

Introduction to Education Studies



INTRODUCTION TO EDUCATION STUDIES



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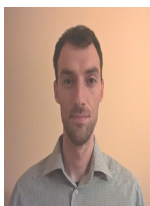
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HOW TO USE THE BOOK

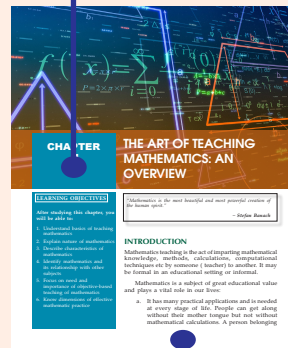
This book has been divided into many chapters. Chapter gives the motivation for this book and the use of templates. The text is presented in the simplest language. Each paragraph has been arranged under a suitable heading for easy retention of concept. Keywords are the words that academics use to reveal the internal structure of an author's reasoning. Review questions at the end of each chapter ask students to review or explain the concepts. References provides the reader an additional source through which he/she can obtain more information regarding the topic.

LEARNING OBJECTIVES

See what you are going to cover and what you should already know at the start of each chapter

ABOUT THIS CHAPTER

An introduction is a beginning of section which states the purpose and goals of the topics which are discussed in the chapter. It also starts the topics in brief.



the expertise, value and uniqueness of the product or service you have developed. Finding a good business name is more difficult than ever. Many of the best names have already been trademarked. But with advertising costs and competition on the rise, a good name is crucial to creating a memorable business image. In short, the name you choose can make or break your business.



There's a lot of controversy over what makes a good business name. Some experts believe that the best names are abstract, a blank slate upon which to create an image. Others think that names should be informative so customers know immediately what your business is. Some believe that coined names (names that come from made-up words) are more memorable than names that use real words. Others think most coined names are forgettable. In reality, any name can be effective if it's backed by the appropriate marketing strategy.

Given all the considerations that go into a good company name, should not you consult an expert, especially if you are in a field in which your company name will be visible and may influence the success of your business? And is not it easier to enlist the help of a naming professional?

Yes, just as an accountant will do a better job with your taxes and an ad agency will do a better job with your ad campaign, a naming firm will be more adept at naming your firm than you will. Naming firms have elaborate systems for creating new names, and they know their way around the trademark laws. They have the expertise to advise you against bad name choices and explain why others are good. A name consultant will take this perplexing task off your hands—and do a fabulous job for you in the process.

Start by deciding what you want your name to communicate. To be most effective, your company name should reinforce the key elements of your business. Your work in developing a niche and a mission statement will help you pinpoint the elements

REMEMBER

This revitalizes a must read information of the topic.

KEYWORDS

This section contains some important definitions that are discussed in the chapter. A keyword is an index entry that identifies a specific record or document. It also gives the extra information to the reader and an easy way to remember the word definition.

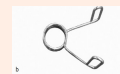
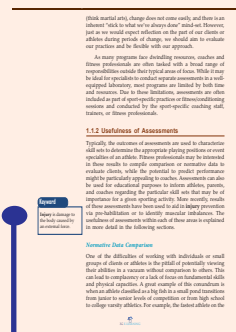


Figure 6. (a) Isobell and (b) collar.

Depending on the nature of the assessment, standard cast iron weight plates ranging from 2.5 to 40 pounds (1.25–20 kg) are used. The use of the standard weight plates is not recommended when the weights might be dropped or *swung* set to the floor, rubberized bumper plates within a similar weight range are recommended. Similarly, cast iron and rubber-coated dumbbells and kettlebells, normally purchased in pairs, are available; however, larger weights may be needed to provide enough resistance to obtain similar training results. The use of bumper plates may be used to provide resistance during muscular strength and endurance assessments include medicine balls, sandbags, sleds, and weight vests. In particular, medicine balls come in a number of forms, including hand, rubberized versions that are capable of bouncing and soft vinyl or other versions that give upon impact. Depending on the nature of the person using the medicine ball in the intended activity, coaches or fitness professionals might select medicine balls that increase in diameter with increasing weight or ones that have a uniform diameter regardless of the weight.

Weightlifting racks or stands and benches are likely needed when conducting strength assessments and must be of sufficient quality and construction to withstand the weights being used. Flat utility benches and adjustable angled benches may be used for specific assessments, primarily those focused on evaluating the upper body musculature. Commonly, power racks (see figure 7), which are freestanding structures featuring four upright columns and adjustable height hooks that hold a barbell and safety bars which prevent the barbell from dropping past a certain point, are used to allow for many different lifts to be safely performed. Wall-mounted racks, freestanding squat stands,

DID YOU KNOW?

This section equip readers the interesting facts and figures of the topic.

EXAMPLE

The book cabinets’ examples to illustrate specific ideas in each chapter.

reliable and therefore more acceptable way of measuring body composition. Nevertheless, it is DEXA and MRI – and not BIA – that are regarded as the reference method in body composition analysis.

Although the instruments are straightforward to use, careful attention to the method of use (as described by the manufacturer) should be given.

Simple devices to estimate body fat, often using BIA, are available to consumers as body fat scales. These instruments are generally regarded as being less accurate than those used clinically or in nutritional and medical practice. They tend to under-read body fat percentage.

Dehydration is a recognized factor affecting BIA measurements as it causes an increase in the body’s electrical resistance, so has been measured to cause a 5 kg underestimation of fat-free mass (i.e. an overestimation of body fat).

Body fat measurements are lower when measurements are taken shortly after consumption of a meal, causing a variation between highest and lowest readings of body fat percentage taken throughout the day of up to 4.2% of body fat.

Moderate exercise before BIA measurements lead to an overestimation of fat-free mass and an underestimation of body fat percentage due to reduced impedance.

Moderate intensity exercise for 90–120 minutes before BIA measurement decreases the fat-free mass of 10–15% compared to 40–50% in body fat percentage after moderate or high intensity exercise.

BIA is considered reasonably accurate for measuring groups, of limited accuracy for tracking body composition in an individual over a period of time, but is not considered sufficiently precise for recording of single measurements of individuals.

Consumer grade devices for measuring BIA have not been found to be sufficiently accurate for single measurement use, and are better suited to tracking changes in body composition over time for individuals. Two-electrode foot-to-foot measurement is less accurate than 4-electrode (foot, hands) and

a model stemming from the field of quality management, termed the Plan-Do-Check-Act (PDCA) cycle (see Figure 13) may be used to illustrate the importance of assessment.



Figure 13. PDCA cycle.

The Plan, Do, and Act portions of this cycle represent the traditional qualitative strengths of coaches and fitness professionals. The Plan portion entails the initial strategic analysis and goal setting procedure. Do is the execution of the plan, and Act is the summative response (i.e., evaluating or making sense of the available information) and adjustment to this implementation. The Check portion of the PDCA cycle represents formative feedback (i.e., bringing together or monitoring of the available information from knowledge-based quantitative data collection via appropriate assessments that inform the decision-making process. This cyclical approach with integrated qualitative (via observation) and quantitative (via data) components allows for the management of both individual client or athlete needs as well as reflection on the strategic approach. For example, through use of the PDCA cycle, coaches and fitness professionals might determine if specific adjustments need to be made on an individual basis from a single cycle on, or as a result of several cycles, if a change to the process employed by the training staff should be considered.

Assessments should allow for a properly informed decision-making process. The results of well-designed and appropriately selected assessments can be used by the coaching or training staff and other stakeholders to design and modify training

ROLE MODEL

A biography of someone who has/had acquired remarkable success in their respective field as Role Models are important because they give us the ability to imagine our future selves.

CASE STUDY

This reveals what students need to create and provide an opportunity for the development of key skills such as communication, group working and problem solving.

ROLE MODEL

EVGENIYA KANAeva: RUSSIAN RHYTHMIC GYMNAST

Evgeniya Olegovna Kanaeva is a Russian retired individual rhythmic gymnast, known for her consistency, elegant routines and high level of technical difficulty. She is the only individual rhythmic gymnast in history to win two Olympic all-around gold medals, winning at the 2008 Summer Olympics, where she finished with 375 points ahead of silver medalist Irina Zhukova, and at the 2012 Summer Olympics, where she also became the oldest gymnast to win the Olympic gold. On 4 July 2013, Kanaeva received the International Fair Play Award for “Sport and Life”.

Kanaeva holds the record for most World titles with seventeen and thirteen European titles. Kanaeva shares the record for most individual world all-around titles with Maria Petrova, Maria Gogova and fellow Russian gymnasts Yana Kudryavtseva and Diana Averina, and Kanaeva is the one of only three gymnasts to have won all three titles without being tied, impossible due to the tie breaking system even though she never was tied for a title.

At the 2009 World Championship in Mie, Japan, Kanaeva became the first rhythmic gymnast to win all six titles. She repeated the feat at the 2011 World Championship in Montpellier, France, equalling her own record.

Kanaeva is the only gymnast to receive a perfect score under the 10-point judging system, having done so twice: in the 2011 Grand Prix Final in Baku and in the 2012 Grand Prix in Voronezh.

In 2009, Kanaeva was awarded the title Merited Master of Sports in Russia. After the 2012 Summer Olympics, on 15 August at the Grand Kremlin Palace, Kanaeva, along with fellow Olympic gold medalists, was awarded the Merit for the Fatherland IV Degree. Russian President Vladimir Putin presented the honors.



CASE STUDY

EFFECT OF THERAGUN ON THE IMPROVEMENT OF BACK FLEXIBILITY

Muscle tightness may be connected to postural instability. Both can contribute to various musculoskeletal conditions. Reduced extensibility resultant from increased hamstring stiffness could be a probable causative factor to low back injuries. Considering that forward bending is one of the mainly common movements in daily activities, shortened hamstrings may increase the risk of injury to the spine from mechanical stresses. Flexibility dysfunction is a extensive problem faced by common as well as sportspersons, especially in case of hamstring group of muscle. Vibration therapy improves muscular strength, power improvement and kinesthetic awareness.

History

We describe a 20-year-old male patient. He is a dentist. His height was 162 centimeters, weight 65 kilograms and body mass index (BMI) was 24.8. The patient was seen by a female physiotherapist and enrolled for daily treatment. He complained of back pain that got aggravated with forwarding bending activity and prolonged sitting. He also complained of difficulty in horse riding. He belonged to a high socioeconomic class and fair family and social support. He had no history of trauma.

Physical Examination

His Back movements were restricted. There were a bilateral Hamstring tightness and reduced back flexibility.

Procedure

Ethical approval was granted from the Institutional Ethical Committee and the Patient gave informed written consent. His demographic data, physical examination and the intensity of pain was done with use of numeric Pain rating Scale score was noted. Flexibility measurement was done with the use of sit and reach test and hamstrings tightness measurement was done with the use of a 90-90 straight leg raising test. Activity difficulty was measure by the use of the patient-specific functional scale.

MULTIPLE CHOICE QUESTIONS

This is given to the students for progress check at the end of each chapter.

MULTIPLE CHOICE QUESTIONS

- A full domain name is a sequence of labels separated by _____.
 - semicolons
 - dots
 - colons
 - none of the above
- A _____ server loads all information from the primary server.
 - primary
 - secondary
 - none of the above
- The first level in the generic domain section allows _____ possible labels.
 - 10
 - 12
 - 16
 - none of the above
- If a label is not terminated by a null string, it is called a _____.
 - PQDN
 - QQDN
 - SQDN
 - none of the above
- What a server is responsible for or has authority over is called a _____.
 - domains
 - label
 - zone
 - none of the above
- DNS can use the services of _____ using the well-known port 53.
 - UDP
 - TCP
 - either (a) or (b)
 - none of the above

REVIEW QUESTIONS

- What is the importance of teaching mathematics?
- What does it mean to teach and learn mathematics?
- What is effective teaching of mathematics?
- What are the objectives of learning mathematics?
- What are the objectives of teaching mathematics in primary?

Answer to Multiple Choice Questions

- (a) 2. (c) 3. (b) 4. (a) 5. (c)

REFERENCES

- Department of Revenue Washington State. “Domain Name Registration Services.” Accessed Dec. 20, 2019.
- Domain Name Wire podcast. “Frank Schilling Explains Price Hike – DNN Podcast #127.” Accessed Dec. 20, 2019.
- Domain Name Wire. “ICANN Shuts Down Alphanumeric Domain Name Register.” Accessed Dec. 20, 2019.
- Domain.com. “Domain Registration Agreement.” Accessed Dec. 20, 2019.
- ICANN. “FAQs: How Long Does a Registration Last? Can It be Renewed?” Accessed Dec. 20, 2019.
- No-IP Knowledge Base. “How Long Until the Domain I Just Registered is Active?” Accessed Dec. 20, 2019.
- IT NewsWire. “Gigabyte Acquires Worldwide Media Inc. Domain Name Portfolio.” Accessed Dec. 20, 2019.
- Symbols.com. “About Symbols.” Accessed Dec. 20, 2019.
- Netpage. “History Q: 2019 Domain Name History Book.” Accessed Dec. 20, 2019.
- Whois.net. “Terms and Conditions of Whois.net.” Accessed Dec. 20, 2019.

REFERENCES

References refer those books which discuss the topics given in the chapters in almost same manner.

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PREFACE

Education is one of the key components that bring growth and progress into society. The more people in a society are educated, the more they can provide a beneficial contribution to their environment. This fact increases the importance of education in society and has resulted in governments investing in education more than ever before. Having education in an area helps people think, feel, and behave in a way that contributes to their success, and improves not only their personal satisfaction but also their community. In addition, education develops human personality, thoughts, dealing with others and prepares people for life experiences. Securing a higher income job through education is only possible when people realize the importance of literacy and education for society. Modern society has modern problems and by developing problem-solving skills, the educated sector can solve many human issues. The meaning and importance of education in society only become clear when we see economic growth.

Organization of the Book

This book is organized into seven chapters. The book presents an introduction to theory and practices in educational psychology. Topics include learning theory, learner characteristics, intelligence, creativity, motivation, measurement and evaluation, and models of teaching appropriate for diverse learners from early childhood through young adulthood.

Chapter 1 presents an introduction to education as a field of study. Understanding the concept of education and its dynamic features will help you to develop insights about the purpose of becoming a teacher and help you while educating your students.

Chapter 2 highlights on learning theories in education. Learning theory describes how students receive, process, and retain knowledge during learning. Cognitive, emotional, and environmental influences, as well as prior experience,

all play a part in how understanding, or a world view, is acquired or changed and knowledge and skills retained.

Chapter 3 sheds light on comparative education. Comparative education is the comparative study of educational theories and practices in various countries. Comparative education attempts to use cross-national data to test propositions about the relationship between education and society and between teaching practices and learning outcomes.

Chapter 4 is ethics for educators. The educator, believing in the worth and dignity of each human being, recognizes the supreme importance of the pursuit of truth, devotion to excellence, and the nurture of the democratic principles.

Chapter 5 sheds light on sociological perspectives on education. The sociology of education is the study of how public institutions and individual experiences affect education and its outcomes.

Chapter 6 highlights on the influence of social factors, gender and ethnicity on achievement. This chapter explores the relationship between social factors and achievement in education.

Chapter 7 elucidates educational psychology promotes teaching and learning. Educational psychology is a combination or overlapping of two separate fields of study; psychology and education.



CHAPTER 1

INTRODUCTION TO EDUCATION AS A FIELD OF STUDY

LEARNING OBJECTIVES

After studying this chapter, you will be able to:

1. Explain the concept and meaning of education
2. Explain the goals of education
3. Describe the types of education

"Education is the passport to the future, for tomorrow belongs to those who prepare for it today."

– Malcolm X

INTRODUCTION

Everyone has their own definition of what education is based on their own experiences of schools and colleges. Beginning university is seen as a continuation of this seamless flow for students embarking on degree courses. Some might define education as a process whereby knowledge is learnt and skills developed; a simple enough description of individual lived experiences. For some this educational process has been enjoyable and enlightening, for others it will have been constraining and not particularly worthwhile. Whichever, a trawl of people in the community at large will find views across this continuum. What, then, is the nature of education as an academic journey?

Educational Studies is a program designed to help you graduate with a major and a minor in education with a non-license teaching degree. This major supports students who might be interested in working in the private education field but are not ready to fully teach in a public teaching setting. While Educational Studies does not earn you a teaching certification, you may choose to pursue a full teaching degree later in life that will allow you to teach in public schools, as well as charter and religious schools. A bachelor's degree in educational studies will enable you to pursue various careers in the educational studies field.

Educational Studies is ideal for students who are either interested in teaching or in an education-related field, such as educational policy or law. Students who pursue an educational studies major are typically interested in the theory of education and education policy and seek to expand their knowledge of education in a liberal arts sense. The topics covered in educational studies include a vast assortment of practical teaching methods, as well as social sciences, health and theory within educational fields.



The term 'education' is a very common and a popular word that is uttered by many of us but understood by a very few in its right perspective. It is in one way or the other appears to be as old as the human race, though during the course of time, its meaning and objectives have inevitably undergone certain changes. As a student of education course, and, as a future teacher, it is essential for you to understand the meaning of education, its conceptual features and different perspectives that have shaped its meaning from time to time. Understanding the concept of education and its dynamic features will help you to develop insights about the purpose of becoming a teacher and help you while educating your students.



Education in its broadest sense is any act or experience that has a formative effect on the mind, character, or physical ability of an individual (e.g., the consciousness of an infant is educated by its environment through its interaction with its environment); and in its technical sense **education** is the process by which society deliberately transmits its accumulated knowledge, values, and skills from one generation to another through institutions. Teachers in such institutions direct the education of students and might draw on many subjects, including reading, writing, mathematics, science and history. This technical process is sometimes called schooling when referring to the compulsory education of youth. Teachers in specialized professions such as psychology, may teach only a certain subject, usually as professors at institutions of higher learning. There is also instruction in fields for those who want specific vocational skills, such as those required to be a pilot. In addition there is an array of education possible at the informal level, e.g., at museums and libraries, with the Internet, and in life experience.



1.1 CONCEPT AND MEANING OF EDUCATION

The term 'education' has been interpreted by different people in different ways. Some people refer to it as formal schooling or to lifelong learning. Some others refer to it as acquisition of knowledge, skills and attitudes. Some say that education is nothing, but training of people's mind in a particular direction to bring about desired changes. If you ask a statesman, an artisan, a teacher, a parent, a philosopher and a student about what education means to them, you would be surprised to know the multiple interpretations and views people have about education. This only shows that education doesn't have one precise universally accepted definition. It has various meanings with various functions. Analysis of these meanings would help us to understand what education really is. To begin with, let us look into how the term 'education' has evolved and some of the views of great thinkers that exemplifies the concept and meaning of education.

Did You Know?

The right to education has been described as a basic human right: since 1952, Article 2 of the first Protocol to the European Convention on Human Rights obliges all signatory parties to guarantee the right to education. At world level, the United Nations' International Covenant on Economic, Social and Cultural Rights of 1966 guarantees this right under its Article 13.



1.1.1 Etymological Meaning

Etymologically speaking, the word education is derived from the Latin word 'educare' meaning 'to raise' and 'to bring up'. According to few others, the word 'education' has originated

from another Latin term 'Educere' which means 'to lead forth' or 'to come out'. These meanings indicate that education seeks to nourish the good qualities and draw out the best in every individual. Education seeks to develop the innate or the inner potentialities of humans. Some other educationists believe that the word 'education' has been derived from the Latin term 'Educatum', which means the act of teaching or training. The meanings of these root words lead us to believe that education aims to provide a nourishing environment that would facilitate or bring out and develop the potentialities in an individual.

If you refer to Dictionary of Education, you will find that education is defined as "the aggregate of all the processes by which a person develops abilities, attitudes and other forms of behavior of practical values in the society in which s/he lives; the social process by which people are subjected to the influence of selected and controlled environment (especially that of the school), so that they may obtain social competence and optimum individual development". The concept of education has been used in a variety of contexts with different meanings. To give a precise definition of education, just as we define certain concepts in science or other technical subjects, is difficult, as there is no one meaning of education held in common by people. Let us try to explore the different meanings and viewpoints on education. Understanding these conceptions would help you to analyze the kind of education that is in vogue now and to what extent it is justified.



1.1.2 Narrow Meaning of Education

You must have come across people who consider that instruction imparted in schools and higher education institutions is nothing but education. The aims of education in these contexts are measured in terms of degrees or certification or promotion. There is a deliberate effort made with a definite purpose to develop certain amount of

knowledge, skills, attitudes and habits in these institutions. This is a narrow concept of education, which is confined only to a few specific, deliberate, and planned efforts that have a bearing on the development of the individual. The educator, in the narrow sense, aims at producing the literate or a professional person such as an engineer, a doctor, a teacher, a businessman and so on. Here, the individual is deliberately 'taught to think' as predetermined by the educators. Thus, in a narrow sense, education is nothing, but a purposeful activity, deliberately planned for the optimum development of an individual's potentials.

Education in the narrow sense does not include self-culture and the general influences of one's surroundings, but only those special influences which are consciously and designedly brought to bear upon the youngster by the adult persons of the community whether through the family, the church or the state. — Thomas Raymont (1906)

1.1.3 Broader Meaning of Education

In the broader or wider sense, education is not limited to a classroom or a school only. It is considered to be a lifelong process, where all the experiences, knowledge and wisdom that an individual acquires at different stages of one's life through different channels (i.e., formally, informally and incidentally) are termed as education. The broader view considers education as an act or experience that has formative or additive effect on the personality of an individual. It is believed that education is not only an instrument of social change, but also an investment in national development. Such a view of education encompasses all life experiences, as there is a shift in emphasis from individual development to national development. It is considered that education is a lifelong process that includes all experiences that the child receives in the school or at home, in the community and society through interactions of various sorts and activities. The broader meaning of education implies the process of development, wherein the individual gradually adapts himself/herself to various ways to his/her physical, social and spiritual environments.

Whatever broadens our horizon, deepens our insight, refines our reactions, and stimulates our thoughts and feelings educates us. — Lodge

It is really life that educates us. — Thomas Raymont (1906)

1.1.4 Education as Process and Product

There is always a controversy whether education is a process or a product. Mostly, we consider education as a product, that is, something that has been produced as a result of certain inputs which in this case is instruction or experiences. In this sense, it is the sum total of what is received through learning — the knowledge, skills, values that are the outcomes of learning. The concept of education as acquisition of **knowledge**

was prevalent since the beginning of history of education. Many literature sources and the religious doctrines have propounded that 'knowledge is power' and 'knowledge is virtue'. Even now it is believed that knowledge leads to wisdom. Education becomes a product only when it assimilates the culture of any society, and is transmitted from one generation to another. Education fosters values in people, which are universally accepted as valuable at a given point of time. Transmission of knowledge or skills which takes place as a purposeful activity in a variety of ways could be termed as the product of education.

Education can also be referred to as a process. In this sense, education is referred to the act of developing the intellect, critical thinking abilities, social and cultural understanding, and understanding of one's own self. Education is considered as an active and a dynamic process which takes place continuously during one's life by way of various experiences through either in a formal or in an informal manner. The individual continuously learns. In this process, he or she learns to utilize one's experiences in learning new things and also to reconstruct new things in the place of old ones. Thus the learning takes place throughout life which is an active and a dynamic process. This dynamic process is nothing but education. So, it can be said that education is a product as well as a process.

Keyword

Knowledge is a familiarity, awareness, or understanding of someone or something, such as facts, skills, or objects.

1.1.5 Concept and Meaning of Education According to Indian Thinkers

Besides knowing the narrow and the broad meanings of education and various other interpretations, it may also be desirable to explore into the educational thoughts of great thinkers in order to get a deeper understanding of the concept and the nature of education.

The great philosophers and thinkers, through different periods of human civilization, have attempted to define education and, in doing so, have reflected their own philosophical ideals and thoughts. Let us try to trace the educational thoughts of some of the great Indian thinkers whom you are familiar with. We shall also examine briefly how education was conceived in ancient times in India.



Education in Ancient India

In India, there is a rich tradition of education dating back to the dawn of human civilization, where the Gurukulas and Guru-Shishya parampara (teacher-disciple tradition) developed thousands of years ago. Two prominent words in Sanskrit stand out as equivalents of the term 'education'. These words are Shiksha and Vidya. The former has been derived from the root word Shas meaning 'to discipline' or 'to control', the latter, Vidya, is derived from the verbal root word 'Wd' meaning 'to know'. These meanings had their relevance to the purpose and the nature of education imparted in the ancient India. In ancient India, learning was pursued, not for its own sake, but for the sake of and as a part of religion. It was sought as a means for the ultimate end of life (i.e., salvation). The main aim of education was training of the mind as an instrument of knowledge and the discharge of one's dharma (duty or moral-ethical value). Education was also conceived as the means to develop the physical and the subtle body, so that the inner spirit or the pure consciousness can express itself without getting hampered by the illusions of the world. In this context, it was felt that the purpose of education was to train and exercise the five sheaths or layers – physical (gross body), vital (subtle body), mental, intellectual and spiritual – in such a way as to make them the sound instruments for leading a good life. However, the meaning and aims of education underwent a change according to the social, political and the cultural conditions of different periods. For instance, education in medieval India was confined to the ideals and goals of life. The meaning of education has been visualized in different ways in the post-independence period by the Indian thinkers and educationists. Among the many great thinkers who have contemplated on the meaning of education, a few of them have been discussed here.

Mahatma Gandhi

As you all must have studied, during the pre-independence period, the education system in India was governed by the British. The goals of education during British period were not akin to the Indian ways of thinking. The medium of instruction was English which was foreign to many Indians. Mahatma Gandhi's interest in education was the outcome of a revolt against the British system of education that had many limitations and drawbacks. His educational thoughts emerged out of his own experiments with truth and nonviolence. According to Mahatma Gandhi, education not only molds the new generation, but reflects society's fundamental assumptions about itself and the individuals who comprise it. By education, he meant, an all-round development drawing out of the best in the child's body, mind and spirit. He stated that literacy is not the end of education, and not even the beginning. It is only the means by which men and women can be educated. In his opinion, education should aim at developing self-reliance, where people learn to earn their livelihood. His aims of education also emphasized on character formation and all round development (physical, mental, social,



moral, aesthetic, and religious). According to him, education should make children ideal members of the democratic society. He wanted a school to be a 'doing and thinking school', rather than a listening school. He emphasized on experiential learning through which the child acquires knowledge and utilizes it for the understanding and control of his social environment. He aspired that education should enable the child to relate what is learnt in the school to the real life situations. His concept of buniyadi talim (basic education) stresses on learning through craft, which favors the child belonging to the lowest stratum of society. Education through craft was felt desirable as it relieves the child from the stress of purely academic and theoretical instruction. The program of basic education was conceptualized in such a way that can bring about social transformation. Mahatma Gandhi believed in integrated education. He believed that the child has several innate potentialities which should be facilitated through educational process. He also believed that education should transmit the **cultural heritage** to enrich the human lives. According to Mahatma Gandhi, education has to be life itself and through life.

I hold that true education of the intellect can come only through a proper exercise and training of the body, hands, feet, eyes, ears, nose, etc. In other words, an intelligent use of the bodily organs in a child provides the best and quickest way of developing his intellect. But unless the development of the body, and mind goes hand in hand with a corresponding awakening of the soul, the former alone would prove to be a poor lop-sided affair. — Mahatma Gandhi

Mahatma Gandhi was a strong advocate of providing education to the girl child. According to him: "The real difficulty is that people have no idea of what education truly is. We assess the value of education in the same manner as we assess the value of land or of shares in the stock-exchange market. We want to provide only such education as would enable the student to earn more. We hardly give any thought to the improvement of the character of the educated. The girls, we say, do not have to earn; so why should they be educated? As long as such ideas persist there is no hope of our ever knowing the true value of education."

Keyword

Cultural heritage is the legacy of tangible and intangible heritage assets of a group or society that is inherited from past generations.



Swami Vivekananda

Swami Vivekananda (1863-1902), a great thinker and reformer of India, provides an insight into what education ought to be. According to him, “Education is the manifestation of the divine perfection, already existing in man”. The word ‘manifestation’ implies that something already exists and is waiting to be expressed. The main focus in learning is to make the hidden ability of a learner manifest.

Vivekananda believed that the system of education, which existed at that time, did not enable a person to stand on his/ her own feet, nor did it teach him/her self-confidence and self-respect. To Swami Vivekananda, education was not only collection of information, but something more meaningful. He felt that education should be man-making, life-giving and character-building. The aim of education, according to him, is to manifest in our lives the perfection, which is the very nature of our inner-self, which resides in everything and everywhere, which is known as ‘satchitananda’ (existence, consciousness and bliss). Hence, education, in Vivekananda’s sense, enables one to comprehend one’s self within as the self everywhere. The essential unity of the entire universe is realized through education. Therefore, man-making relates to the harmonious development of the body, mind and soul. In his scheme of education, great emphasis is laid on the physical health, because a sound mind resides in a sound body. Along with this, he pays special attention to the culture of the mind, power of concentration, and practice of ethical purity. In his opinion, education is not a mere accumulation of information, but a comprehensive training for life. To quote him: “Education is not the amount of information that is put into brain and runs riot there, undigested, all your life.” Education, according to Swami Vivekananda, means the process by which character is formed, strength of mind is increased, and intellect is sharpened, as a result of which one can stand on one’s own feet.

As regards education of girls, Vivekananda considered men and women as two wings of a bird, and it is not possible for a bird to fly on only one wing. So, according to him, there is no chance for the welfare of the world unless the condition of woman is improved.

Sri Aurobindo

Sri Aurobindo, a great philosopher and a nationalist, who was born in 1872, contributed to education immensely. His educational ideas can be obtained from two basic sources: *On Education* (1990) and *A System of National Education* (1907). According to Sri Aurobindo, education is meant to bring out the best in man, to develop his potentialities to the maximum, to integrate him with himself, his surroundings, his society, his country and humanity to make him the ‘complete man’, the ‘integral man’. The purpose of education cannot be merely to create a literate individual, or a highly informed person crammed with information and facts, or to create an individual to find a job.

The more important aspects of an individual are his character, his personality and his values. According to him, the process of education must be integral aiming at the total and complete development of the individual: a strong, supple, well-formed and healthy body; a sensitive, unselfish and mature emotional nature; a positively energetic vital, an enlightened mind, a wide ranging and vibrant intelligence, a strong will, a balanced and pleasing personality; and the subtler spiritual qualities that can channelize, harmonize and direct all the different parts of an individual into a life that is beneficial to the individual and to his fellow men. In short, Sri Aurobindo says that education should be integral, so that it develops the physical, mental, vital, psychic and spiritual aspects of the human personality. According to him, each individual and each nation have to develop according to their own individual characteristics, swadharma. The desirable evolution of **humanity** is then facilitated. Sri Aurobindo observed that the then existing different education trends were inadequate for imparting true or integral education that takes the student to higher levels of consciousness. He proposed a method of education, that is, integral education, for achieving higher level of consciousness, which can radically and favorably change the social, economic and political spheres of life.

Education which will offer the tools whereby one can live for the divine, for the country, for oneself, and for others and this must be the ideal of every school which calls itself national.
— Sri Aurobindo

Rabindranath Tagore

Rabindranath Tagore was born in 1861 in Calcutta, and was one of the early educationists of India whose ideas gleamed through his various writings and educational experiments at Shantiniketan. As an alternative to the existing forms of education, he started a small school at Shantiniketan in 1901 that developed into a university and a rural reconstruction center, where he tried to develop an alternative model of education that stemmed from his own learning experiences. In general, he envisioned an education that was deeply rooted in one's immediate surroundings but connected to the cultures of the wider world, predicated upon pleasurable learning and individualized to the personality of the child. He felt that a curriculum should revolve organically

Keyword

Humanity is the human race, which includes everyone on Earth. It's also a word for the qualities that make us human, such as the ability to love and have compassion, be creative, and not be a robot or alien.



around nature with classes held in the open air, under the trees, to provide for a spontaneous atmosphere. In his opinion, schools should not be factories, but should provide a free atmosphere for the pupils to have close contact with the nature and universe. To Tagore, “the highest education is that which does not merely give us information but makes our life in harmony with all existence. But we find that this type of education is not only systematically ignored in schools, but it is severely repressed. From our very childhood habits are formed and knowledge is imparted in such a manner that our life is weaned away from nature and our mind and the world are set in opposition from the beginning of our days”. Tagore saw education as a vehicle for appreciating the richest aspects of other cultures, while maintaining one’s own cultural specificity. Freedom, creative self-expression and active communication with nature and man are the three cardinal principles of his educational philosophy. According to him, education should aim at the development of the active tendencies of the child. It should be for developing an individual into ‘whole being’. Education should also promote peace, love, kindness, and ideals and should aim at gaining a sense of freedom and of sympathy with all humanity. Tagore considered education as essential need of human life. In his view, education is that social process by which man attains physical progress and spiritual wholeness. True education, according to him, consists in knowing the use of any useful material that has been collected, to know its real nature and to build along with life, a real shelter for life. Besides this, Tagore considered that god pervades in every particle of the nature, and felt that the ultimate aim of human life is to experience this spiritual unity which is the supreme aim or function of education.

Jiddu Krishnamurthi

Jiddu Krishnamurthi, a philosopher and one of the 20th century’s most influential teacher, devoted his life to the awakening of ‘intelligence’ and transformation of society. Krishnamurthy’s interest in education was long standing and always passionate. He addressed the nature of education in majority of his books as well as in his speeches to the public and students in India as well as abroad. Krishnamurthi’s (1994) ideas on education, though radical, attempt to meet the challenges of living at a profound level, and they do so at a time when such insights are desperately needed. According to him, modern education is unable to prepare students for the fundamental challenges of living. In his book titled *Education and the Significance of Life* (1962), we see his concern for education and his views on right kind of education. According to Krishnamurthi, the education system that exists is quite conventional. The educational system in practice now leads to conformity where independent thinking is not possible. It produces the kind of human beings whose primary interest is to find security, to become somebody important, or to achieve some degrees and jobs. While discussing about significance of life, he propounds that as long as education does not cultivate an integrated outlook on life, it has very little significance. In his view, today’s education has very little

significance as it makes us subservient, mechanical and thoughtless, though it awakens us intellectually; it leaves us incomplete inwardly, stupefied and uncreative. The purpose of education is not to produce mere scholars and professionals, but integrated men and women who are free from fear, for only among such human beings can there be enduring peace. To bring about the right kind of education, Krishnamurthi emphasizes upon understanding the meaning of life as a whole. In order to achieve this, one has to be able to think directly and truly, but not consistently. He implies that a consistent thinker is 'a person who conforms to a pattern, and repeats phrases and slogans.' With this analysis about the education system and its narrowly determined goals, he views the function of education as not merely acquiring knowledge, and gathering and correlating facts, but to create human beings who are integrated and, therefore, intelligent. In his view, "Intelligence is the capacity to perceive the essential, the what is; and to awaken this capacity, in oneself and others, is education". In his opinion, education should aim to help people to discover lasting and true values which come with self-awareness and unbiased self-investigation; to help to break down the national and social barriers, as they breed antagonism and violence among human beings and to awaken the capacity to be aware of oneself and not merely indulge in gratifying self-expression. A brief account of the educational ideas of a few Indian thinkers reveals that education is viewed differently by different people. The philosophical ideals of the thinkers about life and the highest form of knowledge to be attained by human beings are reflected in their views on education. We find that Indian thinkers were against the narrow aims/ vision of education and rigid pedagogical methods which were teacher-centered. In general, we find that all the above thinkers have viewed education as an integral process which helps in the all-round development of the individuals. What we need to understand is that, these educational thoughts and concerns influence the educational aims and the educational practices in the society. The educational aims that are determined by the philosophical, and the social perspectives, as well as by the national concerns and priorities, in turn, determine the nature of educational processes right from curriculum construction to pedagogical practices.

1.1.6 Western Views on Education

Let us also trace some of the view points on education in the West and try to find out how the present meaning of education evolved over a period of time. The viewpoints and the attempts to define education by several educational thinkers and philosophers have been synthesized collectively and discussed here under broad dimensions.

Classical Views

The various approaches to educational thought have been classified as conservative versus liberalistic, traditional versus modern, and so on. What we call as conservative position in education finds its origin in the educational thinking of Plato, a Greek philosopher, and

his contemporaries. Many traditional philosophers, who were also the educational thinkers, believed that man is composed of body and soul or mind, of which mind is the knowing aspect of man's nature, while the body is the sensing and feeling aspect of his/her nature. This view asserts that only 'academic subjects' are worthy of the name 'education'; any activities involving the body such as manual skills, crafts, and vocational preparation are not education, but training. This classical view asserts that only the activities of mind designed to develop the rational part of the composed being are truly educative. The classical educationists also believed that human nature is everywhere and at all times essentially the same. Therefore, they held a view that the main purpose of education should be the same throughout the world, from which it follows that the **formal curriculum** in schools should be essentially the same, allowing some small variations to local needs and differences. This belief accounts for the emphasis placed upon developing the rational powers of man. According to this contention, education – as a formal discipline – needs to be imparted in the same manner to everyone. In such a situation there is a very little scope of variation.

Keyword

Formal curriculum is designed as a framework for instructional planning that outlines broad goals and strategies to reach them.

Liberalists' Views on Education

Diametrically opposed to the classical views was the position held by another group of philosophers in the seventeenth and eighteenth centuries which was the beginning of liberalism. Since the 17th century, the idea has grown that education should be directed at individual development for social living. Revolting against the mind-body dichotomy of the conservative educationists, this group held the view that true education is based upon the needs, interests, and the natural desires of the child. The child is viewed as an evolving organism constituted of the same elements as nature around him and that the man is not everywhere and at all times the same, but is in a state of continuous change and development. Based on this, education was viewed as a continuous process which results in emotional development, social adjustment, physical well-being and vocational competence. Some philosophers like Rousseau, Pestalozzi, Froebel, Basedow and other contemporaries were the prime movers of this view. It was felt that the school's purpose should be broadened to include all facets of human



development. They did not affirm that the schools should not develop the intellectual powers of pupils, but they asserted that all the activities of human life are the concerns of the school.

Progressivists' Views

These views, propagated in the 17th and 18th centuries, grew somewhat slowly and took a better shape in the 20th century. Education reforms appeared in many guises in the opening decades of the twentieth century. Progressive education came into focus with the renowned and reform philosophers like John Dewey, Francis W. Parker, and William Wirt who were also known as progressivists. Progressive education movement was influenced by the new scientific outlook and the empirical discoveries which were at their peak during that time. Thinkers like J.S. Mill, Spencer, John Dewey and his followers reflected on the concept of education, influenced by the social and economic conditions, which shifted from the individual to group or collective freedom. It was felt that man's nature is social in origin and hence the educational activities are of prime importance in making man of what he is. The educational institutions were viewed as the agents with the responsibility for not only making the social nature of the pupils and also for the reconstruction of society itself. It was also implied that what the child is, or will become, depends upon society. Education is seen from the notion of individual's free choice. Extending further, it was also felt that the education given by teachers who understand growth and development will somehow predetermine the person to make choices which are in harmony with nature.

According to John Dewey (1916), "Education is reconstruction or reorganization of experience which adds to the meaning of experience and which increases the ability to direct the course of subsequent experiences." This view implies that the child already has acquired some experiences from his/her interaction with the environment. And education plays a role in reconstructing these experiences in the required direction in order to add meaning to those experiences. Let us take an example from your childhood experiences. Try to recall your idea about the earth and the other celestial bodies when you were a child. Through your everyday observations, you must have felt that earth was flat, and you are on the flat surface of the earth, and the sun, moon and stars move around the earth. But after you joined the school and were exposed to the knowledge that 'the earth is round, not flat; it is not the sun, moon and stars that go round the earth, but it is the earth that goes round the sun', with proper scientific explanation by the teacher, supported by visuals, you must have changed your idea about the earth, its motion and your place on the earth. This is what meant by John Dewey as 'reconstruction of experience' that results in knowledge which further helps in understanding subsequent knowledge through subsequent experiences.



Analytical Concept of Education

In the 20th century, a group of educationists who were influenced by the analytical and linguistic philosophy analyzed the concept of education. Among them, it is noteworthy to mention the philosophical and educational thinkers like R.S. Peters, Flannery O'Connor, Paul Hirst and Alfred North Whitehead. According to them, education is not a simple unitary concept and it does not refer to any one particular process. For example, it is not a concept like gardening which is a specific activity. It is like the concept 'reform'. For example, if you are asked the question, 'how do you reform a person who has committed a mistake, or a crime or disobeyed the rules?', you may have different responses, like by punishing, or by counselling, or by making the person to repent and so on. From this, we understand that, reform picks out no particular process. People can be reformed by counselling, reading a religious book, by preventive detention, etc. Similarly, people can be educated by reading books, by exploring the environment, by travel, by having a conversation with others and in the classroom as well. It encapsulates criteria to which any one of a family of processes must confirm. As proposed by R.S. Peters (1956), the logically necessary conditions for 'education' are:

- that it is concerned with the transmission of knowledge;
- which is worthwhile, and in which;
- the transmission of knowledge is done in a morally appropriate manner.

Each of these conditions is considered necessary to define what education is. They could not be merely contingent and, therefore, not present in a correct application of the concept. Taken jointly, they are said to be the concept of education.

Education is also considered as a process of initiation, like saying, that it is an activity rather than it is a concept or idea. You must have come across the cultural practices in certain communities of initiating the child into learning which is celebrated as a ceremony (Akshara Abhyasa). In ancient India, the boy after a particular age was initiated into Vedic learning, which was called as Upanayana Sanskara. This practice of upanayana is carried out even now in some communities. Even in some of the tribal communities, the male child, at a particular age, is initiated into the family occupation, for example, hunting, by the tribal leaders and family heads. Similarly, the above educational viewers, especially R.S. Peters, considered education as a process of initiation into what is considered as worthwhile for the child to learn. He extends his ideas further, saying that education involves essentially certain processes which intentionally transmit what is valuable in an intelligible and voluntary manner and creates in the learner a desire to achieve it.

In sum, from various interpretations and views on education that have been discussed so far, we can say that education is a complex concept which does not refer to a particular process. It has been viewed variously such as acquisition of knowledge,

transmission of culture, drawing out and developing the best potentials in an individual, etc. By educating an individual we attempt to direct him/her towards development of some desirable knowledge, understanding, skills, interests, attitudes and critical thinking, etc. Through education, one develops proper understanding about the natural and social phenomena around and tend to live harmoniously. Education also helps one to develop certain essential skills like, reading, writing, communicating, handling objects, decision making, examining and analyzing things, group living, etc. that are required in one's day-to-day life situations. Education also helps in value and moral development of individuals. It helps one to be committed to tasks, goals and positive desires and pursue them intrinsically. Education refers to essential processes that are worthwhile to be transmitted and which helps in change of attitudes and values towards the desirable ones.

1.1.7 Whether Education Is Natural or Social Process?

Education as a Natural Process

In your experience as a student for so many years, you must have realized that all learning do not take place in a formal setting like a school or a college alone. You must have learnt many things by observing nature, and by interacting with people around you. So, we all know that children learn to identify many things on their own from their surroundings, though later they learn to identify them with a name supplied to them with the help of parents, or elders or teachers.

Education is considered to be a natural process, by some educationists. In their view, education takes place spontaneously in human beings through their experiences in nature. This view assumes that an individual develops or grows like a plant to become something that is presumed to be desirable. As a biological organism, the humans interact with the environment and gain experiences. These experiences lead to some sort of learning, which, in turn, results in the development of the individual. In other words, education becomes a life-long process and with every experience, the individuals gain an understanding of the self as well as of the environment. According to this view, education is not only preparation for life, but it is synonymous with life. Thus, education is concerned with imparting survival skills; developing the child's innate potentialities; making the individual fit for his/her environment; and socializing the child. Maria Montessori, a great educationist, stated that education is not what the teacher gives, it is a natural process spontaneously carried out by the human individual and is acquired not by listening to words, but by experiencing in the environment. In this context, the task of the teacher becomes that of preparing a series of activities spread over a specially prepared environment and let children learn through their observations, interactions, and tasks carried out.



The process of education which makes human beings successful in their respective environment continues throughout life. Life involves a constant and continuous modification of experiences. As a consequence, the ideas, perceptions, skills, attitudes and values undergo a change. This helps the child to adjust and accommodate to the fast changing world. Educational adjustment of the child is further conditioned by the nature of demands of the society to which the child should be adapted and attuned.

According to Johann Heinrich Pestalozzi, a great philosopher, “Education is natural, harmonious and progressive development of man’s innate powers.” It is believed that education consists in the development from within of potentialities rather than ‘molding’ externally. It is also asserted that curriculum should arise from the needs and interests of the child rather than from the demands of the teacher. Self-expression is considered more important than mastering of the subject matter. Many of the Indian and the western thinkers like Rabindranath Tagore, J. Krishnamurthi, Rousseau, Froebel and Montessori considered the education of the child in the natural environment where the child explores and learns through his/her experiences. The natural process of education consisted in preparing the most natural and life-supporting environments for the child and observing the child living freely in this environment.

Though this view can be appreciated, we see that it suffers from certain limitations. It does not answer the questions like what are the worthwhile things that the individual would learn which they can apply to their life situations and what they can pass on to others, and what are the criteria by which we can say that they have achieved the required standards.

There is no end to education. It is not that you read a book, pass an examination, and finish with education. The whole of life, from the moment you are born to the moment you die, is a process of learning. — Krishnamurti

Education is a natural process carried out by the child and is not acquired by listening to words but by experiences in the environment. — Maria Montessori

We have come to this world to accept it, not merely to know it. We may become powerful by knowledge, but we attain fullness by **sympathy**. From our very childhood habits are formed and knowledge is imparted in such a manner that our life is weaned away from nature and our mind and the world are set in opposition from the beginning of our days. Thus the greatest of educations for which we came prepared is neglected, and we are made to lose our world to find a bagful of information instead. We rob the child of his earth to teach him geography, of language to teach him grammar. His hunger is for the Epic, but he is supplied with chronicles of facts and dates...Child-nature protests against such calamity with all its power of suffering, subdued at last into silence by punishment. — Rabindranath Tagore

Education as a Social Process

While some educationists felt that education is a natural process, which takes place in the interaction between the individuals and the environment, there were others who felt that education is a social process, and one of the prime functions of the school is to help in the socialization of the child. Let us examine how education functions as a social process.

Among all living organisms, you must have noticed that it is the human child that depends on the parents for relatively a longer period for nourishment, shelter and for learning basic skills. This prolonged childhood also helps the child to prepare himself/herself better for adult life. During this period, the child learns the necessary skills for her survival in this world. Since human life is not only the result of biological and physiological functions, the child has also to get training in the intellectual, social and cultural aspects of existence. It has to learn the norms and values of the group to become an accepted and effective member of the group. In other words, a child needs to be socialized, acculturated and provided with knowledge and skills of survival together. Home is the first place where the child receives this education in an informal way. Later, school plays an important role as a formal agency to impart education. It exerts greater influence in educating the child, in addition to other social agencies like home, neighborhood, community, religion, media, etc. It is well known that human is a social animal and this belief gives support to the concept of education as a socialization process. This is also derived from the philosophy that child needs to be educated in a desirable way.

The process of education thus takes place in social settings, and society as a whole exercises great control over its process. Every society uses education as a means for promoting its own interests. While education is subjected to the control of society, it also influences society by contributing to its goals. Education performs a threefold social function by maintaining, transmitting and creating social values, ideals, beliefs and culture. For this purpose, education provides a learning platform for children to develop a variety of skills and other dimensions such as social interaction, emotional growth, physical awareness, awareness of life around us and intellectual and emotional dispositions such as attitudes and values. The values, ideals, goals, mores,

Keyword

Sympathy is the perception, understanding, and reaction to the distress or need of another life form.



traditions and culture of society are inculcated in a child through education in order to make him/her an effective member of the society. In fact, all education, beginning with family, has the task of socializing children and adolescents. The modern concept of education also gives importance to social settings in which interaction between the teacher and the taught takes place. But it is not enough, if there is just an interaction between the teacher and the children. There ought to be an active interaction among children, as they learn quite a lot from each other's experiences.

To understand that socialization of the child is a major social process of education, let us turn to John Dewey, according to whom all education proceeds by the participation of the individual in the social consciousness of the race. It means that any system of education that is devoid of social environment is not education at all. You have learnt that education is initiating the child into worthwhile activities in the preceding sections. Socialization is the process of initiating an individual into norms of a group and into his own role or roles in it. Education as a social process does include initiation into the norms and roles of the society in general.

Education is thus both a natural and a social process, wherein development of the uniqueness and individuality of the child is considered as the very essence of education, and at the same time initiating him/her into the society, for which school prepares him/her. The individual is means to an end – the end of perpetuating the social order in the socialization process and the individual is an end by him/herself in the educative process.

1.1.8 Whether Education is Intentional or Unintentional?

Most of our actions or work that we do is directed towards some goals. Let us take an example of you joining the B.Ed/B. Sc.Ed/BA.Ed course. You must have joined with an aim of becoming a teacher in school. Some of you may be having an aim of pursuing your post graduate course and then becoming a teacher. Most of our actions or decisions are geared by some intentions which may be either at conscious or unconscious level. Let us examine, what kind of a process 'education' is – whether intentional or unintentional.

Education is an intentional activity which necessitates achievement of some goal or the other. For example, when a man has lost something, he doesn't look outside, nor does he produce something different from the activity he is engaged in. He tries to find out what he has lost. He achieves or attains the end which is internal to the activity in which he is engaged. Similarly education is intentional which involves certain processes or tasks in which the individual gets engaged for considerable period of time. Thus, it becomes intentional, goal directed, or value directed or 'normative'.

Education has instrumental ('knowledge for practical ends') and intrinsic dimensions ('knowledge for its own sake'). For example, teaching carpentry is both valuable in itself and valuable as a means of increasing production of furniture or construction of houses. Similarly, the instrumental value is something extrinsic to education, while the intrinsic is valuable for its own sake. If a person is doing a particular course, in order to get a job or to earn money, we can say that the person has an instrumental value. On the other hand, if a person is doing a course, just for the love of the subject or wanted to learn more in that field, we can say that the person has an intrinsic value. A deliberate effort to plan educational activities such as curriculum, textbooks, school, etc. in order to bring in some changes in the learner in a desired direction is the instrumental dimension of education. There could be certain aims of education that have an intention of initiating every man and woman into the kind of educational activities which make them to take right place in the society; develop vocational skills, so that they become self-reliant while there could be some aims to develop a thirst for knowledge for its own sake and to develop aesthetic sense in the individuals.

Education suggests that, not only what develops in someone is valuable, but also that it involves the development of knowledge and understanding. In learning at school, the practical ends, besides the intrinsic ends are also important, as the learning situation is often geared to approval, passing exams, and moving to the higher classes based on one's performance and so on. The non-instrumental or knowledge for its own sake involves no exterior motive or intention or a purpose. The person in learning enjoys doing so, just for the sheer joy involved in it.

Though education is intentional, it is not a single aimed activity. It has multiple aims which are directed towards the individual and national development. The imperative character of education for individual growth and development has been universally accepted. It encompasses teaching and learning specific skills and something less tangible but more profound, i.e. imparting of knowledge, sound judgment and wisdom. Education also takes upon itself the responsibility for striking a balance while developing these abilities, so that a 'harmonious personality' becomes the outcome. As an individual in the society, one has to think critically about various issues in life and take decisions about them being free from bias and prejudices, superstitions and blind beliefs. Education intends through its processes, develops in an individual the capacity for critical and analytical thinking and changes his/her approach to life. It aims at awakening curiosity, stimulate creativity, develop appropriate interests, build essential skills, attitudes and values, and the capacity to think and judge independently. Education also intends to develop certain secular, democratic and social values, thereby serving as the means of realization of nation's goals and ideals.

According to the Education Commission (1964-66), 'education must serve as a powerful instrument of social, economic and cultural transformation, necessary for the realization of national goals'.

1.1.9 What Does Education Comprise of?

With an understanding of the concept of education and its intentions, let us look into what education comprises of. According to R.S.Peters (1967), education comprises of normative and cognitive aspects. It comprises of certain criteria by which we can explain the educative process.

The Normative Aspect of 'Education'

Education develops appreciation for certain norms or standards. For example, how do you judge a person good in housekeeping? Is it not when good housekeeping meets certain standards, certain criteria to satisfy? Similarly, education has certain standards or criteria to be fulfilled. It consists of initiating others into (a) doing activities that are 'worthwhile', and (b) modes of conduct and thoughts which have standards written into them by which it is possible to act, think, and feel with varying degrees of skill, relevance and aesthetic sense. Education has normative implications as it implies that something worthwhile is being intentionally transmitted in a morally acceptable manner. For example, can we say that a person 'x' is educated, yet there are no changes in his ways of thinking, attitudes, and behavior? It would be contradiction to say this. Therefore, there are certain norms or standards by which we call a person as educated. It also implies that the person has undergone some worthwhile activities that we call as educative processes. In this context, what becomes important is the task achievement or processes that are worthwhile and intentional, in which one is engaged in a morally acceptable manner. For example, you know very well that education involves teaching and instruction to some extent, yet one may not be sure whether all teaching results in education. Though it may or may not result in education, definitely, it is not morally objectionable. But when a person uses conditioning as a method to educate an individual, just like the ways animals are conditioned to certain behavior by rigorous training, then it is morally objectionable. So, conditioning or indoctrinating might be ruled out as the only process of education.

From the above, we may infer that educational practices are those in which people try to pass on what is worthwhile as well as those in which they actually succeed in doing so. Success may be evident by some of the characteristics such as sense of relevance, precision, applicability of knowledge, power to concentrate, higher order of thinking abilities, and so on.

The Cognitive Aspect of Education

Other important requirements describe education as the family of tasks. These are (a) knowledge and understanding, and (b) the cognitive perspective. Let us examine these characteristics in order to understand what education is in the total sense.

Knowledge and Understanding

Let us go back to our earlier question ‘To whom do we call as an educated person?’ Do we call an individual as an educated person just because he has mastered skills in a particular area? Definitely we do not call a person as ‘educated’ who has mastered skills, even though the skills he has mastered may be highly recognized in the society or highly prized, like engineering, dealing with machines, computers, etc. For a person to be educated, he should also have some body of knowledge and some kind of conceptual understanding to rise above the level of a collection of disjointed facts. This implies understanding of principles for the organization of facts which enables an individual to apply what he has learnt to his/her life situations. A merely informed person is not the same as a truly educated man or woman. For example, a person may be having a number of master’s degrees and lots of information regarding his subject, but he/she may lack certain qualities needed to describe him/her as ‘educated’ man. One must also know the ‘why’ of things. Further, the knowledge acquired by the individual must not be ‘inert’. It means that the knowledge acquired should not be a ‘dead weight’ or useless which cannot be applied. For example, the knowledge of science should not stop at the acquisition of scientific facts and procedures, but should enable the learner to look at the nature, earthly phenomena, the cause and effect relationships, the discoveries made, the speculations of man about life occurrences in the past, understanding the present in light of the discoveries made and look into future possibilities about life on earth and the universe as a whole. The knowledge acquired should also enable one to have better attitudes and approaches to life, rather than getting lost in unfounded beliefs, dogmas and irrational thinking. This differentiates between a merely ‘knowledgeable’ man and an ‘educated one’. Scientific thinking does not just mean knowing the evidence based on certain assumptions, but one should also know what counts as evidence and ensuring that it can be observed. Education also implies the kind of ‘commitment’ that comes from being ‘on the inside of’ a form of thought and awareness. It requires one to understand and to care for the internal standards of those thoughts, forms and awareness. Without such commitment, one gets lost in the information gathered in the name of knowledge and such person cannot be called as an educated person, whose knowledge is purely external and inert or useless.

Cognitive Perspective

A further requirement of education is what has been termed as ‘cognitive perspective’. This means that education must involve essential processes of knowledge and understanding and the holistic view of all aspects of situations that would enable one to apply the knowledge and understanding rather than being inert (dead weight, useless and worthless knowledge). The cognitive perspective is linked with understanding and there is no place for inertness which is useless or worthless. For example, we can have knowledge which we understand and we can make use of such knowledge in



actual life situations. On the contrary, we can have knowledge which we cannot use it, because we do not understand it (inert). A scientist may be good in his/her subject, very thorough with scientific principles, and yet does not see the interrelatedness in the field with rest of the things around, in the patterns of life in the universe. What he/she is lacking here is 'cognitive perspective'. Such an individual cannot be really considered as educated. Education cannot be tied down into specific compartments and specialized skills, viz. scientist, teacher, doctor, engineer, and so on. Education is concerned with the development of whole man and not just a part of him.

Criteria of educative process

- (i) Education implies transmission of what is worthwhile to those who are committed to it.
- (ii) Education involves not only knowledge and understanding, but also some sort of cognitive perspective which stresses on interrelating the knowledge with the world around.
- (iii) Education must be carried out through procedures that uphold dignity and autonomy of persons and secure and utilize their willingness, purposiveness and capabilities.
- (iv) Education is concerned with the development of the whole man, and each activity must contribute to it.

Educational Processes

You have already seen that education does not refer to a single process, but to a family of processes leading to the achievement of being educated. It is, therefore, necessary to isolate the different aspects of being educated and consider which educational processes are of particular relevance.

Training

Training refers to the development of specific skills which are to be exercised in relation to particular ends or functions in accordance with the rules pertaining to the activity. Skills of reading, writing and computations are some of the basic skills to be mastered before formal education can proceed further. A skill cannot be learnt instantaneously by just seeing somebody performing it. It requires a kind of drill or constant practice, especially under the supervision of the instructor or the teacher who is teaching the skill. The teacher who is teaching a skill also provides a model of the performance and corrects it to bring it to perfection. In this case, very little emphasis is given to the underlying rationale for performing a skill. For example, a person who wants to play music on an instrument cannot perform the skill unless he or she practices it constantly for a long period. Training also carries with it an application of the skill which is wider than mere learning of the skill.

While undergoing physical training course, a person not only learns the skills of doing exercises, games and so on, but also learns good habits of keeping him/herself fit, healthy, punctual, eating right type of food, etc. Such learning cannot take place simply by imitating someone blindly.



Training consists of a systematic series of activities involving instruction, practice, etc. to produce desirable habits or behavior in particular aspects of life or vocation, for example, military training, technical training, computer training, etc. Thus training aims at developing and promoting specific skills in a chosen area with a view to make the individual undergoing training an expert in the field or task concerned. It is a kind of capacity building of an individual in a particular skill.

Instruction and Learning by Experience

Instruction is a process which helps in the acquisition of knowledge. It is the means employed to bring about desirable changes in learners. Instruction involves communication of ideas, values, skills, information and knowledge to the students. Instruction may also involve use of systematic and scientific methods of communication for effective transaction. Instruction aims at effective learning in individuals with a view to educate them. Thus, instruction becomes the instrument of educating individuals along with his/her educative experiences. In acquiring a body of knowledge, instruction serves as one of the means of providing experiences. This does not mean that a teacher has to make children sit passively in the class and give instruction. By nature, children are very curious to know things around them by directly observing or by exploring on their own. The teacher can facilitate their learning capacities by creating appropriate learning opportunities and be at hand when children ask questions. In this way, there can be no danger of instruction becoming a teacher-centered. Mere experience alone will not help the child to discover. To enable the child to do that, the right sort of questions have to be asked at the appropriate time and his/her experience has to be guided in a proper direction. It is the task of the teacher to help and guide children in their knowledge exploration, and development of skills and values.



Understanding of Principles

As you have already learnt in the preceding sections, understanding of principles does not depend upon accumulation of isolated bits of information and knowledge. Rather, it requires reflection on what one already knows and relating them to other facts and concepts, so that underlying principles between the facts and the concepts could be known.

Remember

Understanding of principles has no meaning unless one has acquired knowledge of the concepts.

For instance, there could be no appeal to principle, unless there is an experiential or direct knowledge of the concepts. In our daily life instances, we come across many natural and physical phenomena. When we look at them, we don't merely observe but acquire knowledge about them. We do try to see relationships among different events and also try to identify a common thread that runs across. We try to identify the principles that govern certain occurrences in nature. For example, when you understand the concept of a plant, you also try to understand the principle that governs the growth of the plant – why the roots of a plant always grow towards the ground? And why do the leaves and fruits fall down? and so on. In morals, similarly, principles are needed if one has to justify the human conduct. Therefore, the grasp of principle is not just acquisition of knowledge, but goes beyond it in stating the rules and the relationships.

Logical and Critical Thinking

Logical and critical thinking is one of the educational processes involving the purposeful application of cognitive abilities in order to attain more and higher cognitive structures and capabilities. Development of such higher cognitive processes in children is another important aspect of teaching. The responsibility of a teacher is to create learning contexts in such a way that the concepts and meanings are discovered and at the same time a critical attitude towards them are also developed. Creating appropriate learning environment to develop logical thinking and critical thinking is a part of educative process. Further, mere passing on a body of knowledge or principles without any systematic attempt to explain or justify them does not constitute true education; rather it leads to indoctrination. Indoctrination means imposing the principles of a particular school of thought so as to create faith in those principles in the minds of learners. You must have come across certain institutions or schools which



impose their dogmatic beliefs and ideals on children without letting them to question or inquire into them. Education can never take place in an indoctrinated environment, where the individuals are treated as mere objects, but not as thinking minds.

Learning and teaching is the process of education. In this process, the teacher and the learner interact with each other, exchange thoughts and ideas, ask and answer questions, etc. In contrast, the indoctrination does not allow any reasoning or development of critical mindedness. Developing critical mindedness involves an attempt to explain and justify beliefs and practices, giving an opportunity to question the fundamental assumptions on which the beliefs are based, looking for evidences for belief, probing into presuppositions and thinking in a clear, coherent and rational way. The importance of critical thinking in a democratic society is necessary for individuals to take right place in the society. In fact, the success of democracy rests on the individuals' ability to think critically and not to be carried away by propaganda. Thus development of logical and critical thinking constitutes another important aspect of educational process.

1.1.10 Does Education Occur only in Educational Institutions?

Where does education take place? If you ask this question to yourself or to others, probably you may get an answer from most of them, that it take place in the institutions. Education does not necessarily take place only in institutions like schools, colleges and universities. Education is often being confused with schooling, relying on the premise that time spent in school is directly related to education. Try to recall all that you have learnt during your schooling days. It is possible that most of us have learnt things even outside the school. In schools, we find that what one has to learn is predetermined which may or may not be related to one's context. The experiences gained outside the school help in understanding the school content. Many times, we came out with knowledge that is personally relevant and easily transferable to new situations.

Many people have a strong belief that somehow spending time in school will make a person educated. This is one of the biggest misnomers that prevails throughout our society. Certainly, there are many wonderful, authentic, relevant learning experiences that take place in school at all levels. But that is not the only source of education.

The process of education takes place in all personal and social situations. Education in this sense would certainly include all efforts for inculcation of values, attitudes and skills that the society desires to be imparted to children. In contrast to this broader notion, education occurring in institutions like schools and colleges is an act of consciously imparting values, knowledge and skills in accordance with the requirements in a formal situation. Schools and colleges also impart deliberate and systematic training in specialized subject areas that may not be otherwise gained through the informal process. In its essence, schooling is a limited educational exercise in terms of range of experiences provided. It is also limited to a specific period of

human life, i.e., from childhood till one leaves school, while the process of education continues throughout the life. We learn most from our surroundings, from our friends and from other people who share our interests. Besides school, there are number of institutions in the society which are the agencies of education, such as the family, the community, the temple, the church, etc. These institutions are also known as agencies of education. The processes of education in these institutions are deliberately planned with a continuous effort to give certain type of knowledge, skills, or attitudes.

Remember

There is some knowledge which is historical and rooted in certain social traditions and had been accumulated from generation to generation on which the community depends considerably for developmental purposes. The community depends upon the agency like schools for the transmission of such knowledge, skills, and values to children which may not be possible otherwise to learn everything through informal means.

In the institutions like schools and universities, the knowledge is systematized and classified into subjects. Educational activities of a school are understood in terms of the subjects which are taught in it. The schools as the social institutions, in fact, are established with the presupposed objective of imparting knowledge, skills and attitudes to the future members of the society, as it is considered important for living in the society. In ancient India we had institutions like guru ashrama, guru kula, vihara, sangha, pathasala and vidhyapitha which played a prominent role in the process of socialization and transmission of knowledge and rich cultural heritage of India. In the medieval period, we had maktabas (schools) and madararas (colleges). It is during the British rule, the concept of school system emerged in India.

Education also takes informally outside the institutions. For example, we also learn through the library, the newspapers, the magazines, the mass media and interactive communication technology, interaction with learned people, and others, etc. All these sources entail learning. Interacting with a farmer might lead one to acquire an understanding of what kinds of crops are grown every year in different seasons; how much is invested by the farmer for production of crops; how much does he profit from the production of crops; the hurdles faced by the farmer in marketing, etc. This learning takes place informally without any structured ways and means like curriculum, teacher or textbooks or an institution. It opens wider possibilities of learning from others' experiences and get connected to the questions, issues and feelings that are important to people. In contrast to this, education that takes place in the institutions is more formal and



structured, that tends to take place in an organized manner with lots of instructional planning and support which are deliberately planned.

The school environment can also eliminate the unworthy features of the existing environment from influencing the children in developing unhealthy attitudes and values. The school has the duty of omitting things like the undesirable social issues such as discrimination, inequality, gender bias, communalism, etc.

It is necessary to have a common core subject matter and values to have a unity of outlook upon a broader horizon than being confined to a small group norms and culture. The school as an institution coordinates the diverse influences of the various social environments from which the individual students come from and provides an educative environment in which the individuals interact, socialize and learn those that are 'worthwhile'. This would develop a common and balanced outlook to diversities in society, a critical and an analytical mind which applies rationally what is learnt to the life situations.

1.2 GOALS OF EDUCATION

The goals are derived from the universal goals of the humankind, national goals and life goals of the individuals. The educational goals are universal as well as culture-specific and are modified from time to time in accordance with the changing desires and aspirations of the society.

1.2.1 Bases of Educational Goals

The educational goals are drawn from different sources. These are: (a) Desires and aspirations of the society, and (b) Vision about an educated individual. This section discusses these two goals in some detail.

Social Desires and Aspirations

The human society operates at different levels, such as global, national and provincial or sub-national. The aspirations of the society cannot be the same at all levels because of variations in needs, challenges and opportunities.

Global Aspirations

The aspirations of the global society are reflected in the charters of the United Nations, and its specialized organs like UNESCO (United Nations Educational Scientific and Cultural Organization), international laws and treaties, declarations and resolutions adopted by the General Assembly of the United Nations, and the report of the

International Commissions on Education. As per its charter, the United Nations was established to maintain international peace and security. To this end, it takes effective collective measures for the preservation and removal of threats to the peace, and for the suppression of acts of aggression or other breaches of the peace. It also aims at achieving international cooperation in solving problems of economic, social, cultural or humanitarian character and in promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language, or religion. The human rights elaborated in the Universal Declaration of Human Rights, adopted by the General Assembly of the United Nations on 10 December 1948, provide a common standard of 'achievement for all people and all nations'. It emphasizes that all human beings are born free and equal in dignity and rights; everyone has the right to life, liberty and security; no one shall be held in slavery and subjected to torture or inhuman treatment; all are equal before the law and are entitled without any discrimination to equal protection of the law, and everyone is entitled to all the rights and freedoms without distinction of any kind, such as race, color, sex, language, religion, political or other opinion, national or social origin, property, birth or other status. The Convention on the Elimination of all Forms of Discrimination against Women adopted by the General Assembly of the United Nations in 1979 condemned discrimination against women in all its forms and emphasized the need to embody the principle of the equality of men and women in their national constitutions and to adopt appropriate legislative and other measures prohibiting all discrimination against women. The convention on the Rights of the Child adopted by the General Assembly of the United Nations in 1989 re-emphasized that the child, by reason of his physical and mental immaturity, needs special safeguards and care including appropriate legal protection, before and after birth. It further emphasizes that every child shall have the right to freedom of the thought, conscience and religion and the disabled child shall have the right to special care on account of his/her special needs. It enjoins on the national governments to take all appropriate legislative, administrative, social and educational measures to protect the child from all forms of physical or mental violence, injury or abuse, neglect or negligent treatment, and maltreatment or exploitation including sexual abuse. B. Lindqvist, UN Rapporteur, in 1994, observed: "All children and young people of the world, with their individual strengths and weaknesses, with their hopes and expectations, have the right to education. It is not our education system that have a right to certain types of children. Therefore, it is school system of a country that must be adjusted to meet the needs of all children."

Besides adopting declarations and conventions on human rights and freedoms, the United Nations has also adopted a number of declarations and accords on environmental pollution and protection, global warming, energy conservation, reduction in carbon emissions, sustainable development, conservation of natural resources, etc. These efforts of the international community have emphasized the responsibility of the present

generation to leave behind the resources and kind of earth worth living for the future generations.

Emphasizing the role of education, the UNESCO charter states that since the wars begin in the minds of human beings, the defenses of peace shall have to be constructed in minds only. This profound statement brings to the fore the potential of education to guide and facilitate the desired change in the perceptions and attitudes of human beings. Therefore, the potential of education needs to be exploited to promote peace and inculcate respect for human rights and fundamental freedoms.

In nutshell, the global society aspires for the establishment of:

- World order free from injustice, exploitation and discrimination;
- World order based on universal respect for human rights and freedoms;
- Peaceful world committed to the resolution of conflicts through peaceful means; and
- World community conscious of its responsibility and obligation towards the future generations.

National Societies

Being part of the global society, most of the nations, to a large extent, share their aspirations with global societies, with modifications in accordance with their historical and cultural traditions and current developmental status. The aspirations of a national society are reflected in its constitution, laws and policy pronouncements. An under-developed society aspires to improve its position on various developmental indicators and a developing society may aspire to strengthen its clout and prestige in the comity of nations. A liberal democracy may strive to develop democratic values, openness and liberal attitudes, while a totalitarian and authoritative society may expect citizens to conform to the established norms. A secular society expects its citizens to develop secular values and rational outlook. A multilingual, multi-religious and multicultural society may aspire to promote national and emotional integration, and develop feelings of togetherness and respect for diversity. It is well known that many societies in the world do not allow women equal opportunities for development, while liberal democracies do not allow any type of discrimination on the basis of gender. A theocratic state gives preferential treatment to the citizens following a particular religion. A national society generally experiences tension between its urge to get integrated with the world society and to preserve its separate national and cultural identity and promote its world view.

Sub-national Societies

A number of nations in the world having federal set up are divided into geographical regions with concentration of people belonging to a particular ethnic or linguistic



group. In India, each state constitutes a distinct socio-cultural unit. Each unit not only shares aspirations of the bigger India as well as global society but has quite a few its own aspirations which inform the formulation of state-specific educational goals. For example, each unit may nourish a desire to get integrated with the national stream and make a mark in different spheres of human activity like science, technology, industry, sports, education, etc. At the same time, it may have an urge to preserve its separate cultural identity along with its customs and traditions and promote its language, way of life and art forms.

Thus, while formulating educational goals, a society needs to take into account social aspirations at all the three levels, namely, global, national and sub-national. It has to strike a balance if the aspirations at different levels are at variance from each other, and set long term and short term priorities.

Vision about an Educated Person

In our conversations we often differentiate between an educated and an uneducated person. We expect an educated person to possess certain characteristics which an uneducated person normally does not possess. But all the human beings do not have the same vision about an educated person as it depends on their educational, social and professional background. Likewise, the vision of different societies about an educated person depends on their nature as well as on their social, political and economic goals. A secular society expects an educated person to be liberal in outlook, a democratic society expects an educated person to be tolerant towards conflicting view points, and a socialist society perceives the educated person as the one who possesses scientific and rational outlook and cooperative attitude. In a religious society, a person who believes in the existence of a supreme power and perceives the human beings as a reflection of the supreme is considered an educated person.

You know that a person is called upon to perform different roles in different situations. In some situations, he/ she behaves as a learner; in the work place, he/she acts as a worker; and in social situations he/she functions as a citizen. Above all, his/her over-arching role as a human being permeates in all other functions. As a learner, an educated person demonstrates his/her inclination to seek truth through acquisition and construction of knowledge. As a worker, he/she observes higher standards of work ethics and strives to improve the quality of his/her work through application of theoretical knowledge related to the field. As a citizen, an educated person values the constitutional principles and always gives precedence to the unity and progress of the nation vis-à-vis his/her personal interests or those of the community. As a human being, an educated person rises above the narrow considerations of caste, creed, region or nationality.

Realizing the importance of self-knowledge, the Delors Commission (1996) recommended that it should be integral part of education curriculum at all levels. We all know that human beings know much about natural phenomena, social phenomena, the achievements and failings of other human beings, societies and nations, but have very little knowledge of their own self. An educated person not only understands his/her own strengths and weaknesses but has the capacity to examine his/her beliefs, values, attitudes and prejudices. He/she has the capability to further strengthen his positive thinking and attitudes and capacity to evolve strategies to get rid of negative feelings and attitudes.

In this section, you have learnt that educational goals are derived from the aspirations of the global, national and sub-national society. The maintenance of peace, resolution of conflicts through peaceful means and inculcation of respect for human rights and fundamental freedoms are the most obvious aspirations of the global society. Besides sharing the aspirations of the global society, a national or a subnational society aspires to make a mark at the international and national levels, respectively. The aspirations of a nation are reflected in its constitution and policy statements adopted from time to time. The educational goals across societies differ because of variations in their aspirations. The vision of an educated person is another source for the formulation of educational goals. The vision of an educated person in a society depends on its nature as well as on its social, political and economic goals. As a learner, an educated person not only acquires knowledge through different sources, but also constructs knowledge on the basis of his personal experiences and observations. As a citizen, he has faith in the social and political ideals of the society. Besides possessing knowledge of self, an educated person also has the ability to analyze his own strengths, weaknesses, beliefs, attitudes, prejudices, etc.

1.2.2 Nature of Educational Goals

As discussed in the previous section, educational goals are derived from the vision of a society about its future aspirations, and about the qualities and values of an educated person. This implies that educational goals belong to two broad categories, namely, social goals and individual goals. Some of the goals in the two categories have universal character, that is, these goals are common across cultures and nations. On the other hand, there may be certain goals which are specific to a country or group of countries. In this section, an attempt has been made to examine some important features of educational goals.

Universality

You might have read or heard that education aims at the 'all round development' of the child's personality. Some educationists hold the view that one of the goals of

education should be to enable a person to realize his/her potential. That is, through the instrumentality of education, a child should be equipped to become what she is capable of becoming. You will realize that this statement has a universal appeal and, therefore, is equally relevant for almost all countries of the world.

The UNESCO's Commission on Education in the 21st Century, headed by Jacques Delor, in its report *Learning the Treasure Within* (1996), identified the following four pillars of learning which ought to be the basis for the organization of education in any part of the world.

1. Learning to know
2. Learning to do
3. Learning to live together
4. Learning to be

Let us examine these goals in some details.

Learning to Know

A student has to continuously strive to 'know' things by adopting a variety of methods such as reading, listening, questioning, discussion, exploration, observation, experimentation, etc. However, it is not enough for a person to obtain information about certain things or to know certain facts. He must develop the ability to examine the obtained facts and pieces of information to arrive at conclusions leading to learning of concepts and principles. In other words, a learner should be enabled to learn 'how to learn' and not only to acquire knowledge on her own but also to construct knowledge on the basis of her own observations, experimentation and analysis of available data.

Learning to Do

In addition to acquisition of knowledge and reflection on concepts and principles, a person in today's world has to pick a large number of work skills for day-to-day life and also for specialised work situations. It is for this very reason that some sort of work education or work experience is included in the school curricula all over the world. However, this does not mean that learners can learn work skills only in work education classes. Instead 'work' has to be made integral to all learning areas in the school. Moreover, with the advancement of existing technologies and emergence of new technologies, learners have to continuously renew and upgrade their skills. Above all, the learners need to develop the attitude that all work is dignified.

Learning to Live Together

In the present day's world, there are tensions and conflicts at all levels between individuals, between ethnic groups, between racial groups, between religious groups, and between the nation states. In many families, different members sometimes find it difficult to get along with one another. Within a nation state, there are sometimes tensions among various linguistic, religious, regional or ethnic groups because of conflicting interests and aspirations. Also, many countries in the world have strained relations with other countries, especially with their neighbors. In view of the above mentioned realities of the present day world, individuals, groups of people and nations must learn to live with others in harmony which is possible if they are not only tolerant towards others' viewpoints, but also show genuine respect for them.

Learning to Be

Every individual is born with potential for certain mental abilities. During the process of growing up, she gets opportunities to realize her potential through the instrumentality of formal and informal education. She also develops her own viewpoints, beliefs and value systems on the basis of critical analysis of her own observations and experiences and knowledge of social aspirations. In addition, she has to learn to actualize his potential in different spheres, that is, she has to persistently strive to become what she is capable of becoming. A student must learn to acquire knowledge about her own 'self', that is, she should develop the ability to identify her strengths and weaknesses and to develop a viewpoint on various social and moral issues and accordingly develop principles governing her conduct in different situations. The four pillars of learning discussed above are in fact individual goals of education, which are universal in nature. The education system in all the countries has to be guided by these goals of individual development and students all over the world must acquire them.

Country Specificity

In addition to universal goals, each country also formulates its own educational goals in tune with its culture, polity and economy. As the world is fast becoming a global village, the countries aim to produce citizens who not only have faith in socialist ideology but also practice socialist values in life. Likewise, you must have noticed that, in recent years, there is fast development in the societies, fast means of transport and communication, and large scale migration of people from one country to another. As a result of such migration, countries like United Kingdom (UK), Australia, USA, Canada and many others have adopted 'multiculturalism' as a goal of education to promote respect and harmony among different cultural groups. A country like India, with multiple diversities based on religion, language, ethnicity, etc., emphasizes 'national and emotional integration', or development of national unity and spirit of



togetherness as the goals of education. A democratic country like India emphasizes development of democratic values like tolerance, accommodation and respect for divergent viewpoints. In such a society, the vision of educated person is that of a true democrat. On the other hand, countries at different stages of industrial development, formulate their educational goals in accordance with their needs of industrial growth in future. 'Acceleration of modernization' is generally accepted as goal of education in societies which are relatively backward on various indicators of modernity.

1.2.3 Responsiveness to Changing Socio-Economic Realities

The educational goals in every society periodically undergo a change in tune with changing social realities and aspirations. While pleading for the introduction of English education in India, Lord Macaulay had stated that his aim was to provide such education to Indians which will equip them to run the government offices in the country. During the entire British period, educating Indians to become loyal citizens to the British Empire remained the goal. However, after independence, national development based on the principles of democracy and secularism was accepted as the goal. A number of countries during the past few decades have accepted 'multiculturalism' as the goal after they accepted migrants from different countries. The educational goals in the present day Russian Federation cannot be the same as it had as a part of USSR. As the world in the 21st century shall be different from the world of the 20th century in several ways, it will have different educational goals too. Recognizing the need for having different educational goals and strategies in the 21st century, the UNESCO appointed a Commission. The four pillars of learning identified by the Commission on Education in 21st Century have been discussed above.

1.2.4 Functions of Educational Goals

In the present section you will engage yourselves with questions like 'Why should we formulate goals of education?' and 'How do goals impact different processes of education?' The well-articulated educational goals are the major source from which objectives of different stages or different sectors of education are derived. Likewise, the objectives of different curricular areas are also influenced by the educational goals. The educational goal of 'skilled and qualified manpower' shall lead to 'expansion and diversification of technical education', as an objective of higher and technical education. The 'modernization of society', as a goal shall mean promotion of science and technology and 'development of scientific temperament' as objectives of curriculum. The educational goals also impact educational programs, curricular provisions and curriculum transaction methodologies. 'Enhancing productivity' as a goal shall necessitate introduction of 'work education' and 'vocational courses' in schools, colleges and

technical education institutions. It shall also necessitate development of proper work ethos and approaching all types of work as dignified. 'National and social integration', as a goal, shall necessitate 'inclusion of the study of different cultures and life and people of different states', in the curriculum.

The above examples indicate that the educational goals, evolved on the basis of consensus, set the parameters for setting the curricular objectives, content of curriculum, evaluation procedures, educational schemes, financial targets, etc. The clarity about the targets to be achieved leaves little scope for any doubt or confusion about the programs or schemes to be launched or interventions to be made. The well-articulated goals serve as the lighthouse which makes it easier for the wandering ships to move forward in the right direction to reach their destination. The usefulness and desirability of any educational intervention is determined against the criteria of educational goals.

In short, the educational goals are the targets which are sought to be achieved through the implementation of a variety of educational programs and schemes. The curricula and teaching-learning materials should be such as have the potential to realize the goals of individual and social development. The educational goals thus serve as the basis for delineating objectives of different levels (elementary, secondary, collegiate) and sectors (technical, vocational, professional). The educational goals also provide direction to the task of educational planners and administrators, curriculum development institutions, examining bodies and teachers. In the absence of properly articulated goals, adhocism may prevail in the work of the above mentioned persons and institutions.

1.3 TYPES OF EDUCATION

Education goes beyond what takes places within the four walls of the classroom. A child gets the education from his experiences outside the school as well as from those within on the basis of these factors. There are three main types of education, namely, Formal, Informal and Non-formal. Each of these types is discussed below.

1.3.1 Formal Education

Formal education or formal learning usually takes place in the premises of the school, where a person may learn basic, academic, or trade skills. Small children often attend a nursery or kindergarten but often formal education begins in elementary school and continues with secondary school.

Post-secondary education (or higher education) is usually at a college or university which may grant an academic degree. It is associated with a specific or stage and is provided under a certain set of rules and regulations.

The formal education is given by specially qualified teachers they are supposed to be efficient in the art of instruction. It also observes strict discipline. The student and the teacher both are aware of the facts and engage themselves in the process of education.

Examples of Formal Education

- Learning in a classroom
- School grading/certification, college, and university degrees
- Planned education of different subjects having a proper syllabus acquired by attending the institution.

Characteristics of Formal Education

- Formal education is structured hierarchically.
- It is planned and deliberate.
- Scheduled fees are paid regularly.
- It has a chronological grading system.
- It has a syllabus and subject-oriented. The syllabus has to be covered within a specific time period.
- The child is taught by the teachers

Advantages of Formal Education

- An organized educational model and up to date course contents.
- Students acquire knowledge from trained and professional teachers.
- Structured and systematic learning process.
- Intermediate and final assessments are ensured to advance students to the next learning phase.
- Institutions are managerially and physically organized.
- Leads to a formally recognized certificate.
- Easy access to jobs.

Disadvantages of Formal Education

- Sometimes, brilliant students are bored due to the long wait for the expiry of the academic session to promote to the next stage

- Chance of bad habits' adoption may be alarming due to the presence of both good and bad students in the classroom
- Wastage of time as some lazy students may fail to learn properly in spite of motivation by the professional trainers.
- Some unprofessional and non-standard education system may cause the wastage of time and money of the students which leads to the disappointment from formal education and argue them to go for non-formal education.
- Costly and rigid education as compare to other forms of learning

1.3.2 Informal Education

Informal education may be a parent teaching a child how to prepare a meal or ride a bicycle.

People can also get an informal education by reading many books from a library or educational websites.

Informal education is when you are not studying in a school and do not use any particular learning method. In this type of education, conscious efforts are not involved. It is neither pre-planned nor deliberate. It may be learned at some marketplace, hotel or at home.

Unlike formal education, informal education is not imparted by an institution such as school or college. Informal education is not given according to any fixed timetable. There is no set curriculum required. Informal education consists of experiences and actually living in the family or community.

Examples of Informal Education

- Teaching the child some basics such as numeric characters.
- Someone learning his/her mother tongue
- A spontaneous type of learning, "if a person standing in a bank learns about opening and maintaining the account at the bank from someone."

Characteristics of Informal Education

- It is independent of boundary walls.
- It has no definite syllabus.
- It is not pre-planned and has no timetable.
- No fees are required as we get informal education through daily experience and by learning new things.

- It is a lifelong process in a natural way.
- The certificates/degrees are not involved and one has no stress for learning the new things.
- You can get from any source such as media, life experiences, friends, family etc.

Advantages of Informal Education

- More naturally learning process as you can learn at anywhere and at any time from your daily experience.
- It involves activities like individual and personal research on a topic of interest for themselves by utilizing books, libraries, social media, internet or getting assistance from informal trainers.
- Utilizes a variety of techniques.
- No specific time span.
- Less costly and time-efficient learning process.
- No need to hire experts as most of the professionals may be willing to share their precious knowledge with students/public through social media and the internet.
- Learners can be picked up the requisite information from books, TV, radio or conversations with their friends/family members.

Disadvantages of Informal Education

- Information acquired from the internet, social media, TV, radio or conversations with friends/family members may lead to the disinformation.
- Utilized techniques may not be appropriate.
- No proper schedule/time span.
- Unpredictable results which simply the wastage of time.
- Lack of confidence in the learner.
- Absence of discipline, attitude and good habits.

1.3.3 Non-formal Education

Non-formal education includes adult basic education, adult literacy education or school equivalency preparation.

In non-formal education, someone (who is not in school) can learn literacy, other basic skills or job skills.

Home education, individualized instruction (such as programmed learning), distance learning and computer-assisted instruction are other possibilities.

Non-formal education is imparted consciously and deliberately and systematically implemented. It should be organized for a homogeneous group. Non-formal, education should be programmed to serve the needs of the identified group. This will necessitate flexibility in the design of the curriculum and the scheme of evaluation.

Examples of Non-formal Education

- Boy Scouts and Girls Guides develop some sports program such as swimming comes under non-formal education.
- Fitness programs.
- Community-based adult education courses.
- Free courses for adult education developed by some organization.

Characteristics of Non-formal Education

- The nonformal education is planned and takes place apart from the school system.
- The timetable and syllabus can be adjustable.
- Unlike theoretical formal education, it is practical and vocational education.
- Nonformal education has no age limit.
- Fees or certificates may or may not be necessary.
- It may be full time or part-time learning and one can earn and learn together.
- It involves learning of professional skills.

Advantages of Non-formal Education

- Practiced and vocational training.
- Naturally growing minds that do not wait for the system to amend.
- Literacy with skillfulness growth in which self-learning is appreciated.
- Flexibility in age, curriculum and time.
- Open-ended educational system in which both the public and private sector are involved in the process.
- No need to conduct regular exams.
- Diploma, certificates, and award are not essential to be awarded.

Disadvantages of Non-formal Education

- Attendance of participants is unsteady.
- Sometimes, it's just wastage of time as there is no need to conduct the exam on regular basis and no degree/diploma is awarded at the end of the training session.
- Basic reading and writing skills are crucial to learn.
- No professional and trained teachers.
- Students may not enjoy full confidence as the regular students enjoy.
- Some institutes provide fake certification through online courses just for the sake of earning.



ROLE MODEL

MARIA MONTESSORI

Italian physician Maria Montessori was a pioneer of theories in early childhood education, which are still implemented in Montessori schools all over the globe.



Who Was Maria Montessori?

Maria Montessori was placed in charge of the Casa dei Bambini school. By 1925, more than 1,000 Montessori schools had opened in the United States. By 1940 the Montessori movement had faded, but it was revived in the 1960s. During World War II, Montessori developed Education for Peace in India and earned two Nobel Peace Prize nominations.

Early Life

Montessori was born on August 31, 1870, in the provincial town of Chiaravalle, Italy, to middle-class, well-educated parents. At the time that Montessori was growing up, Italy held conservative values about women's roles. From a young age, she consistently broke out of those proscribed gender limitations. After the family moved to Rome, when she was 14, Montessori attended classes at a boys' technical institute, where she further developed her aptitude for math and her interest in the sciences, particularly biology.

Facing her father's resistance but armed with her mother's support, Montessori went on to graduate with high honors from the medical school of the University of Rome in 1896. In so doing, Montessori became the first female doctor in Italy.

Early Childhood Education Research

As a doctor, Montessori chose pediatrics and psychiatry as her specialties. While teaching at her medical-school alma mater, Montessori treated many poor and working-class children who attended the free clinics there. During that time, she observed that intrinsic intelligence was present in children of all socio-

economic backgrounds.

Montessori became the director of the Orthophrenic School for developmentally disabled children in 1900. There she began to extensively research early childhood development and education. Her reading included the studies of 18th and 19th-century French physicians Jean-Marc-Gaspard Itard and Édouard Séguin, who had experimented with the capabilities of disabled children. Montessori began to conceptualize her own method of applying their educational theories, which she tested through hands-on scientific observation of students at the Orthophrenic School. Montessori found the resulting improvement in students' development remarkable. She spread her research findings in speeches throughout Europe, also using her platform to advocate for women's and children's rights.

Educational Legacy

Montessori's success with developmentally disabled children spurred her desire to test her teaching methods on "normal" children. In 1907 the Italian government afforded her that opportunity. Montessori was placed in charge of 60 students from the slums, ranging in age from 1 to 6. The school, called Casa dei Bambini (or Children's House), enabled Montessori to create the "prepared learning" environment she believed was conducive to sense learning and creative exploration. Teachers were encouraged to stand back and "follow the child"—that is, to let children's natural interests take the lead. Over time, Montessori tweaked her methods through trial and error. Her writings further served to spread her ideology throughout Europe and the United States.

By 1925 more than 1,000 of her schools had opened in America. Gradually Montessori schools fell out of favor; by 1940 the movement had faded and only a few schools remained. Once World War II began, Montessori was forced to flee to India, where she developed a program called Education for Peace. Her work with the program earned her two Nobel Peace Prize nominations.

Death and Legacy

Montessori died on May 6, 1952, in Noordwijk aan Zee, Netherlands. The 1960s witnessed a resurgence in Montessori schools, led by Dr. Nancy McCormick Rambusch. Today, Montessori's teaching methods continue to "follow the child" all over the globe.

CASE STUDY

REDUCING EXCLUSIONS AMONG SOMALI AND AFRICAN CARIBBEAN BOYS - PRESTON MANOR SCHOOL

Background Information

In 2012 Preston Manor School identified that Somali and African Caribbean pupils were disproportionately given fixed termed exclusions at Key Stage 4. For example, of the 122 students excluded with fixed termed exclusions in 2011-12, 45 were to Somali and African Caribbean pupils.

Fixed term exclusions have a negative effect on the attainment level of students and ultimately on their life chances. Thus, the school decided to focus some of its resources on tackling this issue. In order to do so, it set the following equality objective to support compliance with the Public Sector Equality Duty: to achieve a 40 percent reduction in the number of fixed termed exclusions of Somali and African Caribbean pupils over 2012-13 and 2013-14.

Actions

The use of equality information was key in presenting the issue to all parties (staff, students and parents) in an objective and sensitive way. After this was done, the school decided to launch the Black Boys Council (BBC) as their main initiative to tackle fixed-term exclusions among Black boys.

The BBC is made of pupils from various year groups who are academically successful as well as those who are less successful and who are at risk of being excluded. The idea is to provide those pupils with an opportunity to broaden their horizons and to increase their aspirations and self-esteem. For example, BBC members:

- Met with successful Black men from Blue Chip companies such as KPMG, one of the largest professional services companies in the world and one of the Big Four auditors, along with Deloitte, Ernst & Young and PricewaterhouseCoopers ;
- Participated in the business training day that takes place every year at Preston Manor School and which consists of researching, selecting, marketing and selling a product of their choice.

All of the pupils selected to be part of the BBC are influential within the school community and the idea is to give them responsibilities to enable them to succeed in school but also to become positive role models to others. For example, the school sets up the BBC budget but students are given the opportunity to decide how to spend part

of it (e.g. on a product of their choice to sell on business training day). BBC members are given a special badge to wear at school so other children know that they belong to the BBC. BBC members are empowered to behave as role models to other children. They are responsible for reporting back to their peers and to their parents about the opportunities they have been given as BBC members. Part of this is done by producing a newsletter and an audio-diary every year.

Outcomes

Members of the BBC have become positive role models around the school and everyone now wants to be part of it. As a result, pupils overall behave better so they get a chance to become a BBC member in future (positive knock on effect).

The BBC initiative is part of a wider effort to reduce exclusions at Preston Manor School. Other projects are taking place but the BBC has already contributed significantly to a decrease in the rate of fixed term exclusions from 86 in 2012/13 to just 35 so far this year - a dramatic reduction.



SUMMARY

- Educational Studies is a program designed to help you graduate with a major and a minor in education with a non-license teaching degree. This major supports students who might be interested in working in the private education field but are not ready to fully teach in a public teaching setting.
- Educational Studies is ideal for students who are either interested in teaching or in an education-related field, such as educational policy or law. Students who pursue an educational studies major are typically interested in the theory of education and education policy and seek to expand their knowledge of education in a liberal arts sense.
- The term 'education' is a very common and a popular word that is uttered by many of us but understood by a very few in its right perspective. It is in one way or the other appears to be as old as the human race, though during the course of time, its meaning and objectives have inevitably undergone certain changes.
- Education in its broadest sense is any act or experience that has a formative effect on the mind, character, or physical ability of an individual (e.g., the consciousness of an infant is educated by its environment through its interaction with its environment); and in its technical sense **education** is the process by which society deliberately transmits its accumulated knowledge, values, and skills from one generation to another through institutions.
- Training refers to the development of specific skills which are to be exercised in relation to particular ends or functions in accordance with the rules pertaining to the activity.
- Instruction is a process which helps in the acquisition of knowledge. It is the means employed to bring about desirable changes in learners. Instruction involves communication of ideas, values, skills, information and knowledge to the students.
- Logical and critical thinking is one of the educational processes involving the purposeful application of cognitive abilities in order to attain more and higher cognitive structures and capabilities.
- The goals are derived from the universal goals of the humankind, national goals and life goals of the individuals. The educational goals are universal as well as culture-specific and are modified from time to time in accordance with the changing desires and aspirations of the society.
- The human society operates at different levels, such as global, national and provincial or sub-national. The aspirations of the society cannot be the same at all levels because of variations in needs, challenges and opportunities.



- Formal education or formal learning usually takes place in the premises of the school, where a person may learn basic, academic, or trade skills. Small children often attend a nursery or kindergarten but often formal education begins in elementary school and continues with secondary school.
- Informal education is when you are not studying in a school and do not use any particular learning method. In this type of education, conscious efforts are not involved. It is neither pre-planned nor deliberate. It may be learned at some marketplace, hotel or at home.
- Non-formal education is imparted consciously and deliberately and systematically implemented. It should be organized for a homogeneous group. Non-formal, education should be programmed to serve the needs of the identified group. This will necessitate flexibility in the design of the curriculum and the scheme of evaluation.



MULTIPLE CHOICE QUESTIONS

1. **What is the origin of the word Education?**
 - a. 'E' and 'Catum'
 - b. Edu and 'Catum'
 - c. Word 'Educate'
 - d. None of these.
2. **Which of the following statements is correct?**
 - a. Education is an art
 - b. Education is a science
 - c. It is neither an art nor science
 - d. To some extent it is art and to some extent it is science.
3. **What is called education acquired without any specific purpose, fixed period and place?**
 - a. Indirect Education
 - b. Individual Education
 - c. Informal Education
 - d. Formal Education.
4. **What are the three components of the educational process?**
 - a. Education, teacher and books
 - b. Teacher, student and education
 - c. Teaching, learning and practice
 - d. Direction, instruction and skill.
5. **What is the main center of informal Education?**
 - a. Society
 - b. Family
 - c. Radio and Television
 - d. All of the above.
6. **Which is the first school for a child's education?**
 - a. Society
 - b. Friends
 - c. Family
 - d. School.

7. **Who was the supporter of Naturalism in Education?**
 - a. Froebel
 - b. Armstrong
 - c. John Locke
 - d. Rousseau.
8. **Which system of education was propounded by Mahatma Gandhi?**
 - a. Teaching by activities
 - b. Teaching through music
 - c. Teaching through listening, meditation etc.
 - d. All of these.
9. **Who said, "Reverse the usual practice and you will almost always do right?"**
 - a. Mahatma Gandhi
 - b. Rousseau
 - c. Dewey
 - d. Plato.
10. **Which among the following does not fit into the scheme of educational goals of the Idealists?**
 - a. Care of body
 - b. Moral values
 - c. Skills
 - d. Self-expression.

REVIEW QUESTIONS

1. What is education?
2. Explain the etymological meanings of education.
3. What are the criteria of education? Which are the criteria that you think are satisfied by schooling? Explain with examples
4. Give examples of four pillars of learning.
5. List the three main types of education.

Answer to Multiple Choice Questions

- | | | | | |
|--------|--------|--------|--------|---------|
| 1. (a) | 2. (d) | 3. (c) | 4. (b) | 5. (d) |
| 6. (c) | 7. (d) | 8. (d) | 9. (b) | 10. (a) |

REFERENCES

1. Billett, S. 2001. Participation and Continuity at Work: A Critique of Current Workplace Learning Discourses. Paper given at the conference Context, Power and Perspective: Confronting the Challenges to Improving Attainment in Learning at Work, Sunley Management Centre, University College Northampton, 8 –10 November.
2. Eaton, Sarah Elaine. 2011. Formal, non-formal and informal learning. http://www.infed.org/archives/e-texts/eaton_formal_nonformal_informal_learning.htm Archived 22 May 2011.
3. Eraut, M. 2000. Non-formal Learning, Implicit Learning and Tacit Knowledge. In F. Coffield (Ed), *The Necessity of Informal Learning*. Policy Press, Bristol.
4. Feutrie, M. 2007. Validation of Non-formal and Informal Learning in Europe: Comparative Approaches, Challenges and Possibilities. Paper presented at the conference on. Recognition of Prior Learning: Nordic-Baltic Experiences and European Perspectives., Copenhagen, 8 March.
5. Hodgkinson, Phil; Colley, Hellen and Janice Malcolm. 2003. The Interrelationships between Informal and Formal Learning. *Journal of Workplace Learning*, 15, 313–318.
6. Srivastava, G. 2003. Compiler. *Reflections of Eminent Indian Thinkers about Women - A Monograph*. NCERT (DWS), New Delhi.
7. Thapan, M. 2006. *Life at School: An Ethnographic Study*. Oxford University Press, New Delhi.





CHAPTER 2

LEARNING THEORIES IN EDUCATION

LEARNING OBJECTIVES

After studying this chapter, you will be able to:

1. Explain the concept and meaning of education
2. Explain the goals of education
3. Describe the types of education

"Learning is unifying seemingly divergent ideas and data."

– Terry Heick

INTRODUCTION

Learning theory describes how students receive, process, and retain knowledge during learning. Cognitive, emotional, and environmental influences, as well as prior experience, all play a part in how understanding, or a world view, is acquired or changed and knowledge and skills retained.

Behaviorists look at learning as an aspect of conditioning and advocate a system of rewards and targets in education. Educators who embrace cognitive theory believe that the definition of learning as a change in behavior is too narrow, and study the learner rather than their environment—and in particular the

complexities of human memory. Those who advocate constructivism believe that a learner's ability to learn relies largely on what they already know and understand, and the acquisition of knowledge should be an individually tailored process of construction. Transformative learning theory focuses on the often-necessary change required in a learner's preconceptions and world view. Geographical learning theory focuses on the ways that contexts and environments shape the learning process.



Outside the realm of educational psychology, techniques to directly observe the functioning of the brain during the learning process, such as event-related potential and functional magnetic resonance imaging, are used in educational neuroscience. The theory of multiple intelligences, where learning is seen as the interaction between dozens of different functional areas in the brain each with their own individual strengths and weaknesses in any particular human learner, has also been proposed, but empirical research has found the theory to be unsupported by evidence.

It may happen sometimes that certain skills are adequately learned and practiced by us without our being aware of the theoretical basis of those skills or the principles behind their successful functioning. But if we know the theories as well, the practice of our skills maybe improved. You may drive a car well without being a car mechanic yourself, but if you also know the mechanism, it may improve your efficiency as a driver. In the field of education, your knowledge of various theories of learning will be very useful when you consciously attempt to practice and improve your teaching learning skills.

Curriculum, syllabi, text design, teaching methods and, modes of evaluation are all based on certain theories of learning. These theories are generally derived from

past experience, or formulated to serve the needs of the present and the future. If we want to implement our educational plan or improve the practice of teaching learning or change the educational system itself, we should acquire the necessary knowledge of various theories of learning before we take any concrete steps in operational terms. Until recently, the design of the majority of distance teaching text materials have been based on various theories of learning from the cognitive, behavioral and information processing families. There is, however, a growing body of literature on the practice of designing materials from a constructive perspective, which have presented as principles that should guide design.

2.1 THE CONCEPT OF LEARNING

Learning is the process of acquiring new understanding, knowledge, behaviors, skills, values, attitudes, and preferences. The ability to learn is possessed by humans, animals, and some machines; there is also evidence for some kind of learning in certain plants. Some learning is immediate, induced by a single event (e.g. being burned by a hot stove), but much skill and knowledge accumulate from repeated experiences. The changes induced by learning often last a lifetime, and it is hard to distinguish learned material that seems to be “lost” from that which cannot be retrieved.



Human learning starts at birth and continues until death as a consequence of ongoing interactions between people and their environment. The nature and processes involved in learning are studied in many fields, including educational psychology, neuropsychology, experimental psychology, and pedagogy. Research in such fields has led to the identification of various sorts of learning.



Conceptually, 'learning' in the conventional sense is the process of assimilation of knowledge resulting from the interaction between the teacher and the taught. The idea of the traditional teacher-student relationship is, however, impossible to achieve with the growing democratization of education and the increasing demand for learning or continuing education. In distance education, the scope for personal contact and its role in the teaching and learning process are limited. The concept of learning thus needs to be reinterpreted in terms of distance education. In distance education, learning takes place not through the mediation of a teacher but primarily through the mediation of text materials and electronic gadgets. As you know, in distance education we deal with adult learners, who use their experience to create construct knowledge, a process which is otherwise known as experiential learning. Along with considering the other meanings of 'learning', we will discuss the concept of experiential learning and constructivism. If we look at the process of learning and teaching at a distance from the point of view of pedagogies, it is more or less integrated combination of forms of learning which are developed in classroom teaching.

These include:

- Learning by reading printed material (textbooks, manuals, lexicons, scientific literature, and lecture notes).
- Learning by means of guided self-teaching (counseling at the commencement of studies, counseling by tutors, consulting reading lists).
- Learning by means of independent scientific work (preparation for written examination, the writing of assignments).
- Learning by means of personal communications (use of the consultation hours of university teaching staff, and of course counseling, peer interaction, practical case-work, project work, seminars etc.).
- Learning with the help of multi-media.
- Learning by participating in traditional academic teaching (lectures, seminars, counseling sessions, laboratory work).

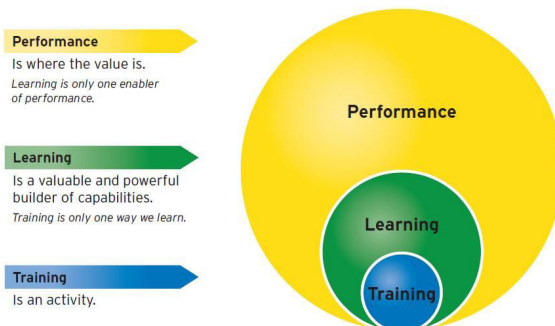
Learning may occur as a result of habituation, or classical conditioning, operant conditioning or as a result of more complex activities such as play, seen only in relatively intelligent animals. Learning may occur consciously or without conscious awareness. Learning that an aversive event can't be avoided nor escaped may result in a condition called learned helplessness. There is evidence for human behavioral learning prenatally, in which habituation has been observed as early as 32 weeks into gestation, indicating that the central nervous system is sufficiently developed and primed for learning and memory to occur very early on in development.



2.1.1 Learning and performance

Learning is a relatively permanent change in behavior, and it is the result of reinforced practice.

Such a concept of learning assumes that certain conditions in the environment bring about fundamental changes in our behavior and that these changes persist for a long time. Learning is not directly observable but can be inferred from performance. We can infer that a person has learnt something when she/he does something which she/he could not do before. A person may know something, and yet may not have learned it. You may 'know' how a computer works, but may not be able to operate it. Thus, the distinction between learning or the acquisition of knowledge (i.e. capability) and performance (i.e. exhibiting this capability in some form of action) is an important one. We use the term 'behavioral tendency' to maintain the distinction between learning and performance. In this context when we speak of relatively permanent change in behavior, we refer to a change in performance.



2.1.2 Learning and cognitive development

We may also define learning in terms of cognitive development. Cognitivists say that learning is the changing or reorganization of cognitive structures, which involves an acquisition of knowledge and the transformation of new knowledge. Looked at this way, we can say that learning is a change in one's knowledge, skills, attitudes and values brought about through experience, and this change may or may not be expressed in overt behavior.



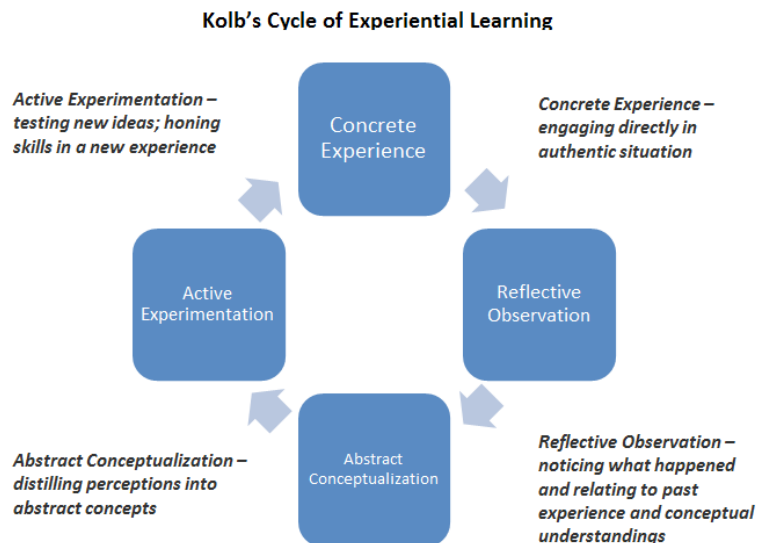
2.1.3 Learning and maturation

Not all changes in behavior can be related to learning. Some behavioral changes are due to biological development or maturation. In maturation, the growth tendencies are independent of specific learning conditions, and depend entirely on biological growth. For example, the swimming of tadpoles and the flying of birds simply occur at the moment of anatomical maturation. A child walks once its legs are strong enough to support its weight.

2.1.4 Experiential learning and constructivism

Experiential learning has been a very influential idea in recent years. It is argued by

Kolb that mature adults have much to offer to the educational process from their life experiences. Peter argues that to some extent experiential learning is constructivism in an adult context. Kolb describes experiential learning as the process whereby knowledge is created through the transformation of experience while Knowles and Brookfield link it to self-directed learning. There is certainly a very strong element of self-direction in learning as in a classic study of the constructivist movement. Knowles postulates certain assumptions about andragogy (the teaching of adults as opposed to pedagogy, which is the teaching of children) and experiential learning. Most of these assumptions also seem to apply to constructivism. Kolb listed the essential characteristics of experiential learning which are applicable to constructivist theory.



These characteristics are:

- Learning is a continuous process grounded in experience.
- Learning is a holistic process of adaptation to the world.
- Learning involves transactions between the person and the environment.
- Learning is the process of creating knowledge.
- The process of learning requires the resolution of conflicts between diametrically opposed modes of adaptation to the world.

As a result of the seminal contributions of Kolb and Knowles there is a style of teaching adults that involves making use of their experiential learning. This is different from pedagogy, in which the teacher instructs the students but does not take experiential learning into account in any way. Andragogy involves the construction of experiential learning into the learning cycle as stated in Figure 1.

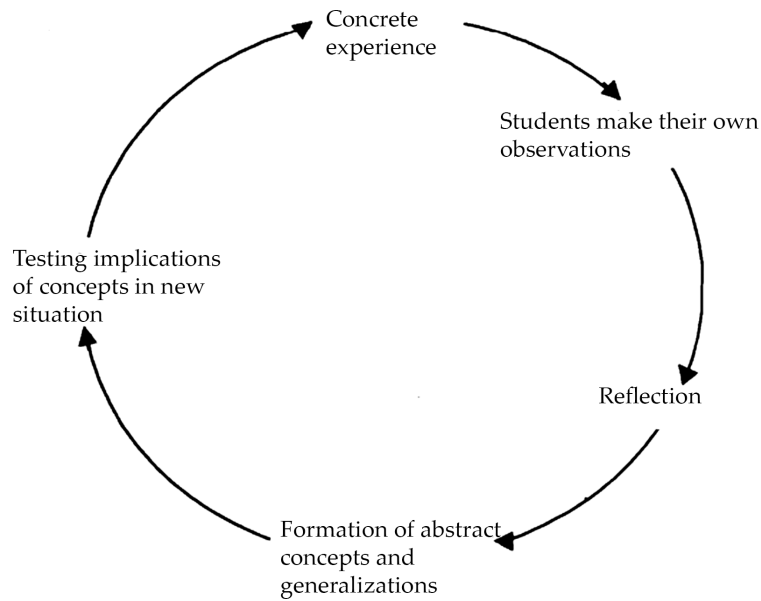


Figure 1. Kolb's experiential learning model.

This cycle explains that the students are encouraged to reflect on their own experiences and to come to conclusions that modify their cognitive structures. They are then ready for the next cycle of experiential learning.

Learning and constructivism

Constructivism refers to a process where the learner is actively constructing both the knowledge acquired and the strategies used to acquire it. The learner constructs a new version of reality from his or her own unique experiences, and it is this construction she then uses to deal with any new experiences in that field.

Constructivist learning is about the elaboration of concepts, as they operate in a real context. Learners elaborate concepts through questioning, critical analysis, and application of the concept and by, reflection-on-action.

To learn constructively is to actively process new information, use structured experiential activity and analyze life experiences, solve problems, examine critically one's existing mental framework, explore belief systems and assess one's learning.

The learner's existing mental framework and learning needs are agents in the interpretation and construction of knowledge.

To prepare the materials constructively is to provide opportunities for complex processing of information related to a learner's needs and knowledge of the world, to design relevant and real world (authentic) tasks, provide complex stimuli, challenge

the learner's existing knowledge structures and values, acknowledge vague structures in knowledge, help learners revisit material in greater depths, confirm the learning identified by learners, and help learners to arrive at correct solutions.

But one of the limitations of this approach is that it does not fully take into account the way in which social processes, such as peer interaction, collaboration and the use of language, which contribute to learning. The main emphasis of constructivism is on individual development through the use of resources and on the accommodation of new experiences to existing understanding.

The role of the tutor/counselor in a constructivist learning environment is to facilitate learning through the provision of programming tasks, and to support individual development by creating a micro-world. There is no specific place for language, dialogue and communication in developing cognition.

The drill and practice approach of behaviorism makes the role of the teacher redundant, while the constructivist approach reinstates learning by discovery, where the role of the teacher is that of a facilitator, someone who works in a supervisory capacity. You can see this difference from the Table 1 given as follows.

Table 1. Difference between behaviorist and constructivist approach

Theory	Behaviorist	Constructivist
Activities	Drill and Practice	Independent learning, experiential learning, programming
Learning Processes	Individual instructional and feedback, drill and practice	Generalizable skills based on individual discovery

The process of designing distance teaching materials should be consistent with constructivist theory. The course materials should be developed for use in a constructivist learning environment. The course materials should evolve through a process of construction of knowledge, reflection and social interactions. The five conditions for creating constructivist learning environments can be applied to the process of designing self-learning materials.

Remember

The curriculum of distance education should provide experiential learning situations for the adult learners and the organization of the content should encourage the learners to realize the consequences of their experiences.

The five conditions are:

1. Embrace the complexity of the design process.
2. Provide for social negotiations as an integral part of designing.
3. Examine information relevant to the design of the instruction at multiple times from multiple perspectives.
4. Nurture flexibility in the design process.
5. Emphasize learner-centered design.

2.1.5 Basic conditions of learning

External conditions responsible for learning are very important in various types of learning. A brief description of the basic conditions of learning is given as follows:

- **Contiguity:** One of the basic conditions of learning is contiguity - the almost simultaneous occurrence of the stimuli and of the responses to them. In teaching, we are always interested in making the students make connections between a particular stimulus and responses to it.
- **Practice:** Practice is the repetition of a response in the presence of the stimulus. We usually need to practice or repeat S-R (Stimulus-Response) associations to retain them for relatively longer periods of time. For new stimuli and new responses, more practice is required. In all types of learning under S-R situations (e.g. classical conditioning, operant conditioning, skills learning) practice is of crucial importance. But it is of minor importance in learning concepts or principles and in problem solving, if the other conditions of learning, such as reinforcement, are provided appropriately.
- **Reinforcement:** Reinforcement is a major condition required for learning to take place. Because of the complexity of the concept of 'reinforcement' and because of its importance, we shall here explain it in detail. We can use reinforcement in different ways to produce different effects, i.e. the effect of different types of learning in the students. In the process of reinforcement, an organism/ learner is presented with a particular stimulus (i.e.



reinforcer) before and after it elicits desired responses.’ In a given situation, the organism will tend to repeat the responses for which reinforcement is given and to discontinue responses for which it is not. We can distinguish a reinforcer from other stimuli because it has a particular effect on behavior.

Feedback is providing the knowledge that the responses are correct or that they require amendment, also functions as reinforcement in strengthening the responses to be learned. The term ‘feedback’ refers to any information that permits learners to judge the quality of their performance. There are various ways in which feedback may be provided. They are immediate or delayed or end-of-session feedback. The importance of supplying feedback has led to several technological innovations, including programmed instruction and computer assisted instruction. Learning efficiency often increases when the student receives feedback about the quality of higher work. The teacher, whether in the classroom or in a distance learning situation, needs to make systematic plans to provide feedback before moving on to new learning materials. Available evidence indicates that active response with direct feedback is superior to passive response with indirect feedback.

A very weak reinforcement may be sufficient for controlling one’s behavior effectively if it is wisely used. We cannot say that a particular activity or event is in fact a reinforcement until we have evidence that it has strengthened the behavior of the individual concerned.

- ***Generalization and discrimination:*** Both generalization and discrimination are perhaps better defined as phenomena rather than as conditions of learning. We call them learning conditions because they are so closely associated with the basic conditions of contiguity, practice and reinforcement which are essential to all learning. A complex learning behavior can be described in terms of stimulus, generalization and discrimination.

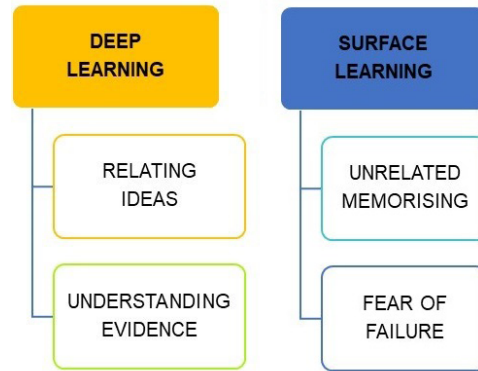
In many situations, we observe that a child, when confronted with a new stimulus, makes a response previously learnt to respond to a similar type of stimulus. We call this behavior ‘generalization’ (or stimulus generalization). When a child is taught to call a particular color ‘red’, it also learns to call other similar hues ‘red’.

Under conditions where discrimination takes place effectively, the individual makes different responses to two or more stimuli. A child, for example, can learn to select the color red and not pink. The extent to which it learns to pick up red and ignore pink, is the extent to which it has learned to discriminate.

2.1.6 Approaches to learning (Deep and Surface)

We have explained the term ‘learning’ as a relatively permanent change in human behavior and it is the result of reinforced practice through the process by which stimulus

and response bonds are established. There is a quantitative increase in knowledge, acquiring, memorizing and reproducing the facts, making sense of the abstract concepts, interpreting and understanding the reality in a different way due to learning.



We will focus on different approaches to learning and we would explain whether there is an internal relationship between the approaches that students adopt to their learning and the outcome of that learning. A course developer should be aware of the approaches to learning while designing and developing self-learning materials. It helps her/him to identify whether materials require memorization or understanding or intended to develop skills and then to work with the materials appropriately. These approaches to learning are described as deep and surface.

A learner who adopts a deep approach

- is interested in the academic task and derives enjoyment from carrying it out;
- searches for the meaning inherent in the task (for example, if a prose passage is read, the intention of the author is sought);
- personalizes the task, making it meaningful to his/her experience and to the real world;
- integrates aspects or parts of the task into a whole (for example, relates evidence to a conclusion), sees relationships between this whole and previous knowledge; and
- ties to understand the theories of the task; forms hypotheses. In other words, if learners want to grow in understanding they will adopt a deep level strategy.

And a learner who adopts a surface approach

- observes the task as a demand to be met, or as a necessary imposition if some other goal is to be reached (a qualification for instance);

- sees the different aspects or parts of the task as unrelated to other tasks;
- considers the time required to complete the task without searching for the meaning inherent in the task;
- relies on memorization, tries to reproduce the surface aspects of the task;
- In other words, if a learner wants to display symptoms of having learned something, she will adopt a surface level approach.

The specific forms of approaches in the specific learning tasks and content domain are researched by distance education practitioners. A large number of studies have been carried out in which approaches to learning and the outcomes of learning have been described. Marton and Booth observed that the students adopted approaches to the tasks they undertook according to their experience of those specific occasions. The outcomes of those tasks were associated with the approaches adopted there, specific to that situation. Some studies have indicated that individual students do indeed adopt different approaches to particular tasks. Other researchers, however, have found it reasonable to make the assumption that individuals have a predominant approach when tackling the tasks of learning, and they have tried to determine the extent to which they adopt such an approach to their studies in general. Ramsden and Entwistle developed questionnaires and interview questions to study how students approach 'learning.

A systematic relationship was found between the attributes and approaches adopted, for example, the perception of heavy workloads, poor presentation, and lack of choice of content and method, and examinations that demanded reproduction. On the other hand, the perception of good teaching and good presentation and freedom to choose what and how to study, are all related to deep approaches to learning.

The features of learning that are typically associated with deep and surface approaches were used by Biggs in developing questionnaires to identify how students approach their study i.e., learning process questionnaire and study process questionnaire. These were used mainly in Australia and Southeast Asia.

Kember has stated that deep learners begin with an intention to understand and maintain a vigorous interaction with content, whereas the surface learner's main intention is to complete the task requirements, which are regarded as external impositions. The implication is that deep learning is somehow better than surface learning because 'understanding' is achieved.

Lyall and McNamara had conducted a study on a population of 137 enrolled students, who have been studying through distance education at tertiary level for at least one year. These learners stated deep learning as understanding and considered this as the better way of learning, since they would be able to retain the knowledge for longer, thus forming a more substantial base on which to build further learning. This building-up of knowledge was considered to be a very important learning strategy.



The results of study emphasize the importance of understanding the approaches to learning while designing materials, because the distance learners have a general desire to adopt 'deep learning' approach, but their circumstances often lead to resort to surface learning approach. These 'circumstances are usually external, such as work commitments, family responsibilities, limitations of study space and isolation from the institution. From the analysis of the pedagogical structure of distance education, and principles of andragogy, we can infer that learning is a 'central basic function of human life' and the distance learners are very pragmatic about their studies and tend to use the more flexible 'strategic' approach to learning. Learning in adulthood becomes constructivist in approach when high flexibility of the learning and teaching strategies are aimed at bringing about quick changes in content and media. The nature of these strategies is of paramount importance in the design of learning materials and the development of a suitable distance teaching paradigm, particularly if new technology is to be used for delivery.

2.1.7 Factors affecting learning

External factors

Heredity: A classroom instructor can neither change nor increase heredity, but the student can use and develop it. Some learners are rich in hereditary endowment while others are poor. Each student is unique and has different abilities. The native intelligence is different in individuals. Heredity governs or conditions our ability to learn and the rate of learning. The intelligent learners can establish and see relationships very easily and more quickly. *Status of students:* Physical and home conditions also matter: Certain problems like malnutrition i.e.; inadequate supply of nutrients to the body, fatigue i.e.; tiredness, bodily weakness, and bad health are great obstructers in learning. These are some of the physical conditions by which a student can get affected. Home is a place where a family lives. If the home conditions are not proper, the student is affected seriously. Some of the home conditions are bad ventilation, unhygienic living, bad light, etc. These affect the student and his or her rate of learning. *Physical environment:* The design, quality, and setting of a learning space, such as a school or classroom, can each be critical to the success of a learning environment. Size, configuration, comfort—fresh air, temperature, light, acoustics, furniture—can all affect a student's learning. The tools used by both instructors and students directly affect how information is conveyed, from the display and writing surfaces (blackboards, marker boards, tack surfaces) to digital technologies. For example, if a room is too crowded, stress levels rise, student attention is reduced, and furniture arrangement is restricted. If furniture is incorrectly arranged, sightlines to the instructor or instructional material are limited and the ability to suit the learning or lesson style is restricted. Aesthetics can also play a role, for if student morale suffers, so does motivation to attend school.



Internal factors

There are several internal factors that affect learning.

They are:

Goals or purposes: Each and everyone has a goal. A goal should be set to each pupil according to the standard expected to him. A goal is an aim or desired result. There are 2 types of goals called immediate and distant goals. A goal that occurs or is done at once is called an immediate goal, and distant goals are those that take time to achieve. Immediate goals should be set before the young learner and distant goals for older learners. Goals should be specific and clear, so that learners understand.

Motivational behavior: Motivation means to provide with a motive. Motivation learners should be motivated so that they stimulate themselves with interest. This behavior arouses and regulates the student's internal energies.

Interest: This is a quality that arouses a feeling. It encourages a student to move over tasks further. During teaching, the instructor must raise interests among students for the best learning. Interest is apparent (clearly seen or understood) behavior.

Attention: Attention means consideration. It is concentration or focusing of consciousness upon one object or an idea. If effective learning should take place attention is essential. Instructors must secure the attention of the student.

Drill or practice: This method includes repeating the tasks "n" number of times like needs, phrases, principles, etc. This makes learning more effective.

Fatigue: Generally there are three types of fatigue, i.e., muscular, sensory, and mental. Muscular and sensory fatigues are bodily fatigue. Mental fatigue is in the central nervous system. The remedy is to change teaching methods, e.g., use audio-visual aids, etc.

Aptitude: Aptitude is natural ability. It is a condition in which an individual's ability to acquire certain skills, knowledge through training.

Attitude: It is a way of thinking. The attitude of the student must be tested to find out how much inclination he or she has for learning a subject or topic.

Emotional conditions: Emotions are physiological states of being. Students who answer a question properly or give good results should be praised. This encouragement increases their ability and helps them produce better results. Certain attitudes, such as always finding fault in a student's answer or provoking or embarrassing the student in front of a class are counterproductive. *Speed, Accuracy and retention:* Speed is the rapidity of movement. Retention is the act of retaining. These 3 elements depend upon aptitude, attitude, interest, attention, and motivation of the students.



Learning activities: Learning depends upon the activities and experiences provided by the teacher, his concept of discipline, methods of teaching, and above all his overall personality.

Testing: Various tests measure individual learner differences at the heart of effective learning. Testing helps eliminate subjective elements of measuring pupil differences and performances.

Guidance: Everyone needs guidance in some part or some time in life. Some need it constantly and some very rarely depending on the students' conditions. Small learners need more guidance. Guidance is a piece of advice to solve a problem. Guidance involves the art of helping boys and girls in various aspects of academics, improving vocational aspects like choosing careers and recreational aspects like choosing hobbies. Guidance covers the whole gamut of learners problems- learning as well as non-learning.

Epigenetic factors

The underlying molecular basis of learning appears to be dynamic changes in gene expression occurring in brain neurons that are introduced by epigenetic mechanisms. Epigenetic regulation of gene expression involves, most notably, chemical modification of DNA or DNA-associated histone proteins. These chemical modifications can cause long-lasting changes in gene expression. Epigenetic mechanisms involved in learning include the methylation and demethylation of neuronal DNA as well as methylation, acetylation and deacetylation of neuronal histone proteins. During learning, information processing in the brain involves induction of oxidative modification in neuronal DNA followed by the employment of DNA repair processes that introduce epigenetic alterations. In particular, the DNA repair processes of non-homologous end joining and base excision repair are employed in learning and memory formation.

2.2 THEORIES OF LEARNING: BEHAVIORISM

Views on learning are based on different philosophical and psychological ideas about human nature and how it learns. Educators work on the basis of various theories of learning.



2.2.1 Behaviorist views

Behaviorism is among the most dominant of modern theories of learning. The behaviorist view is quite comprehensive and includes a variety of thoughts, but all these thoughts suggest a common approach to learning in terms of the development of connections between stimuli received and responses displayed by organisms/learners.

After conducting laboratory experiments with animals, behaviorists concluded that learning is a process by which stimulus and response bonds are established when a successful response immediately and frequently follows a stimulus. They assumed that people are similar to machines, and considered irrelevant any reference to the role of the mind. Most of the basic behavioral research has been conducted on animals. The applications of these research studies, however, relate to a wide range of human behaviors. In this context, we can summarize the major principles of the theories of key behaviorists such as Thorndike, Pavlov and Skinner. These theories have most influence upon the development of a theory of design. According to behavioral theories, learning is viewed as the ability to perform new behaviors which are established as goals. There is an effort to create conditions which will enable the learners to demonstrate these behaviors.

The early behaviorist, Edward L. Thorndike has put forward three main laws of learning: The law of effect, the law of readiness and the law of exercise. The law of effect stresses the importance of the effect of a stimulus-response (S-R). Satisfying results reinforce the response while inadequate results weaken it. Reward and punishment are, therefore, important ingredients of learning. The law of readiness indicates the learner's willingness to make (S-R) connection while the law of exercise is related to the strengthening of the connection through practice.

The mechanistic outlook of learning has been developed by a later generation of behaviorists. They suggest that learning something is a process similar to Habit formation through conditioning which links desired responses to stimuli. A prominent theorist among them is B.F. Skinner who propagated the concept of operant conditioning.

The behaviorist approach to learning has greatly influenced modern educational practices. Behaviorists have conceived of teaching as a manipulation of the environment in order to produce desired behavioral changes in learners and thus make education more effective. They suggest the adoption of the following three principles towards making a teaching learning transaction yield desirable results.

- knowledge of results and use of positive reinforcement,
- minimum delay in reinforcement, and
- elaboration of complex behavior by dividing learning into a series of small steps.



One of the major contributions of behaviorists to education is their emphasis on defining objectives in behavioral terms. They have stressed the need for stating objectives in the form of overt behavior which can be observed and measured. The role of teachers becomes very crucial in deciding what changes of behavior the learners should display when they learn, and in teaching in such a way that learners can attain those behavioral changes.

Behaviorist principles have also influenced contemporary approaches to evaluation. For instance, Bloom has suggested a model of 'taxonomy of educational objectives' based on the hierarchy of learning objectives.

2.2.2 Skinner's theory of operant conditioning

Skinner propagated a theory related to stimulus-response relationship and reinforcement. In his view, learning is a change in behavior. As the learner learns, his/her responses in terms of changed behavior increase. Learning is, therefore, formally defined by him as a change in the likelihood or probability of a response.

Operant conditioning is a learning force which effects the desired response more frequently by providing a reinforcing stimulus immediately following the response. The most important principle of this type of learning is that behavior changes according to its immediate 'consequences'. Pleasurable consequences strengthen behavior while unpleasant consequences weaken it. For example, in Skinner's famous experiment, a pigeon pecks the red ball and gets food. Because of food (reinforcement), the pigeon is likely to peck the same ball again and again.

In operant conditioning, learning activities are divided into many small steps/tasks and reinforced one by one. The operant-the response/behavior or act - is strengthened so as to increase the probability of its recurrence in the future. Three external conditions - reinforcement, contiguity and practice - must be provided to promote or to effect operant conditioning.

Reinforcement

The most important aspect of Skinner's theory of learning relates to the role of reinforcement. An organism/ learner is presented with a particular stimulus - a reinforcer - after it makes a response. In a given situation, the organism/learner will tend to repeat responses for which it is reinforced.

Skinner made a distinction between positive and negative reinforcements. Positive reinforcement is a stimulus which increases the probability of desired responses; usually, it is a positive reward. Praise, smiles, or a prize, are examples of positive reinforcement. In negative reinforcement, the desired behavior is more likely to occur if such stimulus/reinforcement is removed. For example, we can close windows and doors to avoid hearing loud noises or we can avoid wrong answers by giving right answers. Here noise and wrong answers are negative reinforcers. Thus a negative reinforcer is a negative reward - the avoidance of which gives us relief from an unpleasant state of affairs. Skinner did not equate negative reinforcement with punishment.

The basic implication of operant conditioning for instructional activities is their dependence on observable behavior. For Skinner, reinforcement facilitates learning. Further, he thinks that the most effective control on 'human learning requires instrumental aids.

Broadly, Skinner's theory has made the following contributions to the practice of education:

- a) *Teaching Machines*: Teaching machines, in the sense of systematic approaches to teaching with the help of machines, deserve attention as they have strongly influenced distance education both in theory and in practice. In this method, machines present the individual learners with a series of questions to be answered, problems to be solved, or exercises to be done. In addition, they provide automatic feedback to the learners. Teaching through machines and electronic gadgets encourages learners to take an 'active' part in the instructional process. The use of mechanical teaching devices has the following advantages:
 - Right answers are immediately reinforced. Machines encourage and sometimes even compel the learner to come up with the right answers.
 - Mere manipulation of the machines will probably provide enough reinforcement to keep an average student at study for a suitable period each day.
 - Any learner who is forced to leave the activity of learning for a certain period can return at any time and continue from where he/she left off.
 - Each student can proceed with his/her learning on an individual basis at his/her own pace.
 - The teacher is forced to arrange and design the content carefully in a hierarchical order.



- There is constant interaction between the teaching material and the learner, thus sustaining the learning process.
 - After evaluating the progress of the learner, the teacher can supply necessary supplementary reinforcement. Thus, machines make it compulsory that early given material be thoroughly understood before the student moves on to the next set of materials.
- b) *Programmed Instruction*: Programmed instruction is a self-learning system in which the subject matter is broken up into small bits and presented in logical sequences. Each step builds deliberately upon the preceding one. A learner progresses through the sequence of steps at his/her own pace.' Each step presents some new information about the theme that is being taught through the program. At the end of each step there is a question to be answered by the learner. After the question is answered, the learner is expected to check his/her answer with the correct answer supplied in the program. This correct answer functions as a reinforcing stimulus. Thus, the process of reinforcement is an inbuilt feature of programmed materials.

Let us sum up Skinner's theory of operant conditioning in the following Table 2.

Table 2. Summary of Skinner's theory of operant conditioning

Sl.No	Basic Element	Explanation
1	Assumption	Behavioral change is a function of external environmental conditions and events
2	Learning	Change in behavior represented by a visible response
3	Learning outcomes	New responses/behavior
4	Components of learning	Stimulus (discrimination)- Response-Stimulus (reinforcement)
5	Applications to educational practice	<ul style="list-style-type: none"> • Analysis of readiness and motivation • Individual learning materials • Teaching machines • Analysis of aversive classroom practices and interactive classroom • situations • Scheduling reinforcement • Transfer of response stimulus relationship to the solution of new problems.



2.3 THEORIES OF LEARNING: COGNITIVE APPROACH

The cognitive approach deals mainly with the psychological aspects of human behavior. Cognitive learning theory explains how internal and external factors influence an individual's mental processes to supplement learning.

Delays and difficulties in learning are seen when cognitive processes are not working regularly. These processes are such as attention, observation, retrieval from long-term memory, and categorization.

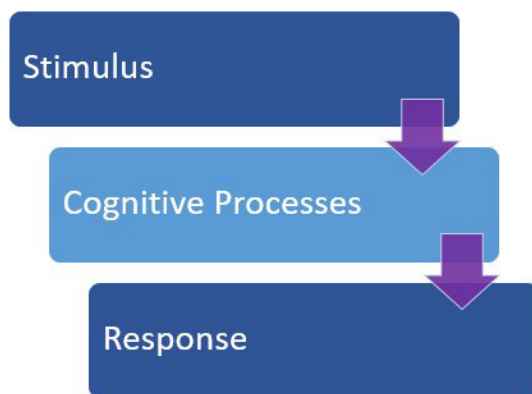
2.3.1 Cognitive approach

'Cognitive approach' has taken an important place in the psychology of learning over the last few decades, and has posed a challenge to behaviorism. It has put back on the agenda the nature of the complex mental process of a learner. While conducting experimental investigation, cognitivism takes into consideration activities such as perception, concept formation, language use, thinking, understanding, problem solving, attention and memory.

Thus, the cognitive approach is concerned with the individual's inner psychological functioning, and it strongly contends the behaviorist's emphasis on overt behavior.

Did You Know?

Even before psychology became an experimental science in the 1890s, learning was an important part of it. But there came a time in the 1910s when psychologists started to become fascinated by learning concepts and learning theories. The 1930s and 1940s are sometimes called the golden age of learning theory; that was when learning was the heart and soul of psychology.



Cognitive theorists have made investigations to show that people learn by perceiving, comprehending and conceptualizing

problems. The comprehension of concepts and rules is transferable to the solution of new problems or from one situation to another. The cognitivists in arguing that people grasp things as a whole, are, therefore opposing the behaviorist approach to teaching which employs drills to memorize the information.

Cognitivists believe that learning is a question both of insight formation and of successful problem solving, and not a mechanical sequence of stimuli and responses. And so, teaching, according to them, should encourage understanding based on problem solving and insight formation.

Information processing

The contemporary cognitivists equate human mental activities with the process that goes on in a 'computer' in operation. They conceptualize human beings as information processing systems. The following discussion explains the process of information system and the three different types of memories, each of which serves a different function in the total process. The three different types of memories are: (i) the sensory memory, (ii) short-term memory and (iii) the long-term memory. The sensory memory receives information into the system either visually or in an auditory form. This type of memory refers to the active mental process by which knowledge is coded or represented. The short-term memory refers to the process by which knowledge is organized, stored and accessed. The long-term memory refers to the mental process by which the information is integrated with previously stored information in short-term memory. When an average person speaks of something being learned, the implication is that the knowledge has been put into long-term memory. One of the most important aspects of long-term memory is that it can be consciously controlled. Information processing is a psychological activity consisting of information being received by the senses and information items being selected and passed on to short-memory where encoding processes transfer them to the long-term memory. Long-term memory provides a store from where information can be retrieved in order to make a response. This process maybe represented diagrammatically as follows:

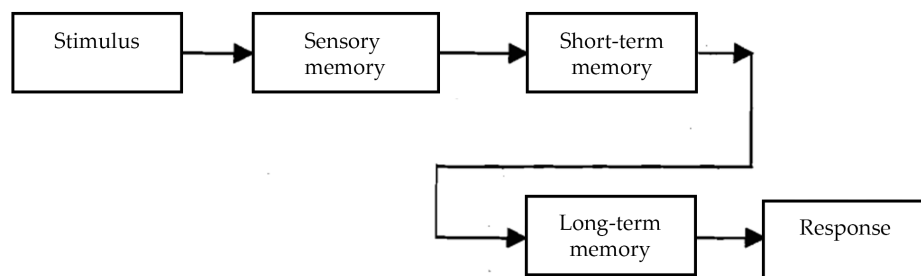


Figure 2. An information processing model.

There are a number of elements which are central to a cognitive theory of learning. To begin with, the individual is seen as having an active relationship with the environment. She has intentions and goals, and thinks of alternative strategies to achieve these goals. Thinking is essentially a purposive activity. Learning is, therefore, an intelligent and active process. Within this process, issues of perception are very important because perceptual activity is the first relationship between a person and his/her environment or situation. The individual interacts with the situation and this interaction leads to relativity in perception as he/she organizes the stimulus into meaningful patterns. Thus an individual acquires knowledge through his/her interaction with the environment and stores this knowledge for use in new situations.

Learning as a cognitive process

For cognitivists, learning is a cognitive process. In the process of learning, certain changes take place in the cognitive structure of the learner, and these changes help him/her develop an understanding of the concept that is being learnt or taught. Thus, learning goals are not achieved simply by performing activities but by grasping the meaning of things in a way that can be transferred to the solution of new problems.

Feedback

One of the important elements of cognitive approach is the notion of 'feedback': The learning situation is seen as one in which an individual confronts a problem, develops a hypothesis based on the knowledge already present in his/her memory and then tries it out. The consequences of his/her action then provide him/her with the required feedback so that the correct solutions are confirmed and the incorrect ones rejected.

2.3.2 Educational implications

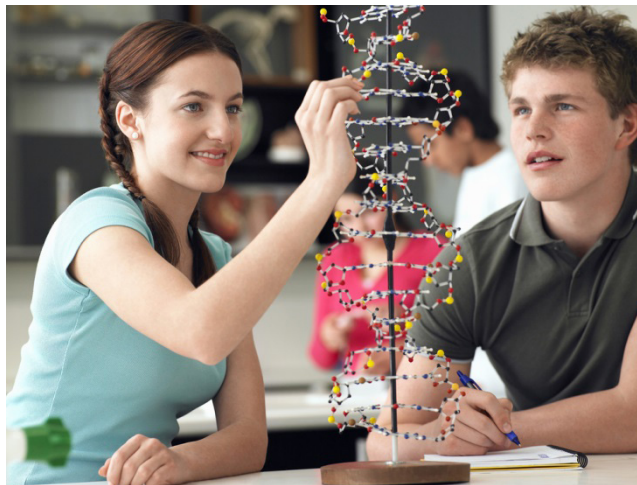
Cognitive psychologists have investigated complex mental behaviors in a scientific way. And their views are becoming increasingly important in their application to education and instruction. The major emphasis of this approach is on how to design educational activities in order to promote cognitive learning. We describe the major educational implications of this approach.

- The most important aspect of the cognitive approach to education relates to promoting retention of knowledge acquired through learning. The ability to retain knowledge depends on how well it is understood. 'Understanding' can help us conceptually locate the information we store in our memory and create new cognitive structures to efficiently use our long-term memory in new situations as well.

- Teaching materials should be planned on the basis of the theory of discovery. Instructional methods should, therefore, emphasize the learners' competence for spontaneous discovery, which implies that active learning methods should be adopted to motivate the learner to rediscover the facts or to find solutions to the problems.
- This approach emphasizes appropriate decisions regarding the instructional objectives, the analysis of prerequisite behavior, and the teaching methods.
- Such an approach also stresses problem-oriented learning. By raising problems and then solving them, it tells us how to teach in a reflective way.
- Lastly, it emphasizes the study of learner characteristics which can be used by the teacher to expand the quality and quantity of the student's insights.

2.3.3 Bruner's discovery learning

Jerome S. Bruner is a proponent of cognitive learning and a developmental psychologist who is primarily interested in the development of mental abilities. His approach to psychology is eclectic (i.e. he selects the best or the most useful features from the various conflicting theories available). He looks at human being as information processors, thinkers and creators, and treats the/learner as a reactive organism who actively selects, structures, retains and' transforms learning/information to achieve certain goals.



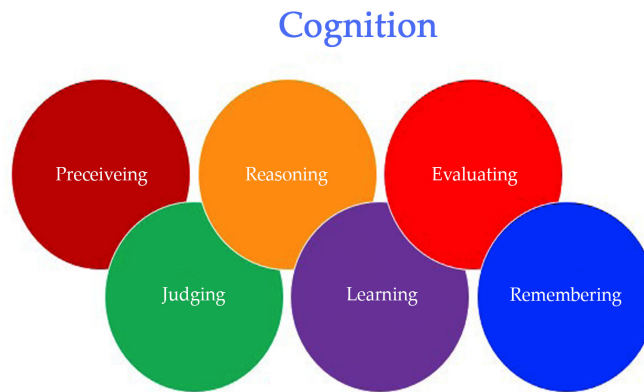
Bruner suggests that people have primary needs, other than animal drives. One of these might be called 'curiosity' which keeps an organism active even in the absence of organic states of tension. So our cognitive activity is not always dominated only by the need for such things as food or sex. Accordingly, Bruner thinks of learning as a goal directed activity which satisfies this drive, and answers the curiosity of the learner.

Learning as a cognitive process

Bruner describes the learner as a problem solver, i.e. one who interacts with his/her environment to test hypotheses and to develop generalizations. The goal of education, according to Bruner, should be cognitive development, and the content of learning should foster the development of problem solving skills through the processes of inquiry and discovery.

In Bruner's view, the cognitive process encloses three almost simultaneous processes:

- Acquisition of new knowledge/information
- Transformation of acquired knowledge
- Checking the adequacy of the new knowledge



The modes of cognitive development are described by Bruner in terms of three hierarchical levels/modes.

The first mode is called 'enactive'. It is the representation of knowledge through actions. For example, a child who inactively knows how to ride a bicycle may not be able to describe the procedure. The second mode is 'iconic'. It is based upon internal imagery. Knowledge is represented by a set of images/graphics/drawings that stand for a concept but do not fully define it. For example drawing can represent the 'triangle' diagrammatically, without explaining the concept of 'triangularity'. The third and the most advanced mode is that of 'symbolic representation'. It is the use of words and other symbols to describe a concept or an experience. Symbolic representation is based upon an abstract, arbitrary and more flexible system of thought. At this stage, language becomes more important as a medium of both of the reception and the expression of ideas. For example, at this stage the child can explain the concept of 'triangularity' or the concept behind the operation of a bicycle.

Autonomous learning

Bruner advocates autonomy in learning. He suggests that when the learner is allowed to approach learning as an act of discovery, she will increasingly engage him/herself in learning, with the autonomy of self-reward. In other words, the learner provides for his/her own stimulation and in this way arouses his or her own curiosity.

The studies of Bruner and his associates indicate that learners can be taught to generate their own instructional method and strategy for learning. A learner learns to study independently and acquires skills to establish his/her own standard in the same way that any scientist/author/researcher does. In this way, the feedback needed from the teacher is at a minimum. Bruner argues that the teacher's role here must be to create an environment in which learners can learn on their own without the help of any pre-packaged information. He suggests that learners should also learn through their active involvement with content. His work was thus influential in the open school movement and other humanistic approaches to learning. The most important goal of education, Bruner feels, is to teach learners how to value learning for its own sake, enabling them to acquire on their own the knowledge they need.

According to Bruner, learning should be flexible and exploratory. Institutions should arouse learners' curiosity, minimize the risk of failure and make the activities relevant to them.

Bruner's theory of instruction

Bruner defines learning as a process in which a learner achieves instructional objectives with little or no help from the teacher. He emphasizes 'the training of students in the use of mind' with confidence, energy and honesty. Thus, a theory of instruction should take into account:

- the ways of structuring knowledge,
- the presentation sequence,
- the motivating experience, and
- the nature of pacing of rewards and punishment

In his theory of instruction, Bruner puts forth his original ideas concerning the most effective way of achieving knowledge and skills. For him, a theory of instruction should cover the following major aspects:

- The emphasis should be placed upon the learners' skills in handling things, and in perceiving and grasping the subject. The learner's approach to learning should be such that she should be able to use the acquired knowledge in solving problems.

- The subject matter should be presented enactively, iconically and symbolically so that learners can acquire optimal comprehension and a generalized set of basic ideas or principles.
- Bruner recognizes the role of extrinsic and intrinsic rewards in promoting learning, but he thinks that intrinsic rewards are more important. He sees intrinsic rewards in the form of the satisfaction gained from solving problems quickly, the interest and involvement in learning, the pleasure received from the intellectual mastery of it; etc.
- Discovery learning increases motivation and strengthens the learner's tendency to carry out his/her learning activities with the autonomy that goes along with self-reward. Discovery learning teaches the learner the techniques-of problem solving and results in a better retention of what is learned because the learner acquires the knowledge through his/her own efforts.
- Intellectual honesty, i.e. willingness to check and correct one's ideas and notions, or one's 'adopted solutions to problems, should be cultivated.

Let us compare behaviorism and cognitivism through a schematic representation of both approaches to learning.

Table 3. Behaviorist and cognitive approaches to learning: A Comparison

Elements	Behaviorist Approach	Cognitive Approach
Basic Premise	Learning is a function of environmental conditions, stimuli and responses; stimulus substitution i.e. an existing response becomes associated with new stimuli. Concentrates on observed response and ignores mental processes.	Learning involves a perceptual reorganization Learning is related to insights. Emphasizes information processing and human memory
Learning formula	Stimulus-Response Reinforcement	Stimulus-Cognitive Processes
Process of Learning	Relationship between stimulus and response.	Learning as insight
Entry behavior	Entry behavior determines the starting point from which complex behavior can be conditioned.	Previous knowledge is used as a base from which a learner can develop his/her own new cognitive structure
Motivation	Organic drives such as hunger, fear, anger, love, etc.	Goal, curiosity and expectation

Major Contribution	Analysis of readiness and motivation. Transfer of stimulus control scheduling Reinforcement analysis of aversive classroom practice. Individualized learning materials.	Linking new learning to cognitive structure. Providing aids in comprehension. Problem solving and long term memory
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2.4 SYNTHESIS OF THE BEHAVIORIST AND THE COGNITIVE APPROACHES

The behaviorist concentrates on the external stimulus and conditions provided by the environment for learning or bringing about changes in behavior. Cognitive theories, on the other hand, stress the internal conditions of learning, viz. perceptual reorganization, insight, information processing and memory. But in reality, learning depends on both external and internal conditions. To make this point clear we present below the views of Robert M. Gagné whose approach is said to be a synthesis of cognitivism and behaviorism.

2.4.1 Gagné's views on learning

Robert M. Gagné is a prominent educational psychologist whose ideas on the 'conditions of learning' are generally employed in every teaching learning process. He identifies the factors which account for the complex nature of human learning and his point of view is often used to underpin the mechanistic instructional technology that is associated with behavior modification and 'performance or competency based education'

He has described learning as a change in the behavior of an individual that is retained and that makes possible a corresponding change in his or her behavior in a particular situation. According to him, learning is a process that takes place inside an individual's brain (comparable to organic processes such as digestion and respiration). The most important aspects of a learner are 'his senses, his central nervous system, and his muscles'.

Gagné combined a basic behaviorist position with elements of cognitive thought and built a hierarchical model of the different types of learning. He thus shows the way in which a unifying theory may be able to explain how different kinds of learning relate to each other. He synthesized the existing theories of learning and tried to provide a consistent explanation for all types of learning with the help of a set of psychological principles of learning. For example, learners learn best when information is presented in logical sequences consisting of short units with a clear framework.

2.4.2 Conditions of learning

Gagné identifies eight conditions of learning, or learning types or varieties of learning, beginning with the simple ones and ending with the complex ones. Although Gagne refers to these conditions as learning types, he is primarily interested in the observable behavior and performance which are the products of these conditions. In these conditions of learning he combined the basic behaviorist view with cognitive theory to present a hierarchical model of different types of learning. Here, we shall give a brief description of the types of learning Gape talks about.

Type	Brief Description
1). Signal learning	The individual acquires a - conditioned response to a given signal, the learning is involuntary
2). Stimulus-response learning	The individual makes responses to. specific stimuli; the correct' response is rewarded
3). Chaining	Two or more previously learned stimulus-response connections are linked together
4). Verbal association	Chains that are verbal, e.g. a child identifies an object and calls it by its proper name (e.g. 'the red ball'), or it finds a Hindi or French equivalent for an English word.
5). Multiple discrimination	The learner learns to distinguish between motor and verbal chains which she has already acquired.
6). Concept learning	A common response to a class of stimuli; in learning a concept the learner responds to stimuli by identifying its abstract characteristics like shape, color, .etc.
7). Rule learning	In] more concepts. '
8). Problem solving	The learner uses the rules learned to achieve some goals; problem solving is the combined product of two or more lower-order rules; it thus requires an internal event i.e., thinking to take place for solving a problem.

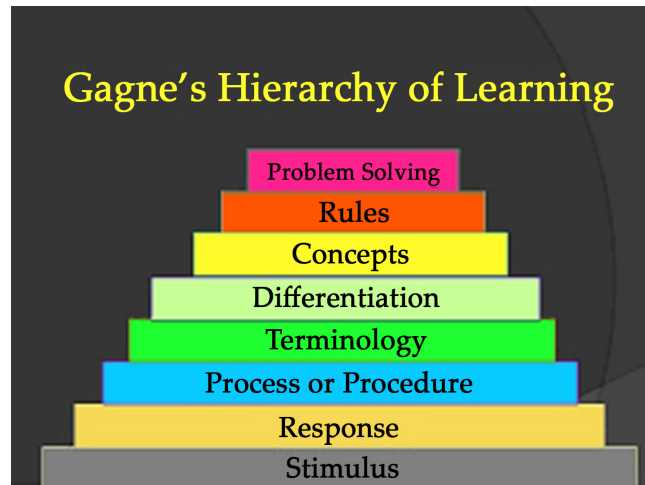
Phases of learning

Gagné has identified nine stages of cognitive processing that are essential to learning and which need to be executed in a sequential order.

These stages are:

- 1) gaining attention;
- 2) informing the learner of the objectives;
- 3) stimulating recall of prerequisite learning;

- 4) presenting the stimulus material;
- 5) providing learning guidance;
- 6) eliciting the performance;
- 7) provide feedback about performance correctness;
- 8) assessing the performance;
- 9) enhancing retention and transfer.



By sequencing instruction in this way, one creates external conditions which complement the internal condition. These phases of learning are the typical series of external and internal events that constitute a single learning act. The internal conditions of learning include two factors- the learner's psychological state and the cognitive processes required for learning. The internal processes may be influenced by external events in the form of environmental stimulation.

The importance of these phases is that they are present in every act of learning and are performed in different ways for different varieties of learning.

They are:

- preparation for learning,
- acquisition and performance, and
- transfer of learning. '

Preparation for learning initiates the individual into the learning task, while acquisition and performance refer to the assimilation of the new knowledge or of the capability. Depending on the complexity of the skill to be learned, these phases may require anything from one to several sessions. Finally, transfer of learning may take place sometime after the acquisition of the new skill.

A brief account of the categories is given as follow:

Category	Phases and their Functions
Preparation for learning	Drawing learners' attention to the stimulus. Informing the learners of learning goals/objectives. Providing recall of prerequisite behavior/learning
Acquisition of performance	Presenting stimulus materials: Permitting temporary storage of stimulus features in working memory. Transferring stimulus features and related information to long-term memory. Retrieving stored information. Activating response. Providing information and feedback about the correctness of performance.
Transfer of learning	Providing additional cues for later recall of capability and assessment of performance ' (cueing retrieval or serve as a signal for getting back the information). Enhancing retention and transfer of learning to new situations/contexts (Generalization).

2.4.3 Psychomotor domain

This domain pertains to the manipulative or psychomotor skills of educational competency. Face-to-face teaching within the overall framework of distance teaching can ensure learning of this kind. For example, driving can be learnt more effectively under the direct supervision of an instructor, after the learner has attended to a television lesson on 'how to drive a car'.

Psychomotor learning has three characteristics:

- i) Response chains: Learning of skills involves a chain of motor responses, i.e. the muscular movements in swimming or driving or writing.
- ii) Movement coordination: Coordination of perception and motor skills is ' necessary here. For example, a child starts riding a bicycle by acquiring this coordination.
- iii) Response patterns: Organization of stimulus-response chains into large response patterns. For example, a child can ride a bicycle or motorcycle without making an error after he/she masters the, skill in question.

There are seven stages of psychomotor-learning. They are: perception, set, guided response, mechanism, complex overt response, adaptation and origination.

1. Perception is the process of becoming aware of objects, qualities or relations by way of sense organs. This level is concerned with the use of the sense organs

- to obtain cues that guide motor activity. The specific learning outcomes are: chooses, identifies, selects and relates etc.
2. Set is a preparatory adjustment of readiness for a particular kind of action. It refers to readiness to take a particular type of action. The specific learning outcomes are: begins moves, reacts and volunteers etc.
 3. Guided response is an early step in the development of skills. It is the overt behavioral act of a learner under the guidance of a counselor or tutor. Readiness is a prerequisite for this kind of response. It includes imitation, and trial and error. The specific learning outcomes are: assembles, builds, sketches, manipulates and constructs etc.
 4. Mechanism means that the learned response has become habitual. At this level, the learner has achieved a certain level of confidence and proficiency. The specific learning outcomes are: a display, measures, organize and builds etc.
 5. Complex overt response is the skillful performance of motor activities that involve complex movement patterns. Proficiency is indicated by a quick and accurate performance requiring a minimum energy. The specific learning outcomes are: assembles, constructs, fixes, organizes and manipulates etc.
 6. Adaptation is concerned with skills that are so well developed that the learner can modify movement patterns to fit special requirements or to meet a problem situation. The specific learning outcomes are: adapts, rearranges, reorganizes and revises etc.
 7. Origination refers to the creating of new movement patterns to fit a particular or specific problem. The specific learning outcomes are: arranges, combines, designs and originates.



ROLE MODEL

ROBERT M. GAGNÉ: AMERICAN EDUCATIONAL PSYCHOLOGIST

Robert Mills Gagné was an American educational psychologist best known for his Conditions of Learning. He pioneered the science of instruction during World War II when he worked with the Army Air Corps training pilots. He went on to develop a series of studies and works that simplified and explained what he and others believed to be “good instruction.” Gagné was also involved in applying concepts of instructional theory to the design of computer-based training and multimedia-based learning.

Gagné’s work is sometimes summarized as “the Gagné assumption”. The assumption is that different types of learning exist, and that different instructional conditions are most likely to bring about these different types of learning.

Biography

Early life and education

Robert Mills Gagné was born on August 21, 1916 in North Andover, Massachusetts. In high school, he decided to study psychology and perhaps be a psychologist after reading psychological texts. In his valedictory speech of 1932, Gagné professed that the science of psychology should be used to relieve the burdens of human life.

Gagné received a scholarship to Yale University, where he earned his A.B. in 1937. He then went on to receive his Sc.M. and Ph.D. at Brown University where he studied the “conditioned operate response” of white rats as part of his thesis.

Career

His first college teaching job was in 1940, at Connecticut College for Women. His initial studies of people rather than rats were interrupted by World War II. In the first year of war, at Psychological Research Unit No. 1, Maxwell Field, Alabama,



he administered and scored aptitude tests to choose and sort aviation cadets. Thereafter, he was assigned to officer school in Miami Beach. He was commissioned a second lieutenant, and assigned to School of Aviation Medicine, Randolph Field, Fort Worth, Texas.

After the war, he held a temporary faculty position at Pennsylvania State University. He returned to Connecticut College for Women. In 1949, he accepted an offer to join the US Air Force organization that became the Air Force Personnel and Training Research Center, where he was research director of the Perceptual and Motor Skills Laboratory. In 1958, he returned to academia as professor at Princeton University, where his research shifted focus to the learning of problem solving and the learning of mathematics. In 1962, he joined the American Institutes for Research, where he wrote his first book, *Conditions of Learning*. He spent additional time in academia at the University of California, Berkeley, where he worked with graduate students. With W. K. Roher, he presented a paper, "Instructional Psychology", to the Annual Review of Psychology.

In 1969, he found a lasting home at Florida State University. He collaborated with L. J. Briggs on *Principles of Learning*. He published the second and third editions of *The Conditions of Learning*.

Personal life

Gagné's widow, Pat, is a biologist. They have a son, Sam, and daughter, Ellen. His non-professional pursuits included constructing wood furniture and reading modern fiction. In 1993, he retired to Signal Mountain, Tennessee with his wife.

Learning process

Gagné's theory stipulates that there are several types and levels of learning, and each of these types and levels requires instruction that is tailored to meet the needs of the pupil. While Gagne's learning blueprint can cover all aspects of learning, the focus of the theory is on the retention and honing of intellectual skills. The theory has been applied to the design of instruction in all fields, though in its original formulation special attention was given to military training settings.

Each category requires different methods in order for the particular skill set to be learned.

Eight ways to learn

In 1956, based on the degree of complexity of the mental process, suggested a system of analyzing different conditions or levels of learning from simple to complex. According to Gagné, the higher order of learning in the hierarchy is built upon the lower levels,



requiring a greater amount of previous knowledge to progress successfully. This analyzes final capability into subordinate skills in an order such that the lower levels can be predicted for positive transfer of higher level learning. The lower four orders focus on the behavioral aspects of learning, while the higher four focus on the cognitive aspects. In his original study on instruction, through a study derived from an analysis of learning of a task of constructing formulas for the sums of number series, Gagné attributed individual differences or differences in intelligence in learning.

Steps of planning instruction

- Identify the types of learning outcomes: Each outcome may have prerequisite knowledge or skills that must be identified.
- Identify the internal conditions or processes the learner must have to achieve the outcomes.
- Identify the external conditions or instruction needed to achieve the outcomes.
- Specify the learning context.
- Record the characteristics of the learners.
- Select the media for instruction.
- Plan to motivate the learners.
- Test the instruction with learners in the form of formative evaluation.
- After the instruction has been used, summative evaluation is used to judge the effectiveness of the instruction.

Nine Events of Instruction

- Gain attention: Present stimulus to ensure reception of instruction.
- Tell the learners the learning objective: What will the pupil gain from the instruction?
- Stimulate recall of prior learning: Ask for recall of existing relevant knowledge.
- Present the stimulus: Display the content.
- Provide learning guidance
- Elicit performance: Learners respond to demonstrate knowledge.
- Provide feedback: Give informative feedback on the learner's performance.
- Assess performance: More performance and more feedback, to reinforce information.
- Enhance retention and transfer to other contexts

Evaluation of instruction

- Have the objectives been met?
- Is the new program better than the previous one?
- What additional effects does the new program include?

The purpose is to supply data on feasibility and efficiency to develop and improve the course.

Evaluation is concerned with the effectiveness of the course or program regarding the student's performance. Based on the student's performance, measures are taken of the kind of student capabilities the program is intended to establish.

When objectively analyzing the condition for learning Gagné says, "Since the purpose of instruction is learning, the central focus for rational derivation of instructional techniques is the human learner. Development of rationally sound instructional procedures must take into account learner characteristics such as initiate capacities, experimental maturity, and current knowledge states. Such factors become parameters of the design of any particular program of instruction."

Awards

- Membership in Phi Beta Kappa, Sigma Xi, and the National Academy of Education
- Eminent Lectureship Award by the Society of Engineering Education
- Phi Delta Kappa Award for Distinguished Educational Research
- E. L. Thorndike Award in Educational Psychology
- John Smyth Memorial Award from the Victorian Institute of Educational Research
- The Robert O. Lawton Distinguished Professorship, Florida State University's highest award
- American Psychological Association Scientific Award for Applications of Psychology
- Educational Technology Person of the Year Award
- AECT Outstanding Educator and Researcher Award

SUMMARY

- Learning theory describes how students receive, process, and retain knowledge during learning.
- Cognitive, emotional, and environmental influences, as well as prior experience, all play a part in how understanding, or a world view, is acquired or changed and knowledge and skills retained.
- Learning is the process of acquiring new understanding, knowledge, behaviors, skills, values, attitudes, and preferences.
- Experiential learning has been a very influential idea in recent years. It is argued by Kolb that mature adults have much to offer to the educational process from their life experiences.
- Constructivism refers to a process where the learner is actively constructing both the knowledge acquired and the strategies used to acquire it.
- Constructivist learning is about the elaboration of concepts, as they operate in a real context. Learners elaborate concepts through questioning, critical analysis, and application of the concept and by, reflection-on-action.
- The specific forms of approaches in the specific learning tasks and content domain are researched by distance education practitioners.
- Behaviorism is among the most dominant of modern theories of learning. The behaviorist view is quite comprehensive and includes a variety of thoughts, but all these thoughts suggest a common approach to learning in terms of the development of connections between stimuli received and responses displayed by organisms/learners.
- The behaviorist approach to learning has greatly influenced modern educational practices. Behaviorists have conceived of teaching as a manipulation of the environment in order to produce desired behavioral changes in learners and thus make education more effective.
- The cognitive approach deals mainly with the psychological aspects of human behavior. Cognitive learning theory explains how internal and external factors influence an individual's mental processes to supplement learning.
- For cognitivists, learning is a cognitive process. In the process of learning, certain changes take place in the cognitive structure of the learner, and these changes help him/her develop an understanding of the concept that is being learnt or taught.



MULTIPLE CHOICE QUESTIONS

1. **When it comes to applying learning theory to the classroom, the most pressing problem for educators is:**
 - a. Presenting students with the right stimuli on which to focus their attention and mental effort
 - b. Getting students to learn
 - c. Presenting the learning material in a gender-neutral manner
 - d. Finding age-appropriate learning materials
2. **What are the functions of cues in discrimination learning?**
 - a. They serve as distracters, inhibiting the effects of discrimination learning
 - b. They act as signals as to what behavior(s) will be reinforced or punished
 - c. They change the circuit architecture of brain, fostering learning
 - d. They act as agents of forgetting
3. **How can principles of stimulus generalization be used to aid learning in the classroom?**
 - a. By using many examples from different contexts. For example teaching the relationship between supply and demand (and how it affects price) can be taught by using examples from grocery shopping, the value of natural resources, and the values of collectibles (such as Beanie Babies, which are produced in small numbers in order to keep up the price).
 - b. By rehearsing the same material over and over until the students get it right
 - c. By using multiple choice tests in the classroom
 - d. By using it in conjunction with punishment
4. **The concept of self-regulated learning derives from**
 - a. Pavlov's work with the conditioned reflex
 - b. Thorndike's law of effect
 - c. Bandura's work with observational learning
 - d. Skinner's work with juvenile delinquents
5. **Behavioral learning theories apply best to**
 - a. Behaviors that can't be observed
 - b. Observable behavior
 - c. Young children
 - d. None of the above



REVIEW QUESTIONS

1. Explain the concept of learning and cognitive development.
2. Describe the factors affecting learning.
3. Differentiate between behaviorist and cognitive approaches to learning.
4. Focus on Gagné's views on learning.
5. Discuss the various phases of learning.

Answer to Multiple Choice Questions

1. (a)
2. (b)
3. (a)
4. (c)
5. (b)



REFERENCES

1. Blanchette, I., & Richards, A., (2010). The influence of affect on higher level cognition: A review of research on interpretation, judgment, decision making and reasoning. *Cognition & Emotion*, 24(4), 561-595.
2. Brain, K., Reid, I., & Boyes, L. C. (2006). Teachers as mediators between educational policy and practice. *Educational Studies*, 32(4), 411-423.
3. Carroll, V. S., (2003). The teacher, the Scholar, the Self - Fitting thinking and writing into a four-four load. *College Teaching*, 51(1). 23-26.
4. Chen, Z. & Hancock, J.E. (2011). Cognitive Development In: Davis, A.S. ed. 2011 *The Handbook of Pediatric Neuropsychology*. New York: Springer Publishing Company LLC. Ch. 6.
5. Department of Education. (2000). Norms and Standards for Educators. Government Gazette No.20844 – 4 February 2000.
6. Ellis, R. A., Hughes, J., Weyers, M., & Riding, P. (2008). University teacher approaches to design and teaching and concepts of learning technologies. *Teaching and Teacher Education*, 25(1), 109-117.
7. Gurr, D., Drysdale, L., Ylimaki, R., & Jacobson, S. L. (2011). Preparation for Sustainable Leadership How School Principals Sustain Success over Time. *Studies in Educational Leadership*, 4183-197.
8. Illeris, K., (2002). *The Three Dimensions of Learning: Contemporary Learning Theory in the Tension Field between the Cognitive, the Emotional and the Social*. Denmark: Roskilde University Press.
9. Kind, V., (2009). A Conflict in Your Head: An exploration of trainee science teachers' subject matter knowledge development and its impact on teacher self-confidence. *International Journal of Science Education*, 31(11). 1529-1562.
10. Major, E.M., (2006). Secondary Teachers as Cultural Mediators for Language Minority Students. *The Clearing House*, 80(1). 29-32.
11. O'Leary, M. O. (2008). Towards an agenda for professional development in assessment. *Journal of In-service Education*, 34, 109-114.
12. Pavlov, I.P., (2003). *Conditioned Reflexes*. 2nd Ed. New York: Dover Publications Inc.
13. Pope, N., Green, S. K., Johnson, R. L., Mitchell, M., (2009). Examining teacher ethical dilemmas in classroom assessment. *Teaching and Teacher Education*, 25, 778-782.
14. Sharan, Y., (2010). Cooperative Learning for Academic and Social Gains: valued pedagogy, problematic practice. *European Journal of Education*, 45(2), 300-313.
15. Stiggins, R. (2001). The principal's leadership role in assessment. *NASSP Bulletin*, 85(621), 13-26.

16. Stith, I. & Roth, W., (2010). Teaching as mediation: The cogenerative dialogue and ethical understandings. *Teaching and Teacher Education*, 26(2), 363-370.
17. Thorndike, E., (1913). *Educational Psychology: The Psychology of Learning*. New York: Teachers College Press.
18. Volante, L., & Fazio, X., (2007). Exploring teacher candidate's assessment literacy: implications for teacher education reform and professional development. *Canadian Journal of Education*, 30(3).
19. Wang, T., Wank, K., & Huang, S., (2008). Designing a Web-based assessment environment for improving pre-service teacher assessment literacy. *Computers & Education*, 51, 448-462.
20. Wentzel, K. R., (2002). Are effective teachers like good parents? Teaching styles and student adjustment in early adolescence. *Child Development*, 73, 287-301.
21. Whitney, B., (2006). Understanding the Teacher's Pastoral Role. In Arthur, J. & Cremin, T. eds., *Learning to Teach in the Primary School*. 2010. New York: Routledge, 2nd ed. 454-465.





CHAPTER 3

COMPARATIVE EDUCATION

LEARNING OBJECTIVES

After studying this chapter, you will be able to:

1. Understand concept of comparative education
2. Explain methods and approaches for research in comparative education
3. Focus on comparative study of education systems

"Properly done, comparative education can deepen understanding of our own education and society; it can be of assistance to policymakers and administrators; and it can form a most valuable part of the education of teachers. Expressed another way, comparative education can help us understand better our own past, locate ourselves more exactly in the present, and discern a little more clearly what our educational future may be."

– Harold Noah

INTRODUCTION

Comparative education is the comparative study of educational theories and practices in various countries. Comparative education attempts to use cross-national data to test propositions about the relationship between education and society and between teaching practices and learning outcomes. Comparative education considers the implications of comparative studies for the formation and

implementation of policies in education, social, national and international development. Comparative education invites contributions from associated disciplines in the fields of government, management, sociology, and technology and communications which affect educational research and policy decisions.

Comparative education aims at:

1. explaining educational systems, processes, or outcomes;
2. helping the development of educational institutions and practices;
3. emphasizing the relationships between education and society;
4. forming generalized statements about education relevant in more than one country.

3.1 CONCEPT OF COMPARATIVE EDUCATION

Comparative Education is a field of study dealing with the comparison of current educational theory and practice in different countries for the purpose of broadening and deepening understanding of educational problems beyond the boundaries of one's own country. If custom and law define what is educationally allowable within a nation, the educational systems beyond one's national boundaries suggest what is educationally possible. The field of comparative education exists to examine these possibilities.

3.1.1 Defining Comparative Education

The history of comparative education can be traced from the earliest times of human history. For example, prehistoric human differentiated between the two genders i.e. between man and woman. In order for the human to improve his/her life comparison has been an important aspect in their life. In political settings, leaders have been inspired to yield equal or more power and authority in comparison to their neighbours. In education circles reformers and educationists have been comparing their system with that found in other countries in order to improve their own. In line with this thinking, then what is comparative education? Comparative education is a fully established academic field of study that examines education in one country (or group of countries) by using data and insights drawn from the practices and situation in another country, or countries. Programs and courses in comparative education are offered in many universities throughout the world, and relevant studies are regularly published in scholarly journals such as Comparative Education, International Review of Education, International Journal of Educational Development, and Comparative Education Review. The field of comparative education is supported by many projects associated with UNESCO and the national education ministries of various nations.

Comparative education has been defined in different ways by various authors but what is common in the definitions is the emphasis on the use of data from another **educational system**. Getao (1996) defined Comparative Education as a discipline, the study of educational systems in which one seeks to understand the similarities and differences among educational systems. Noah and Eckstein (1969) defined comparative education as follows: Comparative Education is potentially more than a collection of data and perspectives from social science applied to education in different countries. Neither the topic of education nor the cross-national dimension is central to any of the social sciences; nor are the social science concerns and the crossnational dimension central to the works of educators. The field of comparative education is best defined as an intersection of the social sciences, education and cross-national study. On the other hand, Sodhi (2006) has quoted various definitions as put forward by renowned comparativists, taking another angle than the above comparativists, who either defines Comparative Education as focusing on various education systems, such as Getao or as a interdisciplinary social science, such as Noah and Eckstein. This angle depart from the premise first formulated sir Michael Sandler (1861- 1943). In a well-known lecture which de delivered in 1900, he contended that in studying foreign system of education it should not be forgotten that things outside the school matter even more than things inside; and that an education system is the.outcome of (societal) forces which have been operated over an extended period of time. Thus he opened a new way of conceptualising Comparative Education and foreign education systems, namely as the outcome of societal or contextual forces.

Keyword

An **education system** refers to the economic and social factors that typically make up public schools at the federal, state or community levels.

3.1.2 Objectives and Scope

Comparative Education has four purposes:

- To describe educational systems, processes, or outcomes.
- To assist in the development of educational institutions and practices.
- To highlight the relationships between education and society.
- To establish generalized statements about education those are valid in more than one country.



Comparative Education is often incorrectly assumed to exclusively encompass studies that compare two or more different countries. In fact, since its early days researchers in this field have often eschewed such approaches, preferring rather to focus on a single country. Single unit studies (i.e. studies focusing on one system of education) dominate Comparative Education research (Wolhuter, 2008: 326). Although this is an apparent negation of the comparative in Comparative Education, comparativists frequently advance several reasons why single-unit studies qualify as Comparative Education research. These include that such studies contribute to the field of knowledge of education systems, and that such studies hook onto general concepts employed in Comparative Education research. Still, some large-scale projects have made important findings through explicitly comparative macro analysis of massive data sets. These include the PISA and IEA studies. PISA (Programme for International Student Assessment) was established in 1997. Coordinated by the OECD (Organisation for Economic Cooperation and Development) it undertakes regular tests of 15 year old pupils in the 65 OECD member states. The first of these tests took place in 2000. The objective is to improve educational policy and quality in these countries. Pupils are tested in reading, mathematics and science. The IEA (International Association of Evaluation of Educational Achievement) is an independent international cooperation of national research institutes and governmental agencies, formed in 1959. The IEA conducts large scale comparative studies on educational achievement. Studies include the International Computer Information Literacy Study, the Trends in Mathematics and Science Study (TIMSS), PIRLS (reading literacy study), ICCS (civic and citizenship Education study) and TEDSM (Mathematics teacher education study). The scope of Comparative Education could be viewed in the following ways. First there is the subject matter/content perspective which covers the essential components of educational systems such as aims, content or curriculum, administration, financing, teacher education and structure. Secondly, there is the geographical unit/area study perspective which comprises intra-national, international, regional, continental and global or world systems studies and analysis. Intra-national studies involve studies done within a nation. The national studies may involve several nations within a region or a continent. Then there is also the ideological approach, which compares countries educational systems on the basis of differing political, social and economic ideologies that are followed. The national philosophy in a country influences the kind of the education that is provided. This can further be affected by the political party manifestoes that propagate a particular ideology. The Socialist countries have used socialism as the main ideology that is followed in their countries and this has affected the education system in those countries. On the other hand Western countries have used several ideologies such as pragmatism, nationalism and democracy in furthering their educational ideals. The thematic scope focuses on themes, topical issues or problems and compares them within one or more geographical units. This can further be done by analysing of a topical issue in education and understanding it. Lastly the special/ historical scope deals with the study of historical development of education.



3.1.3 Rationale for The Field

Many important educational questions can best be examined from an international-comparative perspective. For example, in the United States of America there is no nationwide certificate of completion of secondary education. This raises the question of what the advantages and disadvantages are of leaving such certification and even the choice not to have such a public examination' to each of the 50 states.

Comparative Education draws on the experience of countries such as Japan and France to show how a centralized system works, and what are the advantages and disadvantages of **centralized certification**. This information could then be used to improve the home or own education system.

Keyword

Centralized Certification allows schools with multiple campuses the option of centralizing certifications of enrollment at one location.

3.1.4 Purpose of Studying Comparative Education

There are various reasons why Comparative Education should be studied by prospective teachers and reformers of education in any country of the world. The reasons are:

- **Description:** The most basic utility of comparative education is to describe education systems/learning communities, within their social context, in order to satisfy the yearning for knowledge which is part of human nature. The most basic utility of Comparative Education is to describe education systems within their societal contexts in order to satisfy the yearning for knowledge which is sui generis part of human nature. Bereday (1964: 5) puts it that: "The foremost justification for Comparative Education is intellectual. [Humans] study Comparative Education because they want to know".
- **Understanding/Interpreting/Explaining:** On the next level Comparative Education also satisfies the need to understand: education systems are explained or understood from surrounding contextual forces which shape them. Conversely if education systems are also shaped by the societal matrix in which they are embedded (and if education systems, in turn, shape



societies and cultures) then the comparative study of education systems also fosters an understanding of cultures or societies. Noah's (1986) thesis of "education as the touch stone of society" is very topical here. In this respect the value of Comparative Education is very topical in times of multicultural societies and of Intercultural Education.

- **Evaluation:** Comparative education serves the purpose of evaluating education systems: the own education system as well as universal evaluation of education systems. In the current age of competitive globalised world, the evaluation of the domestic education projects assumes even bigger importance-hence the proliferation of studies such as the PISA (International Programme for the Assessment of Student Achievement) and IEA(International Educational Assessment) studies, and the international ranking of the universities. The universal evaluation entails how well the education systems of the world rise up to the challenges of the twenty first century world as well as an estimation of the limits and possibilities of the societal effects of education.
- **Intellectual:** Comparative education is an intellectual activity that scholars can pursue to the highest level possible in the academic ladder. They can pursue it in their masters and doctoral programmes. An individual can do this in order to enhance his/her intellectual capacity concerning other systems of education with the purpose of enlightenment. This knowledge would help the individual to understand their education system better and that of others with the intention of improving and solving problem in their own system. Knowledge for its own sake is the sole ground upon which comparative education need to make a stand in order to merit inclusion among other academic fields.
- **Planning:** Modern societies have come to appreciate the importance of planning. Various problems that are associated with over-population, under production, diseases, economic nonviability, industrialization and social ills can be tackled through planning. Planning requires careful formulation of objectives, establishment of priorities and the identification of the means to achieve those objectives. Since an educational policy affects millions of people, rational decisions need to be made so that the policy can achieve the desired results. Comparative education is also pursued to design a new education system, to plan education, and to reform education systems. In reforming or improving the education system or in grappling with an educational issue, challenge or problem, one country could benefit from the experience of other countries that once had faced the same problem, could reveal the full extent and implication of the problem and possible contributory causes; and could also suggest possible solutions to the problem. This call for proper planning that comparative education can provide a helping hand.
- **Practicability:** We are living in a practical age in which education is regarded as a consumer good. The pattern of education, which loses its practicability,



goes on being replaced by such patterns, which have practical utility. Those patterns of education that have no practical utility are being reformed. For example, in United Kingdom the state supported primary schools whose objectives was to teach the masses how to read and write, so as to enable them work better in the industrial society. These systems have survived with modification and improvements. In the former USSR and China work experience was emphasized and was very much reflected in the curriculum. In United States of America, comprehensive schools on the principle of utility and practicability have replaced grammar schools. In Kenya the education system was reformed in 1985 with a view to make it more practical. There were various arguments that had shown that the education system was more elitist and had no practical utility to the pupils involved. Moreover, recently there have appeared a number of publications proclaiming the value of Comparative Education in assisting the teachers to improve his/her teaching practice. Comparative Education can assess the track record of particular teaching methods in particular contents. Not the least significance is the value of assisting to improve teaching practice in multicultural classrooms.

- Humanitarian viewpoint: The original inspiration source of the scholarly field of Comparative Education, the philanthropic ideal of the time of Jullien (1775-1848) remains the most noble cause in comparative education. Serving and improving the state of humanity is in the current age of globalisation more urgent than ever by nurturing a global citizen, equipped with a creative, critical and caring mind set. The current world is characterized by increasing problems that are affecting the human population in various ways. Many parts of the world are or have recently been affected by wars, such as Iraq, Togo, Liberia, Sierra Leone, Dufur region in Sudan and Democratic Republic of Congo. The problems experienced in these countries do affect their neighbours and other countries of the world in various ways. For example the Gulf War of 1991 affected the world oil prices just as had happened in 1971 during the crisis in the Middle East. This episode was later repeated

Remember

The problem of reforming an education system to make it more practical and of utility must be studied for solutions and this can be done better through the study of comparative education.



Keyword

Primary education is typically the first stage of formal education, coming after preschool/ kindergarten and before secondary school.

during the war between the United States of America and Iraq in 2003. Since the Universal Declaration of Human Right by the United Nations assembly in 1948; people have aspired for peace, freedom, equality and a better life. Education has been highlighted as a human right and need to be accessed to all irrespective of age. Most of the countries in the world are aspiring to provide education to their masses. Countries like Kenya, Nigeria and Uganda are providing universal **primary education**. However, the economic and social implication of providing education to the masses is not well known. Nations need to co-operate in order to create better world. Therefore, the knowledge of each other education system is necessary and can better be acquired through comparative education.

- Education problems in world perspective: Most countries of the world have identical problems in their educational perspective. Therefore, it is possible for them to learn lessons from each other on how they resolved a particular problem. For example when Kenya was implementing her free primary education in 2003, Nigeria could have provided some of the clues of the problems, which were to be expected, and the solutions to them. Uganda, a close neighbour to Kenya also implemented her universal primary education earlier and she could have provided Kenya with practical solutions on how she managed her problems. Other lessons could have been learnt from Cuba on how she managed to obtain total literacy while India has problems in achieving it. These countries can provide important lessons to Kenya during her implementation of free primary education. Also, one would want to know how nations have struggled to establish media of instruction. The comparative approach would yield a deeper understanding of educational problems and their solutions. In this era, the purpose of Comparative Education would be better understanding of the changed circumstances and to have better equipments to fulfil the new responsibilities. This will help in understanding of why some countries education systems are progressive while others are backward. The administrative system of the land influences the state of the educational system. For example the administrative



machineries of Switzerland, Canada, U.S.A. and Japan are combined with local autonomy and decentralized control. Consequently, in the educational system of these countries, we find a reflection of their political philosophy. Thus the political philosophy and administrative systems of various countries determine the administration and control of education.

- Innovation in education: There are many innovations, which are being introduced to education today. The development of technology has facilitated new methods of organizing learning. For example the use of Radio and Television to deliver knowledge, use of other aspects of the media, Open University, African Virtual University (AVU) and computer assisted distance learning has been introduced to education. All these have facilitated education in a comparative context. The U.S.A. system has facilitated the spread of innovations in education in the world. In most of the developing countries distance education with the use of computer assisted learning is viewed as the panacea of educational access and the associated problems. In this regard the main problem to scarcity of qualified teachers in most of the developing countries would be whether the new technology would replace the real teachers in the classroom settings.
- Economics of education: Much of the massive expansion in the provision of education since the middle of the twentieth century took place on the basis of the belief that the provision of education results in economic growth and increased economic productivity. In the recent year's research has generated the realization that the spread of education is positively correlated with increasing productivity. For example the former U.S.S.R. set out to improve her economy by taking as a first step the eradication of illiteracy. Also, all the developed countries have progressed by investing more in education. On the other hand most of the developing countries have generated the problem of educated unemployment or brain drain by improving their education systems. The belief in the value of education as instrument to effect economic growth took off in the second half of the twentieth century. This belief was spurred by the publication of a book and the formulation of a new theory. F.Harbison and C.A.Myer published their book Education, Manpower and Economic Growth in 1964. This book was based on a correlation between educational enrolment ratios and the level of economic development of 75 countries in the world. In 1961. Theodor W. Schultz, in his presidential address to the American Association of Economists, explained his theory of human capital. This theory, for which he was awarded the Nobel Prize for Economics in 1979, saw education as a productive investment, and no longer as a consumption item as it has been seen in history up to that point in time. This theory resulted in a revolution in Economic thought and in thought in Education alike. While the subsequent experience of more than half a century of educational expansion has proved this belief in the economic returns to educational investment very naive and



simplistic, and economic expansion should not be the only reason for the provision and expansion of education; much of the expansion, in education worldwide takes place in the belief that education will effect economic growth, and can countries learn a lot from each other regarding the use of education to effect economic growth.

- Education for international understanding: International understanding is a central purpose for studying comparative education. The two world wars made man to seek even more seriously the various ways of promoting international understanding. United Nations Educational Scientific and Cultural Organization (UNESCO) have recognized that wars begin from the minds of men. Therefore, in order to stop another war from occurring international understanding is essential so that national pride can be curtailed in the people's minds. This was the spirit of the League of Nations in 1921; International Bureau of Education in 1925 and Commission of Intellectual Cooperation in 1926. To deal with labour problems and education, International Labour Organization (ILO) and United Nations Educational, Scientific and Cultural Organization (UNESCO) have been established. The declaration of human rights by United Nations Organization (UNO) as a way of enhancing peace has contributed to international understanding. Unilateral and multilateral co-operation programmes have been developed to promote international understanding. Education is seen as the possible way to enhance international understanding. To understand other nations of the world, their philosophies of life, education, culture and sociology and to understand the forces, be they geographical, cultural, local and religious influencing their life, to know more about their customs, traditions and culture is absolutely essential. An understanding of how these cultures are affecting education systems, and how these cultures are shaped by education is important for the development of clear concept of internationalism. Exchanging students, teachers and other social workers is intended to promote the international systems of education.
- Relax national pride: This is necessary for combat feelings of superiority, especially among, the populations of countries technologically and economically developed and with military prowess. They need to understand that other countries are essential for their sustenance and therefore have to work for mutual benefit of each other. As Kubow and Fossum (2007), comparative thinking and international perspectives taking are essential for citizens to get along in diverse, global society. Comparison challenges students to suspend judgment of these foreign systems that they might base on their limited and localized perspectives. Through the development of comparative thinking skills, students should be able to undertake analyses of their home cultures and systems with a more nuanced understanding of various cultural factors at play. Comparative education also encourages students and educators to



ask, “What kinds of educational policy, planning, and teaching are appropriate for what kind of society?” The field of Comparative Education focuses our attention on what might be the appropriate and inappropriate policy, while fostering awareness of the ideologies underlying educational practice. Hence, comparative study can also cultivate a political consciousness.

It has been explained above that Comparative Education studies operate on different geographical levels. The utility and value of Comparative Education at the different levels of the global level, the supra-national, the national, the sub-national, the institutional, the class and the individual level will now, in conclusion be illustrated.

On a global level, the significance of Comparative Education has been raised by the phenomenon of globalization. For example, globalization has resulted in a renaissance of Comparative Education in teacher education programs at respectively Canadian and Irish universities. Comparative Education identifies and describes world trends and movements in education. Forces of globalization have acted upon education internationally, creating greater uniformity and standardization. Planet-wide societal (economic, political, social and technological) forces have come to shape education, and need to be taken cognizance of in order to understand education. Comparativists involve themselves in the universal evaluation of education systems globally La. by assessing how these systems live up to global trends and challenges of the twenty-first century. The Millennium Developmental Goals and the campaign for Education for All are global education policies. Similarly, global initiatives such as universal adult literacy, the Millennium Development Goals and Education for All call for the expertise of comparativists to assist with educational planning in order to achieve these goals. In the global village taking shape, other fields/disciplines of educational studies, such as Philosophy of Education, History of Education and Sociology of Education are transcending any parochialism and constructing global frames of reference. The refinement of such an edifice creates another niche for Comparative Education to use by enunciating the relations and interrelations between global society and education, and by explicating the remaining roles of context in shaping education. Current world wide trends such as the information and communication revolution, the

Keyword

Humanity is a virtue linked with basic ethics of altruism derived from the human condition. It also symbolises human love and compassion towards each other.



technological revolution, and the neoliberal economic revolution at the same time hold the possibility of dragging humanity in the twenty-first century to new, unfathomed depths, and the promise to uplift **humanity** to unprecedented planes; placing at the door of Comparative Education the assignment of helping education to steer the world towards the latter.

The most obvious current example of the significance of Comparative Education on the supra-national level is with respect to the nascent European Union. Therefore, for instance, the University of Athens a course called “European Integration: An educational challenge” exists, explicating and explaining to student teachers the uniformisation of education in an integrated Europe. At the African University of Zimbabwe, Comparative Education is taught as part of the courses “African Studies I and II”, elective courses open to students from any faculty. The aim of Comparative Education in these courses is to explicate education within the context of the African continent. A substantial amount of literature focuses on the nature of educational provision in different regions of the world. Such regions include, besides the European Union, also for example the Balkan States, South Eastern Europe. Regional units are constructed on one or more (educational or contextual) characteristics common to the region. Such characteristics obtain increased significance if they distinguish the particular region from other regions. Characteristics can include level of educational development, goals of education, forms of educational administration, institutional fabric of educational institutions, or contextual characteristics such as political organisation, colonial history, cultural origin, or level of economic development. For a complete understanding of national systems of education and individual institutions, it is necessary to turn to regional forces. Regional foci also enlarge the geographic range of educational planning and philanthropic activities.

The level of the nation-state is, of course, the level at which the overwhelming majority of published Comparative Education studies occurs. Here Comparative Education studies describe and explain (from societal forces shaping education systems) national education systems. There is a wide-spread contention among comparativists that the study and comprehension of foreign education systems facilitates a fuller understanding of the own education system. In a recent survey of students’ motivations for studying Comparative Education, Comparative Education students in Bulgaria cited that it will assist them in comprehending their own national education system. Comparative Education research assists with the evaluation of national education systems. IEA and PISA study results, for example, are published in the form of national aggregates. Comparative Education research invokes the educational experience of foreign countries to guide educational reform projects in the home country. National level studies in the field of Comparative Education can also be of value to other fields of educational inquiry. Combinations of national, political, social and economic forces result in configurations of societies discernible at national level, and by explicating such national education societal interrelationships, Comparative Education yields valuable

information to the field of Sociology of Education. It is when an education system requires a nation-wide change that Comparative Education serves the philanthropic ideal at national level. Many studies of institutions such as IIEP (International Institute for Educational Planning) are, for this reason, on a national level.

Current worldwide societal trends of the demise of the once omnipotent nation-state, the resulting decentralisation, and the rise of multicultural societies, bring the sub-national category as level of comparative analysis to the fore. In Germany, for example, the challenge of the educational handling of the substantial number of immigrant (guest worker) children, in the second half of the twentieth century played a pivotal role in the rise of Comparative Education as a field of teaching in German universities and in the rise of Comparative Education as an organised field of scholarly inquiry in Germany - in fact, the name of the German Comparative Education Society is *Sektion International und Interkulturell Vergleichende Erziehungswissenschaft* (Section of International and Intercultural Comparative Education). A paradigm such as feminist studies reveals the experience of women in education, and understanding this experience is the first step towards re-designing education systems and teaching practice to rectify any wrong. It is also by assessing equity in educational systems, not only with respect to the trinity gender, ethnicity/race and socioeconomic status, but also with respect to other, newer, contemporary dimensions of diversity, that Comparative Education plays its part in evaluating education systems. A more positive message emanates from studies in the paradigm of cultural revitalisation. The cultural revitalisation paradigm focuses on deliberative efforts by members of a society to create a more satisfying culture, both at local and national levels, by means of educational initiatives. An example is Mojab and Hall's (2003) study of a Kurdish University in Iran. All these sub-national level studies promote the pursuit of social justice as part of the philanthropic ideal.

Turning to the level of the institution, the paradigm of ethnography (focusing on the culture of a particular educational institution), a fuller description of a school or other educational institution could be obtained, as well as a more complete understanding. The same applies to the paradigm of critical ethnography. Maseman (1986: 11) defines critical ethnography as studies which use a basically anthropological, qualitative, participant-observer methodology, but which rely on a body of theory deriving from critical theory for their theoretical foundation, i.e. conflict theories, with the emphasis on power relations in society. The method is mainly participant-observation small scale, but in order to understand the culture and the life of the actors involved, such a study is then placed finally within a wider theoretical framework of reproduction in which the researcher can make statements about the research that they themselves would never say.

In the competitive globalised world of neo-liberal economies ("survival of the fittest") and decentralisation of power to individual schools, the evaluation of individual schools and lessons that schools can take from best schools internationally assume ever bigger

importance. Holik (2008: 81), for example, linked these to the rise of Comparative Education in post-1990 Hungary. There is strong pressure on schools to attain better results. In assisting schools in this regard, Steyn and Wolhuter (2010) have used their Comparative Education expertise to develop a model for strategic planning in schools. The model has been successfully implemented in a number of schools assisting them to improve and to obtain better results.

On the level of the class, once again the paradigms of ethnography (studying the culture of a particular class) and of critical ethnography, as well as the paradigm of ethnomethodology (studying the social dynamics and norms within a particular class) can be valuable in knowing and understanding what is happening at classroom level. Claire Planel (2008) makes a convincing case, illustrated by an empirical study of 10 student teachers from England doing their teaching practice in France, that Comparative Education in teacher education courses should be reconstructed as Comparative Pedagogy (Pedagogy is understood to mean the theory and practices of teaching). In times of increasing multicultural classrooms, comprehensive schools and inclusive education, Planel argues that Comparative Pedagogy is useful and relevant for teachers as it helps to enhance teachers' understanding of children of diverse socio-economic and cultural backgrounds, and thus culminates in more effective teaching and learning, in view of the importance of teaching to have resonance with, to be linked to the life-world of the students.

In an age of individualisation and human rights, the individual level is destined to assume ever increasing importance in Comparative Education. It is here where the paradigms of phenomenology and phenomenography come into play. Phenomenology limits the scope of ethnomethodology even further, from the classroom to the individual. Individuals and their experiences of situations and contexts, and especially the meanings they attached to these situations and contexts are studied. An example is Milligan's (2003) research on how education influences the forming of identity under Philippine children. Phenomenography (a method, which was established by Tenorth Marton and his research associates in Sweden), as phenomenology attempts to reconstruct individuals' experience and attachment of meaning to phenomena, but unlike phenomenologists' strict limitation to each individual's experience and attachment of meaning as being unique, phenomenography goes over to attempt to classify individual experiences and attachment of meaning. An example is Brew's (2001) study on how seniors experience research. The philanthropic ideal ultimately means the maximum quality of life for every individual, hence the significance of comparative studies at the level of the individual.

The above explicated (potential) of Comparative Education amounts to a tall order, a by no means insignificant assignment; contributing to the coming to fruition of the ideal that every one of the global population of 7 billion people receives an education ensuring quality of life for him/her. There is huge scope for the evolving field of Comparative Education to expand, to rise to the occasion.

3.2 METHODS AND APPROACHES FOR RESEARCH IN COMPARATIVE EDUCATION

There are a number of methodological approaches used by scholars in their approach to the study of comparative education. It is important to note that methodology in comparative education, as in other educational disciplines, is determined by the purpose of the study. Like other social sciences, comparative education has been studied at different times of its development with different methodological approaches. A close look at the various developmental phases reveal that, each phase has produced a different type of work, that mainly depend on the dominant views and motives for comparative education study. Starting with the simple narratives of education abroad during the phase of Travelers Tales, the methodological approaches of comparative education have progressively evolved into the current application of the sophisticated and complex methods of social sciences, which in most cases are empirically based. With a large clientele arising from its multi-disciplinary nature, comparative education scholars have not been able to agree on a single, universally accepted method of study. This view has resulted in a multiplicity of debates and opinions of what method is best suitable for use.

In this regard therefore, we note that methodological approaches used in comparative education are divided into two broad categories, namely traditional approach and modern approach. Under the traditional approach we have the descriptive/statistical method and the historical approach. Under the modern approach we have sociological, analytical and synthetic approaches. We now look at each method independently:

3.2.1 The Statistical/ Quantitative method

This method emphasized the collection, interpretation, verification and comparison of data in education by using statistical/Quantitative analytical charts. The main aim was to facilitate borrowing of useful information or lessons from foreign countries.

In this method various type of educational data are collected about a country. For example, the data about the number of

Did You Know?

Fredrick Schneider and Franz Hilker of Germany sought European precedents in education. William Brickmann in the U.S.A. led the quest and search for the origin of comparative education and educators. His work includes several articles on the subject which dates back as far as to Herodotus (484-425Bc) as a competent cultural comparativist was assumed in the ancient world.



students at a certain stage of education, expenditure on them, the percentage of passes and failures at various stages of education, expenses on teachers' salaries, school building and other items are all collected and the same compared with identical data of another country. Thus, the progress or decline of education in any country is statistically analyzed.

Although the method is still in use today, it is faced with certain shortcomings worth mentioning such as:-

- The unreliability of statistical data, particularly the inaccuracy of local record, which are compiled by officials who may exaggerate figures in order to hide any shortcomings. Generally, due care is not taken in the collection of data. Consequently, many of them are false.
- There is also the imprecision of certain non-standardized term, when applied in different national context. In many cases, the terms used do not connote the same sense. Therefore their statistical analysis is falsified.
- There is also the problem of feasibility of data interpretation without due regard to social influences and values and how they affect education.
- This means, through the statistical method, we cannot understand the educational characteristics that could be as a result of social, cultural, economic, political, and religions situations of a country.

The verification of data in international studies is not always possible due to cost and travel constraints. Evidently the use of the statistical method is very limited.

3.2.2 Descriptive Method

This method was used in the 19th century because the main purpose then in comparative education was to incorporate the good points of another country. This approach therefore called for a detailed description of educational affairs of another country. So many comparative educationists presented detailed descriptive accounts of the educational systems of the countries they visited. Among them were Marc Antoine Jullien de Paris, Victor Cousin, Horace Mann, Henry Bernard and Mathew Arnold. John Griscom of U.S.A (1918-19) visited Great Britain, France, and Holland, Switzerland and Italy and wrote a book entitled "A year in Europe", he described their educational systems in detail. From his report, an attempt was made in U.S.A to incorporate some of the admirable characteristics of the educational system contained in his book. Victor Cousin of France in (1831) published a report on the education system of France.

Some of the educational characteristics of Prussia that he described in his report were emulated in Great Britain and France. However, he did not make a comparative study of educational systems of other countries in his report. This meant that his report could only be evaluated by only persons who had a good knowledge of educational

systems of other countries. Mathew Arnold of Great Britain and Horace Man of U.S.A also did some work in the area of descriptive method approach. M. Arnold studied the educational system of France and Germany and published a report about France in 1859 and about Germany in 1865. In his description, he drew the attention of his readers to those factors which distinguish the educational system of one land from the other. Arnold's method was also followed by Sir Michael Sadler and Paul Monroe. From their views, the study of comparative education became better organized.

Horace Man visited Germany, Ireland, Great Britain, France and Holland. In 1843, he published a report on the educational systems of these countries. He pointed out the special characteristics of the educational systems that he had studied and specifically pointed out the specific elements that should be imitated by others.

He also paid attention to the evaluation of the educational characteristics and their utilities. As a result of his work, later educationist also paid attention to the **evaluation** and utilities of characteristics of educational systems of other countries.

Henry Bernard published thirty one volumes of "The American Journal of Education" between 1856-1881. In these volumes, he described the educational systems of the various states of U.S.A. and many other foreign countries. He interpreted the historical background of each educational system that he described. Michael Sadler on his part emphasized the point that we should study all those national factors, which influence the education system of a country and are responsible for its development and decline. To him, he considered the study of comparative education as useful for one to understand his own system of education. Thus, we can argue here that, in the 19th century only those persons who were able to understand comparative education are those who had a good knowledge of educational systems of their own country. These few example, are accounts, that show the descriptive method of comparative education and as a method, and was advocated for by those educationists who were interested in promoting and popularize the study of comparative education.

Keyword

Evaluation is a systematic determination of a subject's merit, worth and significance, using criteria governed by a set of standards.



3.2.3 The Historical Method Approach

In this approach we study the modern educational problems. The method reveals the basis on which the modern education system is based. Knowledge gained at this point may help us in eliminating undesirable elements in the system and further strengthening of the desirable ones. It is important to note that, we employ historical method not only to know the past in order to understand the present better, but so that we may improve the future by hinting at those factors which may be more useful. In this approach we also try to understand all those geographical, social, racial, political, religious and linguistic factors which influence the educational system of a country.

Scholars such as Nicholas Hans, Isaac Kandel, Schneider and Michael Sadler are known for popularizing this method. They basically agreed that selective cultural borrowing was possible and also emphasized that educational policies and practices have both cause and effect which is found in each society's unique historical experience, that Horace man called the national character. Most of these scholars suggested the development of a science of comparative education in which one could use to discover the universal causes or determinants of educational practices and also to establish terms of education.

Although the scholars who advocated for this approach did not offer a definite procedure to be followed, it is generally agreed that three things, stand out;

- One should study each national system separately in its historical context, taking note of differences in terminologies and methods of collecting and classifying data.
- One should also analyze the forces, and factors responsible for the noted differences that are grouped into four categories i.e. natural, religious, social-economic and political.
- One should also adopt only those ideas and practices that best approximate and can be adapted to the recipient country's historical context.

This approach however is faced by the following short comings;

- The data on which we base one study may not be reliable because in the collection of the same, due care is often not observed. As such the conclusions derived may not be very useful. One should therefore keep in mind that historical materials about education systems of various countries are generally not very reliable. This in turn limits the utility of historical data. Hence it suggests the need for more research to make the data more reliable.
- The other shortcoming is that, historians are generally not impartial in their accounts. In most cases they want to conceal undesirable elements about the history of their own country and look on facts relating to other countries with some perceived prejudice. In this scenario the truth is not known. Consequently

we cannot reach the right conclusions using this approach.

- The third limitation of this approach is that, the past is unduly emphasized. Consequently the study of comparative education can be said to be unbalanced.

3.2.4 The Analytical Method Approach

This approach brings together the relationship that exists between the educational system of a country and its social, political and economical conditions. In any comparative study we have to use analysis. This is because through analysis one can separate the various elements and understand the importance of each independently. The analytical method is considered useful only when the social and educational organizations are compared.

The analytical method therefore follows the four main aspects of analysis.

- i. Collect Educational Data: -This is where all educational information is gathered through descriptive and statistical methods and this forms the basis for the analytical method.
- ii. Interpretation of related data: - This involves interpreting social, political, economic and historical data which is necessary in order to understand similarities and differences found in the educational systems of various countries.
- iii. Determining standard for comparison: -In order for us to compare the educational systems fairly, we need to do so by having a certain standard. This standard will help us compare the similarities and differences of the various educational systems. The analytical method often formulates these standards. For example, the political philosophy, aims of education and the method of control of education are good examples of standards, for comparison. It is on the basis of these standards that one can analyze and understand the similarities and differences of the various educational systems of various countries. On the basis of these standards, for example, one can say that since there is a difference between the political philosophies of Kenya and Tanzania, then, we find differences in their educational systems
- iv. Interpretation and conclusion; -From the above three aspects of analysis, we are able to interpret the collected data and make certain conclusions on the basis of comparison of the various educational systems of various countries.

However, the analytical method approach is also faced with the following two limitations;

- i. This method does not pay adequate attention to the totality of the educational systems.
- ii. The method is also prone to ignoring the inherent similarity, which exists in educational systems in spite of the differences in educational systems of the various countries.



3.2.5 The Synthesis Method Approach

This method has been largely advocated for by Edmond King a renowned comparative educationist in his book “World Perspective in Education”. In this approach, the study of comparative education from an international point of view is considered to be of great significance. In this approach the problems of education are considered and studied on an international frame. This is evidenced by the fact that, when we study the problems of education in various countries, we find some universal truths in their inherent differences the main reason being that, there is much similarities in the needs and aspirations of the people of the globe. For example the United Nations organization, like UNESCO has contributed much towards the consciousness of this similarity. It is important to note that, the method of synthesis has not been fully developed, since it is at its infancy stage and comparative educationists need to develop it further. However an attempt to use it as a comparative study approach is still significant in comparative education.

3.2.6 The Scientific Method Approach

The scientific method approach emerged in the current phase of the development of comparative education. Its time frame dates, back from 1960s. However during this period intense methodological debate centered on the following:

- The feasibility of relying on a particular method as opposed to a multi-dimensional approach.
- The feasibility of the nation- state as the dominant research framework as opposed to intra-national, regional, continental and world systems analyses.
- The over reliance on quantitative (statistical) as opposed to qualitative and descriptive research, and finally
- The range of research concerns that have traditionally dominated studies in comparative education.

The results of the methodological debate culminated in new approaches to the study of comparative education. Some of the scholars have engaged in developing new approaches to comparative education study, while bearing in mind the dynamic nature of the discipline. In fact, some scholars have demanded and attempted to develop a science of comparative education that would finally place comparative education in the family of **social sciences** and at the same time maintain its distinctive position from them.

As such, the methods considered to be scientific that have seen developed, differ in their procedures and focus. Some of these methods include;

3.2.7 The Systematic Area Studies Method Approach

This method was developed and popularized by G.Z.F. Beredy in his book “Comparative Method in Education” (1964). He used the interdisciplinary approach to systematically survey and analyze education in different countries.

The aim is to understand differences and similarities before borrowing and making any predictions. He argues that, since the study has to make sense out of similarities and differences among different educational systems, it is possible to seek assistance from other fields of study such as History, Sociology and Philosophy. In fact educational facts are so enmeshed in a matrix of other social sciences that comparative education cannot be studied in isolation. According to Beredy, the following steps are to be followed;

- i. Description of aspects of Education; - This involves identification of the problem by clearly describing the problem from eye witness accounts, observations or even reading.
- ii. Interpretation and explanation using the interdisciplinary approach; -
- iii. This involves giving explanation of the data collected, of the way things are in each country. Some of the reasons could be historical, social, cultural or religious.
- iv. Juxtaposition or classification of data; - This involves putting the information into groups in categories of contrasting and comparable features. In this way similarities and differences can be easily and clearly seen.
- v. Comparison; - This involves comparing features in one system with those of another system. This helps in the formulation of possible hypotheses.
- vi. Conclusions and generalization; - This involves testing of the hypotheses generated, drawing of valid conclusions and recommendations while focusing on the causes of similarities and differences.

Keyword

Social science is the branch of science devoted to the study of societies and the relationships among individuals within those societies.



3.2.8 The Problem Solving Method Approach

This method was developed and popularized by Brian Holmes in (1964) in his book entitled “Problems in Education: A comparative Approach”. He borrowed the ideas of John Dewey (a famous American Educator) based on the five stages of reflective or critical thinking which Brian applied to the study of comparative education to solve educational problems. The stages are;

- i. Problem Identification
- ii. Problem Analysis
- iii. Proposed problem solutions
- iv. Specification of the context - this involves looking at the factors, and conditions that are likely to influence the outcomes of the proposed solution; such as, conservative mental states like traditions, morals and beliefs. Also it involves prediction of anticipated results - i.e. making informed guesses about expected outcomes.
- v. Comparison and conclusion; - This involves comparing the predicted outcomes (based on the proposed policy solutions) with the actual observable practices. It is more of an evaluation stage (i.e. have things worked out as anticipated?). It also involves making recommendations and conclusions from the observations, and then new lines of action are made.

According to Brian Holmes, he argued that, in the face of a problematic situation, possible solution may spring to mind. On further reflection the problem is better formulated. This further directs the solution to a certain kind of data out of which emerge refined possible solutions, which are then put forward as a hypotheses, which are then tested one after the other and a solution is arrived at.

3.2.9 The Scientific Method Approach

This method was developed and population by Harold Noah and Marc Eckstein in 1960, when they wrote a book entitled “Toward, a Science of Comparative Education”. In this approach, they recommended the following procedure;

- i. Problem identification and review of literature
- ii. Definitions of central concepts, terms and indicators
- iii. Selection/sampling of units of study or cases o be studied
- iv. Data collection
- v. Data Analysis and manipulation
- vi. Interpretation of data -finding & results
- vii Drawing of conclusions and recommendations

As already mentioned earlier, comparative education uses different methodological approaches in its study. For example, some of the scholars in the 1980s such as Robert Arnove, Edmond King and Philip Altbach also wrote on methodology in comparative education. To them they questioned some of the assumptions on which the scientific methods developed earlier were based. However, instead of recommending any particular method for comparative education study, they proposed a combination of methods approach (an eclectic). To them, they argued that the method to be used should largely be determined by the purpose and design of each study. They were indeed skeptical about the possibility of developing an exact science that would allow where possible accurate predictions as had been suggest by the scholars of the scientific method approach (i.e. Noah and Eckstein). In this regard, it is important to note that methodological debate continues to date, which is a sign of a continued evolving and development of a dynamic discipline that deals with the equally ever-changing and complex field of education i.e. study of comparative education discipline.

3.3 COMPARATIVE STUDY OF EDUCATION SYSTEMS

As a result of today's global economy, low-skill workers in high-wage countries such as the United States compete directly with low-skill workers in low-wage countries. Technological advances allowing for the automation of routine jobs have further decreased the demand for low-skill workers and increased the demand for high-skill workers. Shifting demands in the labor market have put pressure on governments to better educate their citizens to be internationally competitive.

Countries that are improving their education systems are improving their economies.

Many international standards and comparisons in education draw upon data from the Programme for International Student Assessment (PISA). This survey by the Organisation for Economic Cooperation and Development (OECD) aims to evaluate

Remember

Education quality no longer can be held solely to national standards, but must be compared internationally.



education systems worldwide by testing the skills and knowledge of 15-year-old students in more than 70 economies. The assessment, administered once every three years, rotates emphasis between the core subjects of reading, math and science.

Table 1. Selected PISA Results

	Mean Score in PISA 2012		
	Math	Reading	Science
Shanghai-China	613	570	580
Singapore	573	542	551
Korea	554	536	538
Japan	536	538	547
Netherlands	523	511	522
Finland	519	524	545
Canada	518	523	525
Belgium	515	509	505
Germany	514	508	524
Australia	504	512	521
OECD Average	494	496	501
United States	481	498	497
Chile	423	441	445
Mexico	413	424	415

PISA aims to measure students' abilities to apply their knowledge to real-life situations. The students and their school principals also complete questionnaires to provide context that can help analysts interpret the results. Since the test is triennial, it is also possible to compare student performance over time. While PISA cannot measure the quality of an education system or identify causal relationships between the various factors and results of education, it does provide a platform to compare successes in educational systems and achievement across nations. By analyzing the educational policies of top-performing countries, the United States can identify ways to improve its own education system.

Critics of international benchmarking believe that cultural bias, inaccurate assessment methodology, and differences in ethnic homogeneity render the results of PISA irrelevant. Furthermore, since the United States remains the world leader in innovation and creativity despite its low PISA scores, critics believe the test must not measure these traits. Nonetheless, it can be valuable to analyze the shared traits of top-performing nations' education systems in order to understand fundamental principles that might be applicable for the states. This brief summarizes some of the most important strategies employed by high-performing countries to provide inspiration for states that are considering important policies for improving student achievements.

3.3.1 Teachers and Teaching

In many of the top-performing countries, teachers are treated as professionals equivalent in status to doctors and lawyers. Not only do these countries display historical respect toward teaching and teachers, but many also offer top salaries and benefits to their teachers. Top-performing nations recruit potential teachers from the top 30 percent of high school graduates: Singapore recruits from the top 30 percent Finland from the top 20 percent and South Korea recruits its primary school teachers from the top 5 percent of high school graduates. In Finland, although the salary is not as competitive as in other top-performing countries, only one in 10 applicants is accepted into the prestigious teaching programs. In contrast, only 23 percent of U.S. teachers come from the top 30 percent—and in high poverty schools, this number is only 14 percent.

Table 2. Ratio of Lower Secondary Education Teachers' Salary to GDP per capita (2008)

	Initial	After 15 Years	Maximum
Singapore	0.98	1.97	*
Korea	1.23	2.13	3.42
Japan	0.88	1.55	1.96
Finland	0.97	1.22	1.53
Canada	1.2	*	*
Australia	0.92	1.3	1.3
US	0.84	1.02	1.26
OECD	1	1.37	1.65
*Data unavailable			

Research consistently shows that teacher quality is the single most influential factor in school performance. Education systems of top-performing countries fundamentally demonstrate that the quality of an education system ultimately depends upon the quality of its teachers.

A look at Singapore

Today, it is considered an honor to be a teacher in Singapore, but this wasn't always the case. Forty years ago, Singapore's education level was similar to that of most developing countries. A series of deliberate policy actions dating from the 1990s onward, however, led to development of Singapore's comprehensive system of selecting and developing its teachers and principals.

Prospective teachers are selected from the top 30 percent of the secondary school graduating class by panels that include current principals. Teachers receive a monthly stipend competitive with the monthly salary for recent graduates in other occupations as observed by the Ministry of Education. All teachers also receive training in the

Keyword

Curriculum is broadly defined as the totality of student experiences that occur in the educational process.

Singapore **curriculum** at the National Institute of Education (NIE). NIE has a close working relationship with the schools, where new teachers are mentored for the first few years. Since the program's focus is designed with teachers in mind rather than to suit to interests of various academic departments, there are no conflicting priorities between arts and sciences and education faculties.

Teaching is considered to be a 12-month profession, with both retention and performance bonuses available for certain teachers. Teachers are allotted 100 hours of professional development (largely school-based) per year so they can constantly improve their practice. Every school has a fund to support teacher growth, which may include study abroad to learn about various aspects of education in other countries. Peer-to-peer learning also is promoted through teacher networks and professional learning communities. Teachers' performances are appraised annually against 16 competencies, which include contribution to academic and character development of students, collaboration with parents and community groups, and contribution to colleagues and the school as a whole. Although teacher salaries do not increase much over time, many opportunities exist for advancement. After three years of teaching, teachers are assessed annually to see which of three career paths— master teacher, specialist in curriculum, or research or school leader would best suit them. Singapore first selects, then trains and supports its teachers. Since the system fosters early selectivity and accountability, there is little attrition and few ineffective teachers and principals.

3.3.2 Funding and Resources

In the United States, 14.8 percent of the variation in student performance is explained by students' socio-economic backgrounds, the same as the OECD average. This value is not a measure of the quantity of disadvantaged students within a nation, but instead is a measure of how powerful poverty is in determining education success or failure. With the exception of Shanghai, Chinese Taipei and a few European nations, top-performing countries tend to have lower variation. In Australia, socio-economic background accounts for 12.3 percent of the variation; in South Korea, 10.1 percent; in Japan, 9.8 percent; and in Finland and Canada, 9.4 percent.



One explanation for the lesser effect of socio-economic background on education performance may be the more centralized systems of funding. In Australia, 75 percent of school funding comes from the state, while the remaining 25 percent is provided by the federal government. In South Korea, 80 percent of local school district funding comes from the central Ministry of Education, Science and Technology. Japan's school funding comes from a combination of national, municipal and prefectural governments, and funding from Finland's federal government accounts for 57 percent of school funding there. Canadian provincial governments have funded schools for the past 20 years, and now provide 90 percent of local school funding. Funding for U.S. public education averages 44.5 percent local, 45.5 percent state, and 10 percent federal. State funding varies significantly, however. New Hampshire school funding is 57.5 percent local, 36.0 percent state and 6.5 percent federal, while Hawaii school funding is 2.2 percent local, 85.2 percent state and 12.6 percent federal.

In many states, a significant component of local funding comes from property taxes. As a result of the property tax, many high-income communities can collect more taxes than low-income communities, where property values can be significantly lower. Some critics of local funding believe this situation creates inequity in the education system, because school funding is determined by the wealth of the local tax base rather than by student need.

A look at Alberta, Canada

The Canadian education finance system shares certain characteristics with that of the United States. In both nations, the national understanding is that, since the federal government cannot appropriately act on local education needs, it therefore should not be charged with managing the system. Canada's system was similar; public schools were largely funded by property taxes. However, the Canadian provinces have undertaken significant reforms since the 1990s, with the aim to create equitable funding for students regardless of where they live. To allow for such equitable funding, Alberta's minister of education determines each school board's education operating budget, using the province's allocation formula, which accounts for grade level, type and number of course credits; the socioeconomic status of the student population; additional needs of English language learners; and any other variations. School boards receive their funding allotments in accordance with this budget from a combination of property taxes and general provincial revenues.

Alberta's provincial government is authorized to levy taxes for school purposes; the lieutenant governor in council sets the property tax rate for the entire province to centralize supervision of property taxes. The revenue from this tax goes to the province instead of the local school board, via the Alberta School Foundation Fund (ASFF). The ASFF distributes the funds to each school board on a per-pupil basis. Alberta's general revenue fund then meets the remainder of the school districts'



operating budgets. Alberta's reforms did not completely revoke the choice of schools and local communities to directly fund their districts. "Separate schools"—many of which have religious affiliations—choose not to receive funds from the ASFF and, instead, raise money locally, perhaps through its religious constituents. To ensure the fairness of this choice, Alberta adds to school funds if enough money is not collected to meet the education operating budget. With a few exceptions, school boards also are not required to spend the money it receives for a given category only on that category. Boards also can still raise money locally through fundraising and fees, but such additional funds are capped so as to not undermine the broader equity principles of the reformed funding system.

3.3.3 Governance

In the United States, the federal government plays a supportive role in education governance, which ultimately is the responsibility of the individual states which, in turn, delegate much of this responsibility to local school districts and other agencies. In general, top-performing nations have a level or agency of government that clearly has responsibility, legitimacy and authority to coordinate education policy as a whole. This is true regardless of whether the governance of education is centralized or decentralized.

The federal Ministry of Education, Culture and Science in the Netherlands, for example, is directly responsible for many aspects of education, including creating policy directives; deciding length and frequency of courses; setting the class size norm; creating examination syllabi and national exams and qualification standards; setting teacher salaries, hours and status; and providing all funding for schools as block grants. South Korea and Japan have centralized forms of governance to both produce and fund major policy initiatives. Both nations have linear and hierarchical systems—their respective ministries set policy and curriculum, create accountability measures, allocate funding to lower levels of government, and set teacher and administrator pay scales. While Finland's national Ministry of Education and Culture technically is responsible for overseeing all publicly funded education, the nation largely places education governance in the hands of the teachers themselves. Singapore's system, although similar to Korea's and Japan's, is unique because of its streamlined teacher advancement policies and its "autonomous" schools. "Autonomous" schools are highperforming institutions within a locality that are given greater responsibility for governance in that they are allowed to choose some staff and set admissions policies.

A look at Australia

Education in Australia is primarily the responsibility of six states and two territories, each of which has its own ministry of education. In addition, Australia has found a way to build some beneficial aspects of centralized education governance without

actually centralizing it. Instead of either the federal government or the states having total control over education governance, both together develop and implement new policies. This was made possible by a variety of agencies created by the various governments, including the Australian Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA); the Ministerial Council for Tertiary Education and Employment (MCTEE); the Standing Council on School Education and Early Childhood; and the Australian Education, Early Childhood Development and Youth Affairs Senior Officials Committee (AEEYSOC).

MCEETYA brings together ministers for education, vocational education, employment and training, and youth services to discuss and develop policies. In 2009, MCTEE was added to execute these policies. One product of MCEETYA and MCTEE is the Melbourne Declaration, which provides a clear set of goals agreed upon by all coalition participants. The Standing Council on School Education and Early Childhood focused on primary and secondary education, early childhood education, and youth policy. It is charged with coordinating development of strategic policy in these areas, negotiation and development of national agreements on shared objectives and interests, and sharing information and the collaborative use of resources. State and national education authorities on this committee meet to jointly develop national education policy. Meanwhile, AEEYSOC is composed of the senior executives of the national and state education systems. On this committee, chief state school officers and the national authority on education are held responsible for implementing Standing Council policies.

Another agency, the Australian Institute for Teaching and School Leadership (AITSL) was created to improve the quality of Australian teachers and school leaders. Funded and owned by the Australian government, the AITSL directed by and acts on behalf of all Australia education ministers at both state and federal levels. With this governing structure, Australia has been able to reform education nationally and to successfully coordinate education both between the state and federal levels and among the various education functions.

3.3.4 Testing and Assessments

Although schools and teachers create their own tests in most education systems, the United States is unique in the amount and purpose of mandatory external testing. Top-performing nations commonly require gateway exams that allow students to move on to the next phase of education, and tests are more often used to determine student placement or to monitor student and school progress. In the United States, however, tests are held almost every year and are used to hold schools and teachers accountable. Although top-performing nations test less frequently than the United States, they tend to test a wider range of subjects.

A look at Finland

Finland holds no required external assessments throughout primary and secondary school, but offers an optional National Matriculation Exam at the end of upper secondary school. Sample diagnostic tests are conducted in grades six and nine, and teachers are encouraged to regularly assess their students following the guidelines provided in the national core curriculum. Students also are encouraged to self-assess so they can understand their strengths and design learning activities to address their needs.

Although the National Matriculation Exam is optional because of students' legal right to proceed to the next level of education upon completion of the previous level, most students who wish to continue higher education choose to take it. The exam, which covers four areas, is based on problem-solving skills rather than subject mastery. Students must take the exam in their mother tongue, but can choose between second national language, foreign language, mathematics, and sciences and humanities for the remaining three areas. The languages and mathematics areas have basic and advanced.

Remember

Students can choose the level for each area but must take at least one advanced level. The results of the test may affect student placement in some national institutes of higher education.

3.3.5 Class Size and Structure

The United States is one of the top spenders in education globally. In particular, the United States places significant resources in education capital— most notably with the intent to keep class sizes small. With an average class size of 24 students in 2009, the United States contrasts to topperforming nations in East Asia, such as Shanghai (39), Japan (37), and Korea (36). Small class size has been considered to provide an overall better classroom experience; lower student-teacher ratios mean more focused, one-on-one attention for each student and a reduced workload for the teacher. Although research shows that smaller classes are beneficial to younger students in primary school and to socioeconomically disadvantaged students, the overall relationship between class size and school performance is weak. More significant to school performance is the amount of class time devoted to teaching and learning, which is affected by how much support teachers are given to address disciplinary issues in the classroom, among various other factors.



A look at Japan

Even with a class of 37 average 15-year-olds, Japanese teachers in primary and lower secondary schools rarely lecture. Classes are more commonly split into small groups, and all students work on the same task. Students are expected to learn by doing things themselves or by watching their peers, instead of by completing drills or listening to lectures.

Both incorrect and correct answers are highlighted, with the understanding that students can better understand the material by seeing both. Students who struggle with material can better understand concepts by watching their classmates. Teachers also frequently team-teach, which allows different teachers to focus on different ability levels within the same lesson.

The large class size also encourages students to develop a sense of self in a group setting. Every Japanese student has a homeroom, which becomes that student's family in the school, and Japanese teachers introduce techniques and skills that allow students to function effectively in a group from the first day of primary school. Responsibility for classroom discipline and management is not solely the teacher's burden, but is shared by the class through the rotating role of class leader.

Particularly in regard to class size, the various aspects of an education system can be a reflection of social, cultural and organizational factors that exist in various countries. Japanese students can spend more time engaging in classroom activities because they are expected to run drills outside of class, at home or in "cram schools." As a result of Japan's emphasis on group orientation, students are consistently and strategically taught not only to be responsible for themselves, but also for each other. This, in turn, allows teacher to effectively oversee a larger class without the need to deal with disciplinary issues.

3.3.6 School Choice

Although charter schools are often the first consideration in relation to school choice, they are the unique product of the American education system and cannot be so easily compared internationally. In the United States, charter schools are publicly funded, independently operated, and must meet the same academic standards as other public schools. Charter schools operate temporarily; reauthorization usually is required every five to 10 years.

More comparable across various nations is private school choice (largely represented by school vouchers in the United States), but even this is difficult to consider since most disparities in international private school choice options are due to the differing histories of each nation's education system.

In the United States, individual states began to adopt school choice policies in the early 1990s for a variety of reasons, including a desire to close the achievement gap and a belief that parents should have the right to choose the school their children attend. In many other countries, however, private school choice was built into the education system from the beginning. This was possible in nations that had an initial education system composed entirely of private—often religious—schools. Many of these nations implemented a public school system by offering subsidies for private school admission to the general public. Thus, while school choice exists in countries other than the United States, different historical and cultural values and different types may apply. In general, top-performing countries offer school choice in the form of government-funded private school choice programs, and all participating private schools are regulated or held accountable in some manner.

Keyword

Private schools are not funded or operated by federal, state or local governments.

Canada has private school choice nationwide, along with charter schools in the Province of Alberta, and most of these schools receive at least some government funding. Charter schools, while independently operated, are subject to more government oversight than private schools and are entirely publicly funded. In Australia, 31 percent of students are enrolled in **private schools**, which are required to meet federal education standards and receive some state and federal government.

In the Netherlands, all schools are funded equally if certain regulations are met, whether the school is public or independent (private). Private schools make up two-thirds of government-funded schools, and 76 percent of students attend private schools with public funding. These schools usually have religious or philosophical affiliations. The few private schools in Finland are given the same government funds as public schools and are held to the same standards as public schools.

Private schools in South Korea are primarily funded privately but also receive a small amount of government funding and subsidies. The Japanese government provides capital grants to private schools and pays 50 percent of private school teachers' salaries. Private schools in Singapore receive no government funding but are held to the same curriculum and assessments as public schools.



A look at Flemish Belgium

The Belgian Constitution includes the right of “freedom of education” —while school is compulsory for all children age six to 18, it also is free. “Freedom of education” in Belgium also means that any natural or legal citizen can start a school and, under the “freedom of organization,” each school is permitted to develop its own education policies from curriculum to teacher selection. Schools are financed and regulated by one of three communities: Flemish-, French- and German-speaking. Regardless of whether a school is publicly or privately operated, the Flemish government requires it to be “recognized” in order to be eligible to award official certificates and diplomas. There are further requirements for recognized schools to receive public funding, and not all schools choose to meet these requirements.

The two major conditions for public funding from the Flemish government are that 1) the school must follow the Flemish core curriculum and 2) the school must allow the Flemish Inspectorate to ensure the school’s quality. School choice also appears under the Flemish constitution’s “freedom of education,” which gives parents the right to choose a school for their children. This not only requires schools to be accountable to parents, but also offers the potential for competition among schools. Most Flemish students attend recognized institutions that are publicly funded and privately operated. In the 2006-2007 school year, 68.28 percent of students (about 60 percent in primary education and 75 percent in secondary education) attended subsidized, privately operated schools. Most of these schools are affiliated with the Catholic or Protestant religious denominations, but some schools instead are affiliated with a particular education method.

Table 3. Enrollment rates (%) in early childhood and primary education (2011)

	Age 3	Age 4	Age 5
Australia	13	67	98
Belgium	98	99	99
Canada*	1	48	92
Chile	42	77	87
Finland	49	57	67
Germany**	90	96	97
Japan	77	93	97
Korea	82	83	86
Mexico	44	100	100
Netherlands	87	100	100
OECD	67	84	94
United States	50	78	83
*Year of reference 2010			
**Year of reference 2006			



3.3.7 Early Childhood Education and Care

Availability and support of early childhood education and care (ECEC) are growing quickly in high-performing countries. This is aligned with research that shows students who have attended pre-primary education programs tend to perform better than students who have not. Longer duration of preprimary education, smaller student-teacher ratios, and higher public expenditure per child all enhance the positive effects of participation in such programs. Topperforming OECD countries have either national available education-only programs or integrated programs, which include both education and child care services. Teachers in these programs usually are qualified and follow a formal curriculum.

Some nations— particularly in the EU— have made access to pre-primary education almost universal for all 3--year-olds, while others have similar plans: China aims to introduce universal preschool education by 2020, and South Korea aims to provide a new public preschool system for children ages 3 to 5, along with at least one year of free education to all children who are age 5. Singapore recently created the Early Childhood and Development Agency (ECDA) to oversee all aspects—including kindergarten and child care centers— of the development of children younger than age 6.

On average in OECD nations, 67 percent of children age 3 or younger are enrolled in early childhood education. In general, top-performing nations tend to have higher participation rates in ECEC programs at earlier ages. Exceptions such as Australia, Canada and Finland represent the difficulty of distinguishing between early childhood education and early child care. For example, low participation rates in “early childhood education” in Finland may be a reflection of high participation rates in Finland’s high-quality “early child care” programs. In contrast, universal participation rates at or below age 5 in countries such as Mexico and the Netherlands reflect a national early compulsory education age.

A look at Germany

As a federal system, many of Germany’s ECEC programs are run by the 16 state governments. With the Child and Youth Welfare Act (KJHG), the federal government provided a legal framework for early childhood services to address the rising demand for educational equity at the earliest ages. KJHG charged all Kinderkrippen (for children under age 3) and Kindergarten (for children age 3 to compulsory schooling age) institutions with encouraging child development and supplementing the child’s upbringing in the family. This includes instruction, education and care for the child to ensure healthy development socially, emotionally, physically and mentally. Education objectives focus on communication of basic skills and development and enrichment of personal resources to help motivate the child to learn.

Concurrently, every child from the age 3 to starting school age has a legal right to day care in a child day care facility. The manner of education and care given to each child is adjusted to the child's individual situation: age and development stage, linguistic capabilities, interests and life situations, and ethnic origin. Although Germany has achieved near-universal participation in pre-primary school, more than 25 percent of total spending on pre-primary education is provided by private sources. At the same time, the rates of services offered theoretically are based on the needs of the children and their families, and the German government offers funds to subsidize ECEC participation.

The U.S. education system has significant strengths, but opportunities exist to learn from what top-performing nations have in common. Although it would be impossible to categorically adopt any single method or policy found abroad into the U.S. education system, the systems of nations that show the best PISA results share a few consistent and common themes. Top-performing countries focus on improving teacher quality through advancing the recruitment pool and providing current teachers with support and professional development opportunities. These countries also seek educational equity when they develop new policies, and cohesively mobilize all the necessary agents of governance to do so. Above all, top-performing nations are committed to steady, long-term improvement over rapid short-term results.



SUMMARY

- Comparative Education is a field of study dealing with the comparison of current educational theory and practice in different countries for the purpose of broadening and deepening understanding of educational problems beyond the boundaries of one's own country.
- Comparative education has been defined in different ways by various authors but what is common in the definitions is the emphasis on the use of data from another educational system.
- Comparative Education draws on the experience of countries such as Japan and France to show how a centralized system works, and what are the advantages and disadvantages of centralized certification. This information could then be used to improve the home or own education system.
- On a global level, the significance of Comparative Education has been raised by the phenomenon of globalization.
- In an age of individualisation and human rights, the individual level is destined to assume ever increasing importance in Comparative Education. It is here where the paradigms of phenomenology and phenomenography come into play.
- The Statistical/ Quantitative method emphasized the collection, interpretation, verification and comparison of data in education by using statistical/Quantitative analytical charts. The main aim was to facilitate borrowing of useful information or lessons from foreign countries.
- Descriptive method was used in the 19th century because the main purpose then in comparative education was to incorporate the good points of another country. This approach therefore called for a detailed description of educational affairs of another country.
- In historical method approach we study the modern educational problems. The method reveals the basis on which the modern education system is based. Knowledge gained at this point may help us in eliminating undesirable elements in the system and further strengthening of the desirable ones.
- The analytical method approach brings together the relationship that exists between the educational system of a country and its social, political and economical conditions. In any comparative study we have to use analysis.
- As a result of today's global economy, low-skill workers in high-wage countries such as the United States compete directly with low-skill workers in low-wage countries. Technological advances allowing for the automation of routine jobs have further decreased the demand for low-skill workers and increased the demand for high-skill workers.

MULTIPLE CHOICE QUESTIONS

1. **What change in Education is necessitated by Globalization?**
 - a. Equality of Educational Opportunities
 - b. Modernization of Education
 - c. Vertical Mobility
 - d. Cultural Diffusion
2. **The great sociologist who held the view that “education does not bring about social change, rather the social change results into an educational change” was:**
 - a. MacDoogal
 - b. Aristotle
 - c. Durkheim
 - d. Dewey
3. **The curriculum construction in Indian education is mostly influenced by**
 - a. Child’s Psychology-
 - b. Teacher’s Personality
 - c. Family structure
 - d. Constitutional provisions
4. **Stanford Binet Scale measures the following attribute of an individual :**
 - a. Intelligence
 - b. Creativity
 - c. Aptitude
 - d. Personality
5. **A sector plan in education indicates**
 - a. overall planning
 - b. a limited area of planning
 - c. planning for a region
 - d. planning for a particular level of education
6. **The ultimate purpose of comparative education is :**
 - a. closely studying the patterns of education in other countries.
 - b. finding similarities and differences between systems of education in different areas.
 - c. adapting feasible educational programmes by scientifically studying these in other regions.
 - d. studying the educational problems of a region in comparison with those of other regions.

7. **Education and socio-economic development are :**
 - a. Related in direct proportion
 - b. Related in an indirect proportion
 - c. Sometimes related and sometimes not related.
 - d. Not related.
8. **Social reform aims at**
 - a. Changing basic values of society
 - b. Changing the norms of the group
 - c. Changing the religious practices
 - d. Changing the habits of the individuals.
9. **Which method is adopted in order to create social attitude among students ?**
 - a. teacher-centric method
 - b. input-out method
 - c. collective persuasive method
 - d. all of these
10. **Education and population are related as follows**
 - a. Expansion of education leads to developing trends of small size family among educated males and females
 - b. Expansion of education can control growth-rate of population
 - c . Expansion of education makes population more qualitative.
 - d. All the above

REVIEW QUESTIONS

1. What is comparative education and its importance?
2. What is comparative education studies?
3. What are the types of comparative education?
4. Mention the uses of comparative education.
5. Discuss the advantages of prospective teachers studying Comparative Education.
6. How can you, as a teacher in the classroom, make profitable use of Comparative Education?
7. Critically discuss the merits and demerits of the problem solving approach as advocated for by Brian Holmes.
8. Assess the practicability of a multi-dimensional approach in the study of comparative education.

Answer to Multiple Choice Questions

- | | | | | |
|--------|--------|--------|--------|---------|
| 1. (a) | 2. (c) | 3. (d) | 4. (a) | 5. (d) |
| 6. (c) | 7. (a) | 8. (a) | 9. (c) | 10. (d) |

REFERENCES

1. Brew, A. (2001). Conceptions of Research: a phenomenographic study. *Studies in Higher Education* 26: 271-285.
2. Chaube A. & Chaube S.P. (2004) *Comparative education*, Vikas publishing house PVT Ltd, Delhi.
3. Fidler, B. 2002. *Strategic Management for School Development: Leading your school's improvement strategy*. London: SAQE.
4. Holik, H. (2008). The Role of Comparative Education in Hungary. In: Wolhuter, C.C.; Popov, N.; Manzon, M. and Leutwyler, B. (eds). *Comparative Education at Universities Worldwide*. Sofia: World Council of Comparative Education Societies and Bureau for Educational Services: 81-87.
5. Kubow, P.K. and Fossum, P.R. (2007). *Comparative Education: Exploring issues in international context*. Upper Saddle River, New Jersey: Pearson Education.
6. Larsen, M.; Majhanovich, S. and Maseman, V.L. (2008). *Comparative Education in Canadian Universities*. In: Wolhuter, C.C.; Popov, N.; Manzon, M. and Leutwyler, B. (eds). *Comparative Education at Universities Worldwide*. Sofia: World Council of Comparative Education Societies and Bureau for Educational Services: 145-156.
7. Machingura, V. and Mutemeri, J. 2006. The State of Comparative Education and History of Education in Zimbabwe. In: Wolhuter, C.C. (ed.). *Aurora Australis: Comparative Education and History of Education at Universities in Southern Africa/ Education Comparee et Histoire de l'education dans les universities d'Afrique Australe*. Potchefstroom: C.C.Wolhuter: 89-99.
8. Sodhi, T.S. (2006) *Text Book of Comparative Education*, Sixth edition, Vikas publishing house, Delhi.





CHAPTER 4

ETHICS FOR EDUCATORS

LEARNING OBJECTIVES

After studying this chapter, you will be able to:

1. Explain the concept of teacher education
2. Elaborate the significance of roles and responsibilities of educators
3. Define the code of ethics for educators

"If you are planning for a year, sow rice; if you are planning for a decade, plant trees; if you are planning for a lifetime, educate people."

– Chinese Proverb

INTRODUCTION

The educator, believing in the worth and dignity of each human being, recognizes the supreme importance of the pursuit of truth, devotion to excellence, and the nurture of the democratic principles. Essential to these goals is the protection of freedom to learn and to teach and the guarantee of equal educational opportunity for all. The educator accepts the responsibility to adhere to the highest ethical standards.

The educator recognizes the magnitude of the responsibility inherent in the teaching process. The desire for the respect and confidence of one's colleagues, of students, of parents, and of the members of the community provides the incentive to attain and maintain the highest possible degree of ethical conduct.

The educator strives to help each student realize his or her potential as a worthy and effective member of society. The educator therefore works to stimulate the spirit of inquiry, the acquisition of knowledge and understanding, and the thoughtful formulation of worthy goals.



In fulfillment of the obligation to the student, the educator--

1. Shall not unreasonably restrain the student from independent action in the pursuit of learning.
2. Shall not unreasonably deny the student's access to varying points of view.
3. Shall not deliberately suppress or distort subject matter relevant to the student's progress.
4. Shall make reasonable effort to protect the student from conditions harmful to learning or to health and safety.
5. Shall not intentionally expose the student to embarrassment or disparagement.
6. Shall not on the basis of race, color, creed, sex, national origin, marital status, political or religious beliefs, family, social or cultural background, or sexual orientation, unfairly--
 - a. Exclude any student from participation in any program
 - b. Deny benefits to any student
 - c. Grant any advantage to any student

7. Shall not use professional relationships with students for private advantage.
8. Shall not disclose information about students obtained in the course of professional service unless disclosure serves a compelling professional purpose or is required by law.

4.1 CONCEPT OF TEACHER EDUCATION

Education renders a significant contribution in leading to effective growth and development of the individuals and teachers have an important role to play in imparting education to the students. The major significance of teacher education is focused upon the impartment of training to the teachers, with the main purpose of achieving the desired academic outcomes. Teachers have an important role to play in leading to effective growth and development of the students. Therefore, to perform their job duties up to the required standard, it is vital for them to enhance their skills and abilities. The teachers have an important role to play in not only achieving the desired goals and objectives of the educational institutions, but also in promoting welfare of the community. Within the course of implementation of their job duties, they are required to cope with many challenges.



Educational institutions render a significant contribution in making provision of knowledge and information to the students to lead them towards light from darkness. The key personnel within the educational institutions, who play an important part in the implementation of this task and in bringing about transformation within the lives of the individuals are the teachers. The teacher is regarded as the most important element within the educational program. It is the teacher, who is responsible for putting into practice the educational programs at any stage. It is vital to make an investment in leading to preparation of the teachers in an appropriate manner, so that the individuals,

community as well as the entire nation can move forward towards progression. The teachers are required to be well-prepared and possess the essential skills and abilities with the purpose of performing their tasks and functions in an appropriate manner.



The teachers are required to be effectively trained not just to perform their job duties of educating the students, but they also lead to progress of the community and secure the future of the nation. The significance of competent and proficient teachers cannot in any way be overemphasized. The National Curriculum Framework 2005 places demands and expectations on the teacher, which are required to be addressed by both initial and continuing teacher education. The concept of teacher education primarily states that the quality and extent of the achievement of the learners are determined primarily by teacher competence, sensitivity and teacher motivation. Teacher education comprises of all formal and non-formal activities and experiences that would help to improve the aptitude and qualify a person to assume the responsibilities of the members of the education profession or to carry out his or her job duties more appropriately.

4.1.1 Scope of Teacher Education

The scope of teacher education has been highlighted in the following factors:

Teacher Education at Different Levels of Education

Teacher education is regarded as an indispensable concept for the teachers at all levels of education. These are, pre-primary, primary, elementary, secondary, higher secondary and tertiary. The system of education is different at all levels. The main focus of teacher

education is based upon the levels of education. On the other hand, the needs and requirements of the students also vary at each level. The teacher education need to take into consideration the needs and requirements of the students. Therefore, level and stage-specific teacher preparation is essential. Teacher education renders a significant contribution in the development of teaching skills among the students. The teachers, employed in professional institutions are informative in terms of practical and theoretical knowledge regarding their respective subjects. It is essential for them to make use of specialized teacher training inputs with the purpose of training the students, who are making an entry into their professions. In the area of teacher education, special education and physical education are also emphasised upon. The knowledge base is adequately specialized and diversified across different levels of education. It has the main objective of preparing the teachers to perform their job duties in an appropriate manner.



Triangular Basis of Teacher Education

Formation of the appropriate knowledge base for each stage of education requires a high degree of academic and intellectual understanding of the information that is related to teacher education. This involves the selection of the theoretical knowledge from the disciplines cognate to education, namely psychology, sociology and philosophy and converting into the forms that are suitable for teacher education. These disciplines provide the basis for better understanding and application of teacher education. The philosophical basis provides the insights to the student teachers in terms of philosophy, ancient and modern philosophical thoughts of the philosophical thinkers of education and various aspects, such as, curriculum instruction and discipline.



The sociological basis helps the student teachers to understand the role of the society and its dynamics in the educational system of the nation and the world at large. It takes into account the ideals that have an influence upon the national and international scenes. The psychological basis helps the student teachers to develop insights into the psychological well-being of the students. This enables them to understand their self and the learning situations. In this manner, they are able to provide meaningful and relevant learning experiences to their students. In this manner, the students are able to benefit from learning.

Aspects of Teacher Education

The aspects of teacher education are, who (teacher educator), whom (student teacher), what (content), and how (teaching strategy). Teacher education is dependent upon the quality of teacher educators. The quality of the pedagogical inputs within the teacher education programs and their operative utilization for the purpose of preparing prospective teachers depend to a large extent on the professional competence of teacher educators and the ways in which it has been utilized for the reinforcement of the teacher education programs. Teacher education programs, thus have the main objective of adequately preparing teacher educators. The student teachers are the ones, who obtain knowledge and information in order to achieve their professional as well as personal goals. It serves to equip the teachers with the conceptual and theoretical framework, within which they can acquire an understanding of the intricacies of the profession. It aims at the formation of the attitude among the individuals, so they are able to cope up with challenges and problems in a positive manner. The individuals get empowered with the skills and abilities, so they are able to perform all the relevant tasks and functions in an operative and efficient manner. The primary focus of teacher education is upon the content matter.

4.1.2 Changing Context of Teacher Education

The well-established tradition of teaching and learning retained its strength even under adversarial circumstances. The post-independence period was characterised by the major efforts being made to nurture and bring about transformations in teacher education. The system of teacher preparation has come under considerable pressure, as a result of the expansion and growth of school education, through the efforts to universalize elementary education. There have been implementation of efforts to adapt and update the teacher education curriculum to the local needs, to make it more context-based, responsive and dynamic, particularly in terms of the needs and requirements of the overall system of education.



The present system of teacher education is supported by a network of national, provincial and district level resource institutions, working in integration to improve the eminence and efficiency of the teacher preparation programs at the pre-service level and also through in-service programs for serving the teachers throughout the country. The main factors that highlight the changing context of teacher education scenario have been stated as follows:

Impact of National Policies

This is with regards to the overall literacy, infrastructure, universal access and enrolment in schools. The major developments that have taken place in recent years form the background to the present reform in teacher education. These are the political recognition of the Universalization of Elementary Education that led to the Right to Education Bill, 2008 and the National Curriculum Framework for school education, 2005. The

Bill has been passed by the Parliament and the Right to Education Act, came into being, making it compulsory to make provision of education to the children, belonging to the age group of six to fourteen years. The Act mandates the functioning of the schools, which includes the teacher-student ratio of 1:30 till a student population of 200 students at the primary stage.

Developments in School Education

It has been estimated that 82 percent of 20 crore children, within the age group of six to fourteen years were enrolled in schools. This is a fact that 50 percent of these children dropped out, even before reaching class eight. Regional, economic, social and gender disparities are leading to new challenges and problems. The continued fragmentation of the school system poses a challenge to the national declaration of meeting the basic needs and requirements of the children within the age group of six to fourteen years. However, increasing privatization and differentiation of the schooling system have recognized the Right to Education for all children, irrespective of their categories and backgrounds.

Changing Role of the Teacher

Within the course of time, the teachers are bringing about changes and transformations within their roles and job duties. The teachers are required to focus upon rendering their job duties in a manner that would not only lead to enhancement of academic knowledge among the students, but also in leading to development of morality and ethics among them. The students get enrolled in educational institutions, not just to hone their academic skills and abilities, but also to acquire the knowledge of principles, standards, values and norms, so that they can contribute effectually towards promoting well-being of the community and nation. Hence, for this purpose, it is vital for the teachers to put into practice modern and innovative strategies and methods that would lead to overall growth and development of the students.



Challenges in Teacher Education

Teaching is a hard job. Within the course of teacher education, the teachers are required to undergo number of problems and challenges. These are primarily in concern with the environmental conditions of the educational institutions, performance of job duties, management of the classroom, coping with the needs and requirements of the students, getting along with the colleagues, principals and other staff members of the educational institutions and so forth. In order to cope up with these challenges, it is necessary to possess the essential skills, abilities and knowledge. One needs to be aware that one should possess effective communication skills and not depict the feelings of anger and frustration upon anybody. Within the teaching jobs, the teachers are required to augment their **professionalism**.

Research and Innovation

Research and innovation are regarded as the aspects that enable the individuals to bring about advancements and improvements in their tasks and functions. Research is primarily carried out in three ways. First is through the use of books, articles, reports and other documents, second is through the use of the internet and third is through field research. The teachers make visits to other educational institutions and observe and generate awareness in terms of the approaches and strategies implemented by them. Therefore, research is regarded as one of the imperative aspects that helps in augmentation of one's knowledge. Innovation is regarded as bringing about modernization and creativity in one's tasks and functions. In the system of education, research and innovation renders a significant contribution in bringing about improvements.

Keyword

Professionalism

is also about the qualities and behaviours you exhibit, and the manner in which you conduct yourself during your business affairs.



Inclusive Education

There are two types of exclusion prevalent in schools. One is exclusion of the child with disabilities and another is exclusion of children, who belong to deprived and marginalized sections of the community. The need to equip the teachers to promote inclusive education and not discriminate against any student on the basis of caste, creed, race, religion, gender, ethnicity or socio-economic background is of utmost significance. Any types of biases need to be overcome and one needs to handle the challenges in a positive manner.

Perspectives of Equitable and Sustainable Development

The perspectives of equitable and sustainable development of the community and nation are influenced to a major extent through acquisition of education. Attaining education helps in the development of skills and abilities among the individuals to promote equitable and sustainable development. It is necessary for the individuals to implement all types of tasks and functions within their daily lives in an appropriate manner. These are, management of household responsibilities, carrying out job duties within the employment setting satisfactorily, forming effective terms and relationships with the individuals within as well as outside the home and so forth. On the other hand, one also need to be educated to preserve the environmental conditions, alleviating their conditions of poverty and backwardness and meeting the livelihoods requirements.

Role of Community Knowledge in Education

The main purpose of community knowledge in education is primarily focused upon training the students in such a manner that they are able to implement the tasks and functions in such a manner that are geared towards promoting well-being of the community. The teachers need to train the students in a manner that they learn to apply the academic knowledge within their daily lives. On the other hand, adult learners bring their daily life experiences in order to enrich the academic knowledge that they are acquiring within the classroom setting. For instance, when the students are learning in terms of morality and ethics or effective communication skills and communication processes, then it is vital for them to ensure that they implement these traits within their daily lives. The NCF 2005 promotes the inclusion of locally relevant content within the curriculum and the instructional systems as well as pedagogy.

ICT in Schools and E-Learning

With the onset of the creation of the Information and Communication Technology (ICT), there is an increasing demand that it will be included in school education. The use of ICT in school education primarily involves the use of technology within the

teaching-learning methods. In the present existence, in educational institutions at all levels, there has been implementation of technology. In making provision of teaching and learning processes within the classrooms, mostly computers are made use of. In higher educational institutions, the professors conduct classes and provide lectures to the students, but they are required to prepare their assignments and projects through the use of technology. Teacher education has been used to equip the teachers to differentiate between developmentally appropriate and detrimental uses of ICT. The teachers are required to be competent enough to lead to their own professional development.



Teacher Education Programs

The teacher education programs are comprehensive. In the present existence, there have been initiation of teacher education programs that are primarily focused towards promoting the skills and abilities among the individuals in such a manner that they are able to perform their job duties within the educational institutions in accordance to the established standards. The teachers have number of job duties to carry out within the educational institutions. These are, imparting academic knowledge and skills to the students, putting into practice effective teaching-learning methods and instructional strategies, maintaining good terms and relationships with the other members, and possessing leadership skills. Furthermore, they are also equipped to carry out the managerial functions of planning, organising, directing, controlling and co-ordinating. These functions are mostly applied in the case of teaching methods, organization of competitions, workshops, seminars and so forth. The teachers are required to put into operation their job duties with diligence and enthusiasm. The teacher education programs enables them to acquire the essential knowledge that are needed to develop their skills and abilities.

4.1.3 Challenges of Teacher Education

Did You Know?

The Persons with Disabilities (PWD) Act of 2005 makes provision of free and compulsory education for all children up to the age of 18 years. The education of the economically backward sections of the society has remained a major concern for several years. The teachers need to be aware of the measures that need to be formulated to overcome social deprivation.

The expansion that has taken place in the teacher education scenario during the last decade has reflected the teacher education scenario of the present. There have been developments taking place in the system of education and there has been an increase in the enrolment of students. The demands of the teachers have increased due to the programs. The major challenges encountered in teacher education have been stated as follows:



Insufficient Research – Implementing research is regarded as one of the aspects that helps in conducting an analysis of the areas that are needed to get improved. In the area of teacher education, there has been insufficient research, particularly with regards to classroom practices. Additionally, there have not been much developments made in educational research regarding the studies, and others areas in the system of education. There is a need to bring about collaborative design and development of the teacher education programs. The trainers, who perform the job duties of training the teachers need to develop as researchers on teacher education. They are required to conduct research in terms of all areas and fields that are necessary to enhance teacher education programs.

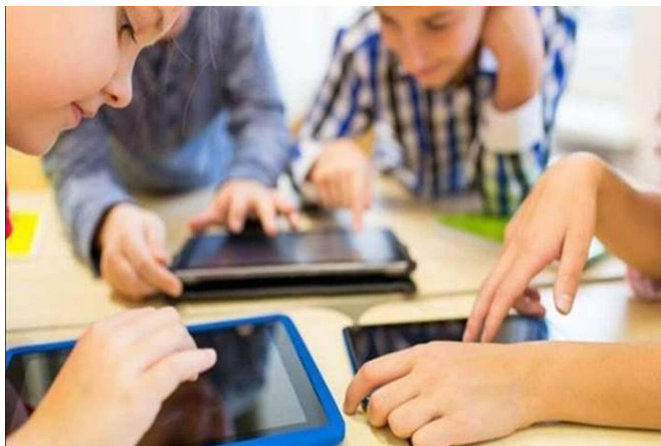
Lack of Quality Teachers – Teacher quality is regarded as one of the most important determinants in leading to improvements in the quality of education. One of the most important factors

determining student achievement is teacher quality. In the system of education, lack of quality among the teachers signify that they merely lack the skills and abilities that are needed to perform the job duties in an appropriate manner. The teachers either do not possess the essential educational qualifications, or they do not perform their job duties with interest and enthusiasm. Hence, lack of quality teachers is a major hindrance in the achievement of the desired goals and objectives.



Lack of Motivation of Teachers – Motivation is regarded as an important aspect that enables the individuals to develop interest and enthusiasm towards their work. When the aspect of motivation among teachers is emphasised upon, then the terms such as, commitment, satisfaction, morale and attitudes are taken into consideration. On the other hand, factors such as, absenteeism, misconduct and attrition are the reflections of low motivation. It has caused an increase in the rate of absenteeism and there is shortage of teachers in schools, primarily within rural communities.

Inadequate Infrastructure – School infrastructure is regarded as the key aspect for teaching and learning in schools. The main objective of the infrastructure is to lead to an increase in enrolment of students, improve motivation among the students and improve the academic achievement of students. There is lack of proper infrastructure and equipment in schools in various regions throughout the country. This has had a negative influence upon the learning of students and they even get compelled to drop out, before their educational skills are honed. Inadequate infrastructure is a major challenge as well as an impediment within the course of increase in enrolment and retention of students.



Lack of Skills – The teachers are required to possess certain skills and abilities among them, which are imperative to perform their job duties well. The important skills are communication skills, problem solving abilities, soft skills, decision making skills, and leadership skills. These skills render an indispensable contribution in enabling the teachers to achieve the goals and objectives. Lack of any of these skills may have a negative influence upon the job performance of the teachers. Lecture technique is the one that is most commonly used in teaching, hence, it is necessary for the teachers to work towards honing their skills on a continuous basis.

Remember

The lack of subject knowledge among the teachers would have a detrimental effect as, they would not be able to provide adequate explanation of the concepts to the students. Hence, in this manner learning and academic performance of the students would get affected in a negative manner.

Lack of Subject Knowledge – In some cases, the programs that focus upon the teachers training such as, B.Ed. does not put emphasis upon the subject knowledge. Subject knowledge has an important role to play. The good-quality teaching rests upon the teachers having an efficient understanding of the subjects and the concepts that they are teaching.

Problem of Selection – When recruitment and selection of teachers takes place, it is necessary to take into consideration number of factors. These are their educational qualifications, skills, abilities and personality traits. Not all schools have equitable access to good quality teachers. This fact can be attributed to the recruitment challenges that are experienced by the school administrators, school districts and the provincial school departments, not only in India, but throughout the world. With experiencing problems and challenges in the recruitment and selection of the teachers, there is an emerging need to examine the processes of teacher recruitment and selection.

Incomplete Competency Development of Teachers – There are teachers within schools as well as in training centres, who do not possess the competency traits. As a result, their job performance suffers and they even experience problems in retaining their job duties for long. The commitment and competency of the teachers are associated with the feelings of interest and enthusiasm towards one's job, development of the feeling of job satisfaction and attitude towards the working environmental conditions. In some cases, the teachers do not feel satisfied with their jobs, as they do not take interest and enthusiasm in the performance of job duties, hence, incomplete or lack of competency development of teachers is one of the major challenges.

Improper Practice Teaching – The teachers at all levels of education are required to obtain adequate practice in terms of teaching. Teaching is regarded as an art and teachers are required to generate awareness in terms of particular strategies and methods. Improper teaching practices are regarded as challenges that hinder the abilities of the teachers to impart adequate knowledge and information to the students. Teaching is regarded much as an art form as it is a technique. The teachers are required to master this technique appropriately and be well-prepared before they initiate their class lectures or other training methods.



Inappropriate Teaching Methods – The teaching methods are implemented by the teachers in accordance to the level of education and the needs and requirements of the students. Making use of improper teaching methods are regarded as one of the major challenges that would impede the learning of students. For instance, if students are able to learn well through verbal explanation and dictation of notes, then the teachers should explain them the concepts as well as give notes. The other methods and tools that are used in most cases by the teachers include, demonstrations, discussions, role plays, laboratories, contests, practices, projects, assignments, fieldwork, and supervised experience.

4.1.4 Redefining the Role of the Teacher: It's a Multifaceted Profession

Imagine a school where teaching is considered to be a profession rather than a trade. The role of teachers in a child's education -- and in American culture -- has fundamentally changed. Teaching differs from the old "show-and-tell" practices as much as modern medical techniques differ from practices such as applying leeches and bloodletting.

Instruction doesn't consist primarily of lecturing to students who sit in rows at desks, dutifully listening and recording what they hear, but, rather, offers every child a rich, rewarding, and unique learning experience. The educational environment isn't confined to the classroom but, instead, extends into the home and the community and around the world. Information isn't bound primarily in books; it's available everywhere in bits and bytes.

Students aren't consumers of facts. They are active creators of knowledge. Schools aren't just brick-and-mortar structures -- they're centers of lifelong learning. And, most important, teaching is recognized as one of the most challenging and respected career choices, absolutely vital to the social, cultural, and economic health of our nation.

Today, the seeds of such a dramatic transformation in education are being planted. Prompted by massive revolutions in knowledge, information technology, and public demand for better learning, schools nationwide are slowly but surely restructuring themselves.

Leading the way are thousands of teachers who are rethinking every part of their jobs -- their relationship with students, colleagues, and the community; the tools and techniques they employ; their rights and responsibilities; the form and content of curriculum; what standards to set and how to assess whether they are being met; their preparation as teachers and their ongoing **professional development**; and the very structure of the schools in which they work. In short, teachers are reinventing themselves and their occupation to better serve schools and students.



New Relationships and Practices

Traditionally, teaching was a combination of information-dispensing, custodial child care and sorting out academically inclined students from others. The underlying model for schools was an education factory in which adults, paid hourly or daily wages, kept like-aged youngsters sitting still for standardized lessons and tests.

Teachers were told what, when, and how to teach. They were required to educate every student in exactly the same way and were not held responsible when many failed to learn. They were expected to teach using the same methods as past generations, and any deviation from traditional practices was discouraged by supervisors or prohibited by myriad education laws and regulations. Thus, many teachers simply stood in front of the class and delivered the same lessons year after year, growing gray and weary of not being allowed to change what they were doing.

Many teachers today, however, are encouraged to adapt and adopt new practices that acknowledge both the art and science of learning. They understand that the essence of education is a close relationship between a knowledgeable, caring adult and a secure, motivated child. They grasp that their most important role is to get to know each student as an individual in order to comprehend his or her unique needs, learning style, social and cultural background, interests, and abilities.

This attention to personal qualities is all the more important as America continues to become the most pluralistic nation on Earth. Teachers have to be committed to relating to youngsters of many cultures, including those young people who, with traditional teaching, might have dropped out -- or have been forced out -- of the education system.

Their job is to counsel students as they grow and mature -- helping them integrate their social, emotional, and intellectual growth -- so the union of these sometimes separate dimensions yields the abilities to seek, understand, and use knowledge; to make better decisions in their personal lives; and to value contributing to society.

Keyword

Professional development is learning to earn or maintain professional credentials such as academic degrees to formal coursework, attending conferences, and informal learning opportunities situated in practice.



They must be prepared and permitted to intervene at any time and in any way to make sure learning occurs. Rather than see themselves solely as masters of subject matter such as history, math, or science, teachers increasingly understand that they must also inspire a love of learning.



In practice, this new relationship between teachers and students takes the form of a different concept of instruction. Tuning in to how students really learn prompts many teachers to reject teaching that is primarily lecture based in favor of instruction that challenges students to take an active role in learning.

They no longer see their primary role as being the king or queen of the classroom, a benevolent dictator deciding what's best for the powerless underlings in their care. They've found they accomplish more if they adopt the role of educational guides, facilitators, and co-learners.

The most respected teachers have discovered how to make students passionate participants in the instructional process by providing project-based, participatory, educational adventures. They know that in order to get students to truly take responsibility for their own education, the curriculum must relate to their lives, learning activities must engage their natural curiosity, and assessments must measure real accomplishments and be an integral part of learning.



Students work harder when teachers give them a role in determining the form and content of their schooling -- helping them create their own learning plans and deciding the ways in which they will demonstrate that they have, in fact, learned what they agreed to learn.

The day-to-day job of a teacher, rather than broadcasting content, is becoming one of designing and guiding students through engaging learning opportunities. An educator's most important responsibility is to search out and construct meaningful educational experiences that allow students to solve real-world problems and show they have learned the big ideas, powerful skills, and habits of mind and heart that meet agreed-on educational standards. The result is that the abstract, inert knowledge that students used to memorize from dusty textbooks comes alive as they participate in the creation and extension of new knowledge.

New Tools and Environments

One of the most powerful forces changing teachers' and students' roles in education is new technology. The old model of instruction was predicated on information scarcity. Teachers and their books were information oracles, spreading knowledge to a population with few other ways to get it.

But today's world is awash in information from a multitude of print and electronic sources. The fundamental job of teaching is no longer to distribute facts but to help children learn how to use them by developing their abilities to think critically, solve problems, make informed judgments, and create knowledge that benefits both the students and society. Freed from the responsibility of being primary information providers, teachers have more time to spend working one-on-one or with small groups of students.



Recasting the relationship between students and teachers demands that the structure of school changes as well. Though it is still the norm in many places to isolate teachers in cinderblock rooms with age-graded pupils who rotate through classes every hour throughout a semester -- or every year, in the case of elementary school -- this paradigm is being abandoned in more and more schools that want to give teachers the time, space, and support to do their jobs.

Extended instructional periods and school days, as well as reorganized yearly schedules, are all being tried as ways to avoid chopping learning into often arbitrary chunks based on limited time. Also, rather than inflexibly group students in grades by age, many schools feature mixed-aged classes in which students spend two or more years with the same teachers.

In addition, ability groups, from which those judged less talented can rarely break free, are being challenged by a recognition that current standardized tests do not measure many abilities or take into account the different ways people learn best.

One of the most important innovations in instructional organization is team teaching, in which two or more educators share responsibility for a group of students. This means that an individual teacher no longer has to be all things to all students. This approach allows teachers to apply their strengths, interests, skills, and abilities to the greatest effect, knowing that children won't suffer from their weaknesses, because there's someone with a different set of abilities to back them up.

To truly professionalize teaching, in fact, we need to further differentiate the roles a teacher might fill. Just as a good law firm has a mix of associates, junior partners, and senior partners, schools should have a greater mix of teachers who have appropriate levels of responsibility based on their abilities and experience levels. Also, just as much of a lawyer's work occurs outside the courtroom, so, too, should we recognize that much of a teacher's work is done outside the classroom?

New Professional Responsibilities

Aside from rethinking their primary responsibility as directors of student learning, teachers are also taking on other roles in schools and in their profession. They are working with colleagues, family members, politicians, academics, community members, employers, and others to set clear and obtainable standards for the knowledge, skills, and values we should expect America's children to acquire. They are participating in day-to-day decision making in schools, working side-by-side to set priorities, and dealing with organizational problems that affect their students' learning. Many teachers also spend time researching various questions of educational effectiveness that expand the understanding of the dynamics of learning. And more teachers are spending time mentoring new members of their profession, making sure that education school graduates are truly ready for the complex challenges of today's classrooms.



Reinventing the role of teachers inside and outside the classroom can result in significantly better schools and better-educated students. But though the roots of such improvement are taking hold in today's schools, they need continued nurturing to grow and truly transform America's learning landscape. The rest of us -- politicians and parents, superintendents and school board members, employers and education school faculty -- must also be willing to rethink our roles in education to give teachers the support, freedom, and trust they need to do the essential job of educating our children.

4.2 SIGNIFICANCE OF ROLES AND RESPONSIBILITIES OF EDUCATORS

Within the system of education at all levels, educators are the ones, who are vested with important job duties and responsibilities. They are vested with numerous responsibilities, which are primarily related to promoting effective growth and development of students, facilitating the achievement of academic goals and up-grading the overall system of education. When the educators are recruited, there are certain aspects that need to be taken into consideration. These include, educational qualifications, experience, competencies and personality traits. Furthermore, the educators should possess the abilities to work under stress and deal with various problems and challenges in an appropriate manner. With these traits, they will be able to perform their job duties satisfactorily and incur job satisfaction. In order to retain their jobs, it is vital for the educators to identify their roles and responsibilities. Within the period of time, it is necessary to generate awareness in terms of usage of technologies and other modern and innovative methods that would facilitate in the successful implementation of tasks and activities. To carry out ones job duties satisfactorily, they need to hone their skills and abilities. The main concepts that have been taken into account in this research paper include, significance of roles and responsibilities of educators, roles of educators and responsibilities of educators.



In order to enhance the system of education, it is indispensable to demand new knowledge and skills from educators as well as the principals, directors and heads. They are the ones, who render an effective contribution in formulating measures, procedures and policies that render a significant contribution in enhancing the overall system of education. With the advent of technologies, like Information and Communications Technologies (ICT) and knowledge revolution, there has been an increase in the job demands of educators. They are required and should be encouraged to assume new roles and responsibilities for ICT to bring about improvements in the quality of education. In addition, they are also required to enhance their capabilities to provide assistance and support to learners to achieve academic goals.



The roles and responsibilities of the educators are primarily focused upon making provision of knowledge and information to the students, so they can enrich their overall living standards. Apart from contributing towards development of students into moral and ethical human beings, they render a significant contribution towards enriching the overall system of education. A proficient educator needs to possess adequate knowledge in terms of subjects. Apart from possessing knowledge of the subject, they need to ensure they make students acquire an efficient understanding of the concepts. Furthermore, they need to possess the competencies and abilities to present the subject content in a logical and systematic manner. One of the important aspects is classroom control. Classroom control can take place in an appropriate manner, when educators and learners develop mutual understanding and they encourage learners to ask questions. Hence, the roles and responsibilities of the educators primarily centre on creating an amiable environment, in which students feel motivated towards learning.

The significance in terms of roles and responsibilities of the educators is primarily recognized in leading and managing the planning, delivery, evaluation and improvement of education of students through the efficient utilization of resources. The educators need to ensure, they make wise decisions, which may prove to be beneficial to the members as well as the educational institutions.

The role of the leading educators is to carry out their job duties efficiently, by bringing about improvements in skills, competencies, and performance of the teaching workforce. Typically, leading educators are responsible for co-ordinating a number of staff members for bringing about improvements in teaching and learning, which may involve the modelling, collaborating and coaching and using processes that develop knowledge, practice and professional participation. Leading educators are expected to direct and manage a significant area or function within the educational institutions with the high degree of independence to ensure the operative development, provision and evaluation of the educational programs. Leading educators would be expected to make a significant contribution to policy development related to teaching and learning in schools. A leading educator has a direct impact and influence on the achievement of academic goals. They are responsible for the implementation of one or more priorities contained in the strategic plan.

Educators need to be skilled classroom practitioners to a major extent, who continue to spend the majority of their time within the classroom in delivering high quality teaching and learning and have a range of responsibilities related to their expertise, including teaching demonstration lessons, observing and providing feedback to other educators and facilitating school-based professional learning. The educators need to be well-aware in terms of the subject areas, which they are imparting to the students. Under the guidance of experienced educators, novice educators into the teaching profession will plan and teach student groups in one or more subjects and are expected to participate in the induction programs and other professional learning activities that

are designed to ensure the integration of curriculum, assessment and pedagogy across the educational institutions.

4.2.1 Roles of Educators

The educators are the ones, who play an important role in not only imparting knowledge and information to the students in terms of academic concepts, but in augmenting the overall system of education. The major roles of educators have been stated as follows:

Resource Provider – Educators make provision of assistance to their colleagues by providing educational resources. These include, books, articles, notes, websites, documents, and other teaching materials. In educational institutions, when educators are newly recruited, they need assistance and support in terms of performance of their job duties satisfactorily. Hence, it is one of the important roles of experienced educators to help new educators. They provide them resources and generate information among them in terms of various aspects of educational institutions. In this way, they can render a significant contribution in performing their job duties in a well-organized manner and achieve educational goals and objectives.

Instructional Specialist – As an instructional specialist, the colleagues are provided with adequate information in terms of implementation of teaching strategies in an appropriate manner. The teaching-learning methods need to be well-formulated. Furthermore, they should be in accordance to the grade levels, academic concepts and needs and requirements of students. Obtaining ideas and suggestions from colleagues and superiors would also help to generate the desired outcomes.



When educators are teaching students numerical problems, they need to make use of writing methods. Verbal explanation of numerical problems may not provide adequate understanding to the students. Therefore, instructional specialists need to possess efficient knowledge in terms of methods and approaches that are suitable to various academic concepts.

Curriculum Specialist – The job of the curriculum specialist is to acquire an understanding of content standards. Furthermore,



they need to be aware of how various components would be connected to each other and how to make use of curriculum in planning instruction and assessment. These are essential to ensuring implementation of curriculum and instructional methods in a consistent and coherent manner. Curriculum specialists enable the educators to agree on the standards and norms, follow the adopted curriculum methods, use common pacing charts and develop shared assessments. When formulation of curriculum takes place, the educators need to ensure that it is in accordance to the grade levels and abilities of learners.

Classroom Supporter – Educators are regarded to be classroom supporters. When they are performing their job duties as classroom supporters, they need to ensure, they develop innovative ideas and strategies. These ideas and strategies are in terms of lesson plans, teaching-learning methods, teaching-learning materials, organization of activities, evaluation methods and helping students to overcome the problems, particularly the ones, which may be encountered within the course of producing desired academic outcomes and achieving goals and objectives. As classroom supporters, it is the job duty of the educators to ensure students feel motivated towards learning and there should be provision of all the materials and facilities that may support learning.

Learning Facilitator – Facilitating professional learning opportunities among not only students, but also staff members is another role of educators. When the educators are to carry out the job duty of learning facilitator in a well-organized manner, it is vital for them to participate in discussion meetings with their colleagues as well as heads. In order to facilitate learning, they need to be well-equipped in terms of aspects, and modern and innovative methods. Furthermore, they need to identify the flaws and inconsistencies and put into operation the methods, needed to bring about improvements. To facilitate learning, they need to conduct an analysis of alternatives and bring about improvements.

Mentor – The job duty of the mentor is to guide and advise the individuals in terms of providing solutions to their problems, enabling them to carry out their tasks and functions in a well-organized manner and achieving personal and professional goals. The educators need to serve as mentors for newly recruited educators and students. When educators carry out their job duties as mentors, they not only help others to achieve professional goals, but also personal goals. When educators possess an approachable nature and a friendly attitude, they even get engaged in informal conversations with colleagues and students. Being a mentor takes a great amount of time and expertise and makes a significant contribution towards development of a new professional.

School Leader – Being a school leader means serving on the committee, such as the school improvement team, acting as a grade-level or department chair, supporting school initiatives, or representing a school on community or district task forces or committees. A school leader shares the vision of the school. Apart from achievement



of academic goals, it is the job of the school leaders to guide and direct the tasks and activities of students in such a manner that would contribute in enriching the overall system of education. The school leaders align his or her professional goals with those of the schools and shares the responsibility for the success of the school as a whole.

Research and Writing – Although educators have access to great deal of data, the extensive use of technology and internet have enabled them to collect data in terms of various subjects. In higher educational institutions, research and writing are regarded as an integral parts of job duties of the educators as well as students. The educators, who are teaching Bachelors, masters or doctoral level students are required to carry out the tasks of research and writing to a major extent. They write articles, research papers and books. They normally send their work to the journals for publishing purposes or upload it on the internet. Hence, in this manner, they are honing their writing skills, acquiring knowledge and disseminating information among others.

Catalyst for Change – Educators are catalysts for bringing about changes. The visionaries, who are not contented with the traditional methods and are looking for modern methods, need to bring about changes. Within the classroom settings and the overall educational institutions, educators play an important role in bringing about changes. The important aspects in terms of which, changes are brought about within the classroom settings are, teaching-learning methods, instructional strategies, teaching-learning materials, technologies, furniture and equipment. On the other hand, in educational institutions, the changes are brought about in terms of technologies, infrastructure, civic amenities, laboratories, number of classrooms and overall environmental conditions. The educators and other members of the educational institutions need to work in collaboration and integration with each other in bringing about changes.

Learner – The educators also are regarded as learners. The reason being, within the course of their job duties, they need to enhance their knowledge and competencies and generate awareness in terms of utilization of modern and innovative methods. In other words, they need to learn number of aspects. Research has indicated that in some cases, educators are not well-quipped with the usage of mobile technology or even computers. Hence, to acquire knowledge, they get enrolled in computer training centres and augment their competencies. In addition, they need to get engaged in thorough practice. In this manner, they are able to become well-equipped with the usage of technology. Apart from technology and modern and innovative methods, educators need to develop their skills in terms of communication, critical thinking, decision making and conflict resolution. Honing of skills and abilities would enable them to carry out their job duties in a well-organized manner and incur job satisfaction.

4.2.2 Responsibilities of Educators

The various aspects, which highlight the responsibilities of educators have been stated as follows:

Managerial Functions – The educators need to exercise the managerial functions of planning, organizing, leading, co-ordinating, and controlling. These functions need to be implemented within the classrooms as well as in educational institutions. In classrooms, the implementation of these functions takes place with regards to teaching-learning methods, instructional strategies, student learning, teaching materials, technologies, equipment, discipline and overall environment. On the other hand, these functions also need to be implemented appropriately in the functioning of the overall system of education. In most cases, the heads and principals are the ones, who are vested with the authority to control the tasks and operations and make decisions. In making of important decisions that are related to the overall functioning of the educational institutions, they take ideas and suggestions from educators. Hence, educators render a significant contribution in the implementation of managerial functions. They contribute in management and organization of human and material resources for educational growth and development.

Personnel Management – Personnel management is referred to planning and management of human resources. The main functions that need to be taken into account in this case is, recruitment, transfer and redeployment, promotional opportunities, **performance appraisal systems**, grievance redresser mechanisms, and professional development issues. Normally, educators are vested with the authority to promote personnel management, primarily concerning students. Opportunities need to be created and teaching-learning methods need to be organized in such a manner that would enable the students to achieve academic goals. The students usually experience various kinds of problems and challenges, within the course of acquisition of education. Hence, it is vital for educators to put into operation, the methods and approaches and form the system of education in such a manner that would enable them to develop motivation towards learning and enhance professionalism.

Keyword

Performance appraisal system manages the employee performance process of an organization to evaluate the job performance of a team. It includes capturing qualitative and quantitative feedback and turning them into actionable insights.

Student Management – Student management is an aspect that is of utmost significance that educators need to pay attention to. One of the major objectives of educators is to ensure, learning takes place among them in a well-organized manner. In the implementation of this function, there are number of aspects that need to be taken into consideration, these include, imparting to them adequate knowledge in terms of academic concepts, giving them assignments and practice exercises to augment their skills, implementing appropriate performance appraisal methods, listening to their problems and providing solutions, ensuring they are disciplined, providing guidance and inculcating among them the traits of morality, diligence and conscientiousness. These aspects would enable them to emerge to be effectual citizens of the country. When the educators are able to carry out the function of student management appropriately. They are able to achieve professional goals and incur job satisfaction.

Academic Management – In the academic management, there are number of factors that need to be taken into consideration. These are, teaching-learning methods, curriculum and instruction systems, evaluation methods, organization of activities and competitions, conduct of examinations, formulation of policies and procedures for the progression of overall system of education and encouraging the use of modern, scientific and innovative methods in imparting learning, organization of co-curricular activities, carrying out curriculum transactions, taking decisions in terms of natures of tests and encouraging promotion criteria for students. In order to carry out all the academic management functions satisfactorily, it is vital for the educators to possess the essential educational qualifications and competencies. They need to conduct research on a regular basis that would enable them to generate awareness in terms of limitations. Furthermore, they need to ensure that methods and approaches that are put into operation prove to be beneficial to all the members of the educational institutions.

Performance Assessment – After the educators have imparted knowledge to the students in terms of lesson plans, another step is to find out how much they have learned and whether the teaching-learning methods have proven to be beneficial to them. Hence, performance assessment is referred to implementation of methods and strategies that are used to assess the performance of students. In educational institutions at all levels, the most commonly used performance assessment methods are, organization of tests, assignments, presentations, competitions and other activities. When the students perform well in these methods, the educators possess this viewpoint that they have put into operation the teaching-learning methods in a satisfactory manner and are contributing effectively towards facilitating understanding of concepts among them. On the other hand, when students experience setbacks in their academic performance, the educators not only advise them to work harder and concentrate on their studies, but also bring about improvements in teaching-learning methods.

Taking Actions – Taking actions is an integral part of job duties of educators. Within the educational institutions, particularly in colleges and universities, it is vital

for the educators to ensure they are rendering a significant contribution towards imparting educational skills to the students in a well-organized manner. Apart from this objective, they need to take actions in terms of other areas as well. These include, organization of workshops and seminars, attending meetings, working on policies and procedures and initiation of modern and innovative methods in implementation of tasks and activities. When the educators are taking actions, they need to work in co-ordination and integration with each other. Working in seclusion would not lead to desired outcomes. Furthermore, when they have taken actions, they need to ensure they prove to be advantageous and worthwhile to the educational institutions and its members.

Counselling and Guidance – In educational institutions at all levels, students normally experience problems and challenges with regards to number of aspects. These include, problems in understanding academic concepts, home environmental conditions, financial problems, family issues and psychological problems. These problems prove to be impediments within the course of achievement of academic goals. Therefore, it is essential for them to formulate solutions to these problems. In providing solutions to these problems, they normally seek counselling and guidance from educators or join counselling centres to seek assistance from professional counsellors. In educational institutions, there are counselling centres, which provide counselling and guidance to individuals in terms of various areas. These include, providing solutions to their learning disabilities, psychological problems, career counselling, providing them guidance regarding employment opportunities, solutions to financial problems and so forth. In order to provide solutions to various kinds of problems in an appropriate manner, it is vital to conduct an analysis of the alternatives and select the most appropriate ones.

Use of Technology in Education – In the present existence, the use of technology has gained grounds not only in educational institutions but in other areas as well. The individuals are making use of technologies to carry out their tasks and activities. In the field of education, the individuals are making use of technology to impart learning and understanding of the academic concepts among students. The students too are making immense use of technology to prepare assignments, reports and projects. When the individuals need to obtain information regarding various aspects, they make use of internet. Research has indicated that individuals begin to learn, how to make use of technologies and computers from the stage of early childhood. As they get older and get enrolled in secondary schools, senior secondary schools and higher educational institutions, they develop proficiency and expertise. The use of technology have enabled the individuals to carry out their tasks and activities in a more manageable manner and generate the desired outcomes.

Development of Leadership Skills – The educators need to render an effective contribution in development of leadership skills among students. These skills can be enhanced by making provision of various opportunities. For instance, educators

Remember

The integral job of the leaders is to adequately guide and lead others. Therefore, when students are implementing leadership skills, they need to ensure they guide and lead others in the right direction and help them cope with problems and challenges. Development of leadership skills is worthwhile in achievement of personal and professional goals.

assign the responsibilities of monitoring and supervision to some students. Especially in the absence of the educators, they are required to ensure, discipline is maintained. In some cases, educators even allow them to implement teaching-learning methods and instructional strategies in their absence. Usually, students get engaged in some other tasks in the absence of the educators or do not pay attention towards their work. Therefore, when students are trained in terms of development of leadership skills, they need to ensure discipline is maintained.

Development of Communication Skills – Communication skills are regarded to be of utmost significance in all areas of ones living. Whether one is enrolled in educational institutions, or engaged in employment opportunities or is to participate in social, economic, cultural and political functions, or in maintenance of good terms and relationships with family members, friends or community members, it is essential for the individuals to hone their communication skills. Communication skills can be honed by gaining theoretical knowledge in terms of processes of communication, which are, speaking, listening, responding and giving feedback and one is required to get engaged into communication with others. One can communicate with others in a verbal form through phones or face-to-face or written forms, through messages, letters, emails and so forth. Development of communication skills with others play an important role in enriching the overall quality of lives of the individuals. In educational institutions, educators render an important contribution in honing communication skills by encouraging participation in group discussions, speeches, presentations and debates.

Providing Equal Rights and Opportunities – In order to achieve academic goals and objectives and enrich the overall system of education, it is vital for educators to promote discipline. Research has indicated that in educational institutions at all levels, there are occurrence of various types of criminal and violent acts, which not only impede attainment of education but are major barriers within the course of achievement of academic goals and objectives. Thus, in educational institutions, there are formulation of laws and policies, which put emphasis upon making provision of equal rights and opportunities to all and treating all individuals with respect and courtesy. In co-education, it is vital for educators to possess the viewpoint that



girls should not be discriminated against and they should be provided with equal opportunities to participate in various tasks and activities. When all members of the educational institutions are given equal treatment, this is important for promoting enrichment of the system of education.

Promoting Discipline – It is vital for the educators to impart training and information among students to be disciplined within the classroom setting. One of the most simple strategies that educators make use of to promote discipline is, communicating in a polite and decent manner and use appreciation, more than criticism. When students do well, they should be appreciated by their educators. On the other hand, when they experience setbacks, they should be given constructive feedback. In order to promote discipline among students, the first and foremost step is to communicate with the students in a calm and composed manner. They should be generated awareness that they need to maintain order and concentrate wholeheartedly towards their work. On the other hand, when students are undisciplined and do not listen to what their educators are telling them, penalties are imposed. In **educational institutions**, there are formulation of measures and policies that render an effective contribution in promoting discipline.

4.2.3 Hypothesis of Educators Roles and Responsibilities

The roles and responsibilities of educators are considered vital in promoting academic learning among individuals, enabling them to inculcate the traits of morality, ethics, diligence, resourcefulness and conscientiousness, promoting community welfare and leading to effective growth and development of individuals, so they can render a significant contribution in promoting better livelihoods for themselves. In order to carry out one's roles and responsibilities in an appropriate manner, it is essential for educators to augment their competencies and educational qualifications. They need to ensure, they generate awareness in terms of modern and innovative methods that are necessary to carry out their job duties in a well-organised manner. There are differences in the roles and responsibilities of educators. The major roles of educators are, resource provider, instructional specialist, curriculum specialist, classroom supporter, learning

Keyword

Educational institution is a place where people of different ages gain an education, including preschools, childcare, primary-elementary schools, secondary-high schools, and universities.



facilitator, mentor, school leader, research and writing, catalyst for change, and learner. These roles need to be carried out by educators throughout their jobs.

The various aspects, which highlight the responsibilities of educators are, managerial functions, personnel management, student management, academic management, performance assessment, taking actions, counselling and guidance, use of technology in education, development of leadership skills, development of communication skills, providing equal rights and opportunities and promoting discipline. The roles and responsibilities of the educators are related to promoting well-being of not only students, but all members of the educational institutions. When they are carrying out their roles and responsibilities, they need to form constructive viewpoints. Teaching jobs are hard and educators are required to undergo number of challenges within the course of implementation of their job duties. But it is vital for them to form constructive viewpoints, conduct analysis in terms of areas, which need to be improved, learn to cope with difficulties and problems appropriately and develop interest and enthusiasm towards the implementation of their job duties. Hence, these factors would enable them to carry out their roles and responsibilities in a well-organised manner and incur job satisfaction.

4.3 CODE OF ETHICS FOR EDUCATORS

The professional educator strives to create a learning environment that nurtures to fulfillment the potential of all students. The professional educator acts with conscientious effort to exemplify the highest ethical standards. The professional educator responsibly accepts that every child has a right to an uninterrupted education free from strikes or any other work stoppage tactics.

Ethical Conduct toward Students: The professional educator accepts personal responsibility for teaching students character qualities that will help them evaluate the consequences of and accept the responsibility for their actions and choices. We strongly affirm parents as the primary moral educators of their children. Nevertheless, we believe all educators are obligated to help foster civic virtues such as integrity, diligence, responsibility, cooperation, loyalty, fidelity, and respect-for the law, for human life, for others, and for self.

The professional educator, in accepting his or her position of public trust, measures success not only by the progress of each student toward realization of his or her personal potential, but also as a citizen of the greater community of the republic.

1. The professional educator deals considerately and justly with each student, and seeks to resolve problems, including discipline, according to law and school policy.
2. The professional educator does not intentionally expose the student to disparagement.

3. The professional educator does not reveal confidential information concerning students, unless required by law.
4. The professional educator makes a constructive effort to protect the student from conditions detrimental to learning, health, or safety.
5. The professional educator endeavors to present facts without distortion, bias, or personal prejudice.

Ethical Conduct toward Practices and Performance: The professional educator assumes responsibility and accountability for his or her performance and continually strives to demonstrate competence.

The professional educator endeavors to maintain the dignity of the profession by respecting and obeying the law, and by demonstrating personal integrity.

1. The professional educator applies for, accepts, or assigns a position or a responsibility on the basis of professional qualifications, and adheres to the terms of a contract or appointment.
2. The professional educator maintains sound mental health, physical stamina, and social prudence necessary to perform the duties of any professional assignment.
3. The professional educator continues professional growth.
4. The professional educator complies with written local school policies and applicable laws and regulations that are not in conflict with this code of ethics.
5. The professional educator does not intentionally misrepresent official policies of the school or educational organizations, and clearly distinguishes those views from his or her own personal opinions.
6. The professional educator honestly accounts for all funds committed to his or her charge.
7. The professional educator does not use institutional or professional privileges for personal or partisan advantage.

Ethical Conduct toward Professional Colleagues: The professional educator, in exemplifying ethical relations with colleagues, accords just and equitable treatment to all members of the profession.

1. The professional educator does not reveal confidential information concerning colleagues unless required by law.
2. The professional educator does not willfully make false statements about a colleague or the school system.
3. The professional educator does not interfere with a colleague's freedom of choice, and works to eliminate coercion that forces educators to support actions and ideologies that violate individual professional integrity.



Ethical Conduct toward Parents and Community: The professional educator pledges to protect public sovereignty over public education and private control of private education.

The professional educator recognizes that quality education is the common goal of the public, boards of education, and educators, and that a cooperative effort is essential among these groups to attain that goal.

1. The professional educator makes concerted efforts to communicate to parents all information that should be revealed in the interest of the student.
2. The professional educator endeavors to understand and respect the values and traditions of the diverse cultures represented in the community and in his or her classroom.
3. The professional educator manifests a positive and active role in school/community relations.

4.3.1 The Importance of Professional Development for Educators

Education is a never-ending process. It doesn't stop after earning a degree and starting a career. Through continuing education, career-minded individuals can constantly improve their skills and become more proficient at their jobs. In the field of K-12 education administration, it is particularly important for school administrators to encourage teachers to pursue professional development, not only to ensure the best learning outcomes for their students but also to be more effective and satisfied in various other aspects of their work.

Students Have Better Learning Outcomes

Educational technology, school district guidelines and curriculum standards are constantly changing, making it challenging for teachers to keep up with trends and best practices in the field. Professional development transforms teachers into better and more apt educators by enabling them to create relevant and tailored course instructions for today's students.

National Board Certification is one path for teachers to pursue professional development and keep up with the latest educational standards to ensure optimal student learning. One study by Charlotte-Mecklenburg Schools found that student performance on end-of-course tests in Algebra II, Biology, Civics and Economics, Chemistry and Geometry was significantly higher for those students taught by National Board Certified Teachers than students of teachers without National Board Certification.

Teachers Learn Better Ways to Teach

When educators discover new teaching strategies through professional development, they are able to go back to the classroom and make changes to their lecture styles and curricula to better suit the needs of their students. However, these changes are hard to evaluate because they are typically implemented gradually. Professional development for teachers makes them more efficient in their presentations and course evaluations by exposing educators to new delivery methods, evaluation styles and record-keeping strategies.

Teachers Develop Better Organization and Planning Skills

In addition to the hours spent presenting in the classroom, much of teachers' time is spent on student evaluations, curriculum development and other paperwork. Professional development training can help teachers to become better at planning their time and staying organized. This ultimately makes teachers more efficient and gives them extra time to focus on students rather than the paperwork.

Teachers Gain Knowledge and Industry Insight

Students expect teachers to be subject matter experts for the topics they teach. This means teachers should be able to answer any question a student throws their way. Professional development programs can enable teachers to expand their knowledge base in different subject areas. The more professional development a teacher undergoes, the more knowledge and industry insight he or she gains.

Teachers Want to Continue Their Education

It's easy for teachers to become burdened by the grind of teaching. Professional development gives them an opportunity to step out of their routine — they get to be the student instead of the teacher. This keeps educators engaged because they feel like they are receiving the professional help they need to be better teachers. After all, professional development nurtures the talents of teachers who aspire to take on educational **leadership** positions, and teachers must learn from other experienced leaders to become effective future leaders themselves.

Keyword

Leadership is a process of social influence, which maximizes the efforts of others, towards the achievement of a goal.



Implementing professional education development has benefits for both teachers and students, but most importantly, it helps teachers become better educators and develop into competent future school administrators.

4.3.2 Principles of Professional Conduct for the Education

(1) The educators shall be guided by the following ethical principles:

- The educator values the worth and dignity of every person, the pursuit of truth, devotion to excellence, acquisition of knowledge, and the nurture of democratic citizenship. Essential to the achievement of these standards are the freedom to learn and to teach and the guarantee of equal opportunity for all.
- The educator's primary professional concern will always be for the student and for the development of the student's potential. The educator will therefore strive for professional growth and will seek to exercise the best professional judgment and integrity.
- Aware of the importance of maintaining the respect and confidence of one's colleagues, of students, of parents, and of other members of the community, the educator strives to achieve and sustain the highest degree of ethical conduct.

(2) The educators shall comply with the following disciplinary principles. Violation of any of these principles shall subject the individual to revocation or suspension of the individual educator's certificate, or the other penalties as provided by law.

- Obligation to the student requires that the individual:
 - Shall make reasonable effort to protect the student from conditions harmful to learning and/or to the student's mental and/or physical health and/or safety.
 - Shall not unreasonably restrain a student from independent action in pursuit of learning.
 - Shall not unreasonably deny a student access to diverse points of view.
 - Shall not intentionally suppress or distort subject matter relevant to a student's academic program.
 - Shall not intentionally expose a student to unnecessary embarrassment or disparagement.
 - Shall not intentionally violate or deny a student's legal rights.
 - Shall not harass or discriminate against any student on the basis of race, color, religion, sex, age, national or ethnic origin, political beliefs, marital status, handicapping condition, sexual orientation, or social and family background and shall make reasonable effort to assure that each student is protected from harassment or discrimination.

- Shall not exploit a relationship with a student for personal gain or advantage.
- Shall keep in confidence personally identifiable information obtained in the course of professional service, unless disclosure serves professional purposes or is required by law.
- Obligation to the public requires that the individual:
 - Shall take reasonable precautions to distinguish between personal views and those of any educational institution or organization with which the individual is affiliated.
 - Shall not intentionally distort or misrepresent facts concerning an educational matter in direct or indirect public expression.
 - Shall not use institutional privileges for personal gain or advantage.
 - Shall accept no gratuity, gift, or favor that might influence professional judgment.
 - Shall offer no gratuity, gift, or favor to obtain special advantages.
- Obligation to the profession of education requires that the individual:
 - Shall maintain honesty in all professional dealings.
 - Shall not on the basis of race, color, religion, sex, age, national or ethnic origin, political beliefs, marital status, handicapping condition if otherwise qualified, or social and family background deny to a colleague professional benefits or advantages or participation in any professional organization.
 - Shall not interfere with a colleague's exercise of political or civil rights and responsibilities.
 - Shall not engage in harassment or discriminatory conduct which unreasonably interferes with an individual's performance of professional or work responsibilities or with the orderly processes of education or which creates a hostile, intimidating, abusive, offensive, or oppressive environment; and, further, shall make reasonable effort to assure that each individual is protected from such harassment or discrimination.
 - Shall not make malicious or intentionally false statements about a colleague.
 - Shall not use coercive means or promise special treatment to influence professional judgments of colleagues.
 - Shall not misrepresent one's own professional qualifications.
 - Shall not submit fraudulent information on any document in connection with professional activities.
 - Shall not make any fraudulent statement or fail to disclose a material fact in one's own or another's application for a professional position.



- Shall not withhold information regarding a position from an applicant or misrepresent an assignment or conditions of employment.
- Shall provide upon the request of the certificated individual a written statement of specific reason for recommendations that lead to the denial of increments, significant changes in employment, or termination of employment.
- Shall self-report within forty-eight (48) hours to appropriate authorities (as determined by district) any arrests/charges involving the abuse of a child or the sale and/or possession of a controlled substance. Such notice shall not be considered an admission of guilt nor shall such notice be admissible for any purpose in any proceeding, civil or criminal, administrative or judicial, investigatory or adjudicatory. In addition, shall self-report any conviction, finding of guilt, withholding of adjudication, commitment to a pretrial diversion program, or entering of a plea of guilty or Nolo Contendere for any criminal offense other than a minor traffic violation within forty-eight (48) hours after the final judgment.
- Shall comply with the conditions of an order of the Education Practices Commission imposing probation, imposing a fine, or restricting the authorized scope of practice.
- Shall, as the supervising administrator, cooperate with the Education Practices Commission in monitoring the probation of a subordinate.

4.3.3 Teachers and their Relationship

Whoever adopts teaching as a profession assumes the obligation to conduct · himself / herself in accordance with the ideal of the profession. A teacher is constantly under the scrutiny of her/his students and the society at large. Therefore, every teacher should see that there is no incompatibility between her/his precepts and practice. The national ideals of education which have already been set forth and which she/he should seek to inculcate among students must be her/his own ideals. The profession further requires that the teacher should be calm, patient and communicative by temperament and amiable in disposition.

Teacher should:

- Adhere to a responsible pattern of conduct and demeanor expected of them by the community;
- Manage their private affairs in a manner consistent with the dignity of the profession;
- Seek to make professional growth continuous through study and research;
- Express free and frank opinion by participation at professional meetings, seminars, conferences etc., towards the contribution of knowledge;

- Maintain active membership of professional organizations and strive to improve education and profession through them;
- Perform their duties in the form of teaching, tutorials, practical's, seminars and research work, conscientiously and with dedication;
- Discourage and not indulge in plagiarism and other non-ethical behavior in teaching and research;
- Abide by the Act, Statute and Ordinance of the University and to respect its ideals, vision, mission, cultural practices and tradition;
- Co-operate and assist in carrying out the functions relating to the educational responsibilities of the college and the university, such as: assisting in appraising applications for admission, advising and counselling students as well as assisting the conduct of university and college examinations, including supervision, invigilation and evaluation; and
- Participate in extension, co-curricular and extra-curricular activities, including the **community service**.

Keyword

Community service is unpaid work performed by a person or group of people for the benefit and betterment of their community without any form of compensation.

Teachers and Students

Teachers should:

- Respect the rights and dignity of the student in expressing her/his opinion;
- Deal justly and impartially with students regardless of their religion, caste, gender, political, economic, social and physical characteristics;
- Recognize the difference in aptitude and capabilities among students and strive to meet their individual needs;
- Encourage students to improve their attainments, develop their personalities and at the same time contribute to community welfare;
- Inculcate among students scientific temper, spirit of inquiry and ideals of democracy, patriotism, social justice, environmental protection and peace;



- Treat the students with dignity and not behave in a vindictive manner towards any of them for any reason;
- Pay attention to only the attainment of the student in the assessment of merit;
- Make themselves available to the students even beyond their class hours and help and guide students without any remuneration or reward;
- Aid students to develop an understanding of our national heritage and national goals; and
- Refrain from inciting students against other students, colleagues or administration.

Teachers and Colleagues

Teachers should:

- Treat other members of the profession in the same manner as they themselves wish to be treated;
- Speak respectfully to other teachers and render assistance for professional betterment;
- Refrain from making unsubstantiated allegations against colleagues to higher authorities; and
- Refrain from allowing considerations of caste, creed, religion, race or sex in their professional endeavor.

Teachers and Authorities

Teachers should:

- Discharge their professional responsibilities according to the existing rules and adhere to procedures and methods consistent with their profession in initiating steps through their own institutional bodies and / or professional organizations for change of any such rule detrimental to the professional interest;
- Refrain from undertaking any other employment and commitment, including private tuitions and coaching classes which are likely to interfere with their professional responsibilities;
- Co-operate in the formulation of policies of the institution by accepting various offices and discharge responsibilities which such offices may demand;
- Co-operate through their organizations in the formulation of policies of the other institutions and accept offices;
- Co-operate with the authorities for the betterment of the institutions keeping in view the interest and in conformity with the dignity of the profession;
- Adhere to the terms of contract;

- Give and expect due notice before a change of position takes place; and
- Refrain from availing themselves of leave except on unavoidable grounds and as far as practicable with prior intimation, keeping in view their particular responsibility for completion of academic schedule.

Teachers and Non-Teaching Staff

Teachers should:

- Treat the non-teaching staff as colleagues and equal partners in a cooperative undertaking, within every educational institution;
- Help in the functioning of joint-staff councils covering both the teachers and the nonteaching staff.

Teachers and Guardians

Teachers should:

- (i) Try to see through teachers' bodies and organizations, that institutions maintain contact with the guardians, their students, send reports of their performance to the guardians whenever necessary and meet the guardians in meetings convened for the purpose for mutual exchange of ideas and for the benefit of the institution.

Teachers and Society

Teachers should:

- Recognize that education is a public service and strive to keep the public informed of the educational programs which are being provided;
- Work to improve education in the community and strengthen the community's moral and intellectual life;
- Be aware of social problems and take part in such activities as would be conducive to the progress of society and hence the country as a whole;
- Perform the duties of citizenship, participate in community activities and shoulder responsibilities of public offices;
- Refrain from taking part in or subscribing to or assisting in any way activities, which tend to promote feeling of hatred or enmity among different communities, religions or linguistic groups but actively work for national integration

SUMMARY

- The educator, believing in the worth and dignity of each human being, recognizes the supreme importance of the pursuit of truth, devotion to excellence, and the nurture of the democratic principles.
- The educator recognizes the magnitude of the responsibility inherent in the teaching process. The desire for the respect and confidence of one's colleagues, of students, of parents, and of the members of the community provides the incentive to attain and maintain the highest possible degree of ethical conduct.
- Education renders a significant contribution in leading to effective growth and development of the individuals and teachers have an important role to play in imparting education to the student
- Teacher education is regarded as an indispensable concept for the teachers at all levels of education. These are, pre-primary, primary, elementary, secondary, higher secondary and tertiary. The system of education is different at all levels.
- The well-established tradition of teaching and learning retained its strength even under adversarial circumstances. The post-independence period was characterised by the major efforts being made to nurture and bring about transformations in teacher education.
- The main purpose of community knowledge in education is primarily focused upon training the students in such a manner that they are able to implement the tasks and functions in such a manner that are geared towards promoting well-being of the community.
- The teacher education programs are comprehensive. In the present existence, there have been initiation of teacher education programs that are primarily focused towards promoting the skills and abilities among the individuals in such a manner that they are able to perform their job duties within the educational institutions in accordance to the established standards.
- Imagine a school where teaching is considered to be a profession rather than a trade. The role of teachers in a child's education -- and in American culture -- has fundamentally changed.
- Extended instructional periods and school days, as well as reorganized yearly schedules, are all being tried as ways to avoid chopping learning into often arbitrary chunks based on limited time
- Educators need to be skilled classroom practitioners to a major extent, who continue to spend the majority of their time within the classroom in delivering high quality teaching and learning and have a range of responsibilities related to their expertise, including teaching demonstration lessons, observing and providing feedback to other educators and facilitating school-based professional learning.



MULTIPLE CHOICE QUESTIONS

1. **Education is.....for achieving full human potential, developing an equitable and just society, and promoting national development.**
 - a. Constitutional
 - b. Legitimate
 - c. Fundamental
 - d. Authentic
2. **Education is a great leveler and is the best tool for achieving economic and social mobility, inclusion, and.....**
 - a. disparity
 - b. discrimination
 - c. inequality
 - d. equality
3. **The main objective of teaching at Higher Education Level is:**
 - a. To give new information
 - b. To prepare students to pass examination
 - c. To develop the capacity to take decisions
 - d. To motivate students to ask questions during lecture
4. **Most often, the teacher - student communication is:**
 - a. Critical
 - b. Utilitarian
 - c. Spurious
 - d. Confrontational
5. **Absenteeism can be tackled by:**
 - a. Teaching
 - b. Punishing the students
 - c. Giving the sweets
 - d. Contacting the parents



REVIEW QUESTIONS

1. Explain the scope of teacher education.
2. What is the changing context of teacher education?
3. How to redefining the role of the teacher as a multifaceted profession?
4. Elaborate the roles and responsibilities of educators.
5. What things is importance of professional development for educators?

Answer to Multiple Choice Questions

1. (c) 2. (d) 3. (c) 4. (b) 5. (d)



REFERENCES

1. Mokaya, Z.M. (2013). Influence of School Infrastructure on Student's Performance in Public
2. Secondary Schools in Kajiado County, Kenya. University of Nairobi. Retrieved December 04, 2018 from http://erepository.uonbi.ac.ke/bitstream/handle/11295/55954/Mokaya_Influence%20of%20School%20Infrastructure%20on%20Students%27%20Performance%20in%20Public%20Secondary%20Schools%20in%20Kajiado%20County,%20Kenya.pdf?sequence=3
3. Ogalo, M.O. (2011). Teaching Techniques that Enhance Integration in the Development of English Language Skills in Secondary Schools in Gatundu District, Kenya. Kenyatta University. Retrieved December 04, 2018 from <http://ir-library.ku.ac.ke/bitstream/handle/123456789/3598/michael%20o%20ogalo.pdf;jsessionid=D1E8F10F71706EDD8A8F115BE3EDF8EF?sequence=3>
4. Richardson, E. (2014). Teacher Motivation in Low-Income Contexts: An Actionable Framework for Intervention. Retrieved December 05, 2018 from <http://www.teachersforefa.unesco.org/tmwg/blog2/wp-content/uploads/2015/03/Teacher-Motivation-in-Low-Income-Contexts.pdf>
5. Shukla, S. (2014). Teaching Competency, Professional Commitment and Job Satisfaction-A Study of Primary School Teachers. *IOSR Journal of Research & Method in Education*, 4(3), 44-64. Retrieved December 03, 2018 from <http://www.iosrjournals.org/iosr-jrme/papers/Vol-4%20Issue-3/Version-2/G04324464.pdf>
6. Subject Knowledge: Leading Teaching. (n.d.). Retrieved December 05, 2018 from http://www.inspiringleaderstoday.com/ILTMaterials/LEVEL3_LIT-v4.0-2014_08_08-11_54_0/leading-and-improving-teaching/lit-s4/lit-s4-t05.html



A photograph of a classroom with several students in the foreground and background, all with their hands raised as if participating in a lesson. The room has large windows on the left and a whiteboard in the background.

CHAPTER 5

SOCIOLOGICAL PERSPECTIVES ON EDUCATION

LEARNING OBJECTIVES

After studying this chapter, you will be able to:

1. Discuss the concept of sociological perspectives on education
2. explain the theoretical approaches to sociology of education
3. Focus on education and social stratification
4. Define the effects of education on cultural development

"The sociological context of the times, affects education. Some people call it television culture—you're supposed to be able to get everything in 30 seconds, a sort of quiz-show attitude."

– James Alfred Van Allen

INTRODUCTION

The sociology of education is the study of how public institutions and individual experiences affect education and its outcomes. It is most concerned with the public schooling systems of modern industrial societies, including the expansion of higher, further, adult, and continuing education. It is a philosophical as well as a sociological concept, denoting ideologies, curricula, and pedagogical techniques of the inculcation and management of knowledge and the social reproduction of personalities and cultures. It is concerned with the

relationships, activities and reactions of the teachers and students in the classroom. It emphasizes sociological problems in the realm of education. The philosophical foundations of education explore humanities, sociology, philosophy and the history of educational trends. Educational policy and its methods are the main facets of a degree program. The decision to pursue a degree in education should be made by those who have the desire to shape educational policy and possess a vision for change. Studies covering the philosophical foundations of education examine social policy involving schools and curricula. Aspiring professionals in this field may examine the various ways students learn subjects as well as how to set up teaching environments that stimulate critical thought and emphasize the importance of solid curricula. Social Foundations of Education draws upon several disciplines and fields to examine education, namely history, philosophy, comparative/ international education, cultural studies, sociology, and political science. Social Foundations inquiry helps to sharpen students' capacities to understand, analyze, and explain educational issues, policies, and practices in order to improve education. Thus, the purpose of Social Foundations study is to draw upon these humanities and social science disciplines to develop students' interpretive, normative, and critical perspectives on education, both inside and outside of schools. The development of such perspectives helps educators to "exercise sensitive judgments amidst competing cultural and education values and beliefs".

5.1 CONCEPT OF SOCIOLOGICAL PERSPECTIVES ON EDUCATION

Sociology includes three major theoretical perspectives: the functionalist perspective, the conflict perspective, and the symbolic interactionist perspective (sometimes called the interactionist perspective, or simply the micro view). Each perspective offers a variety of explanations about the social world and human behavior. The major sociological perspectives on education fall nicely into the functional, conflict, and symbolic interactionist approaches.

Table 1. "Theory Snapshot" summarizes what these approaches say.

Theoretical perspective	Major assumptions
Functionalism	Education serves several functions for society. These include (a) socialization, (b) social integration, (c) social placement, and (d) social and cultural innovation. Latent functions include child care, the establishment of peer relationships, and lowering unemployment by keeping high school students out of the full-time labor force.

Conflict theory	Education promotes social inequality through the use of tracking and standardized testing and the impact of its “hidden curriculum.” Schools differ widely in their funding and learning conditions, and this type of inequality leads to learning disparities that reinforce social inequality.
Symbolic interactionism	This perspective focuses on social interaction in the classroom, on the playground, and in other school venues. Specific research finds that social interaction in schools affects the development of gender roles and that teachers’ expectations of pupils’ intellectual abilities affect how much pupils learn.

5.1.1 Sociology of Education

Sociology of Education may be defined as the scientific analysis of the social processes and social patterns involved in the educational system. Brook over and Gottlieb consider that this assumes education is a combination of social acts and that sociology is an analysis of human interaction. Educational process goes on in a formal as well as in informal situations. Sociological analysis of the human interaction in education may include both situations and might lead to the development of scientific generalizations of human relations in the educational system. .

Any individual can learn very little by himself. Others play a very important role and contribute a lot to his learning process. The presence of other persons is important because a person learns from the knowledge gained by others. Therefore the process of getting education is always a social process.

The word Sociology is derived from the combination of the Latin socius meaning companion and the Greek logos - meaning the study of’. So the word literally means the study of companionship, or social relations. It is the science or study of the origin, development, organization, and functioning of human society. It is the science of fundamental laws of social behavior, relations, institutions, etc.



The word Education comes from the Latin e-ducere meaning to lead out. Webster defines education as the process of educating or teaching. Educate is further defined as to develop the knowledge, skill, or character of. Thus, from these definitions, one can assume that the purpose of education is to develop the knowledge, skill, or character of students. The aim of education should be to teach us rather how to think, than what to think rather to improve our minds, so as to enable us to think for ourselves, than to load the memory with the thoughts of other men.

Emile Durkheim was the first person who indicated the need for a sociological approach to education. He considered education to be essentially social in character and in its functions and that as a result the theory of education relates more clearly to sociology than any other science. He emphasized that education is not a static phenomenon but a dynamic and ever-changing process. Educational sociology is by definition a discipline which studies education sociologically, with the premise that it recognizes education as a social fact, a process and an institution, having a social function and being determined socially. Educational sociology could appear only when it accepted the social nature of education.

5.1.1 Scope of Sociology of Education

The scope of sociology of education is vast:

- It is concerned with such general concepts such as society itself, culture, community, class, environment, socialization, internalization, accommodation, assimilation, cultural lag, subculture, status, role and so forth.
- It is further involved in cases of education and social class, state, social force, and cultural change, various problems of role structure, role analysis in relation to the total social system and the micro society of the school such as authority, selection, and the organization of learning, streaming, curriculum and so forth.
- It deals with analysis of educational situations in various geographical and ethnological contexts. E.g. Educational situations in rural, urban and tribal areas, in different parts of the country/world, with the background of different races, cultures etc.
- It helps us to understand the effectiveness of different educational methods in teaching students with different kinds of intelligences.
- It studies the effect of economy upon the type of education provided to the students.
- It helps us to understand the effect of various social agencies like family, school on the students.
- It studies the relationship between social classes, culture, language, parental education, occupation and the achievement of the students

- It studies the role and structure of school, peer group on the personality of the students
- It provides an understanding of the problems such as racism, communalism, gender discrimination etc.
- It studies the role of schools in socialization of the students.
- It suggests ways to develop national integration, international understanding, the spirit of scientific temper, globalization among the students
- It promotes research studies related to planning, organization and application of various theories in education.

All these are the concerns of education and sociology as inseparable discipline focusing on the problems of the society.



5.1.2 The Functions of Education

Functional theory stresses the functions that education serves in fulfilling a society's various needs. Perhaps the most important function of education is *socialization*. If children need to learn the norms, values, and skills they need to function in society, then education is a primary vehicle for such learning. Schools teach the three Rs, as we all know, but they also teach many of the society's norms and values. In the United States, these norms and values include respect for authority, patriotism (remember the Pledge of Allegiance?), punctuality, individualism, and competition. Regarding these last two values, American students from an early age compete as individuals over grades and other rewards. They learn to value their membership in their homeroom, or *kumi*, and are evaluated more on their *kumi's* performance than on their own individual performance. How well a Japanese child's *kumi* does is more important than how well the child does as an individual.

A second function of education is *social integration*. For a society to work, functionalists say, people must subscribe to a common set of beliefs and values. As we saw, the development of such common views was a goal of the system of free, compulsory education that developed in the 19th century. Thousands of immigrant children in the United States today are learning English, U.S. history, and other subjects that help prepare them for the workforce and integrate them into American life. Such integration is a major goal of the English-only movement, whose advocates say that only English should be used to teach children whose native tongue is Spanish, Vietnamese, or whatever other language their parents speak at home. Critics of this movement say it slows down these children's education and weakens their ethnic identity.

A third function of education is *social placement*. Beginning in grade school, students are identified by teachers and other school officials either as bright and motivated or as less bright and even educationally challenged. Depending on how they are identified, children are taught at the level that is thought to suit them best. In this way they are prepared in the most appropriate way possible for their later station in life. Whether this process works as well as it should is an important issue, and we explore it further when we discuss school tracking shortly.

Social and cultural innovation is a fourth function of education. Our scientists cannot make important scientific discoveries and our artists and thinkers cannot come up with great works of art, poetry, and prose unless they have first been educated in the many subjects they need to know for their chosen path.

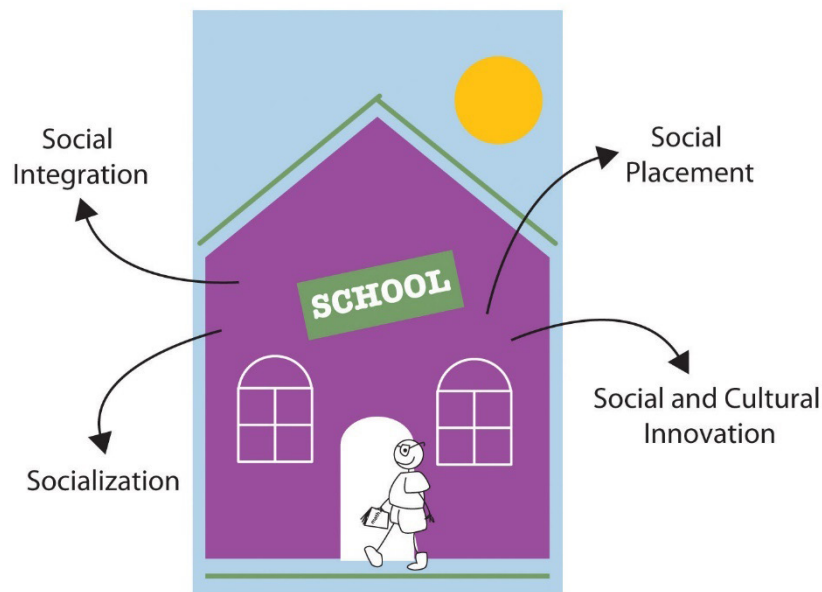


Figure 1. The Functions of Education

Schools ideally perform many important functions in modern society. These include socialization, social integration, social placement, and social and cultural innovation.

Education also involves several *latent* functions, functions that are by-products of going to school and receiving an education rather than a direct effect of the education itself. One of these is child care. Once a child starts kindergarten and then first grade, for several hours a day the child is taken care of for free. The establishment of peer relationships is another latent function of schooling. Most of us met many of our friends while we were in school at whatever grade level, and some of those friendships endure the rest of our lives. A final latent function of education is that it keeps millions of high school students out of the full-time labor force. This fact keeps the unemployment rate lower than it would be if they were in the labor force.

5.1.3 Education and Inequality

Conflict theory does not dispute most of the functions just described. However, it does give some of them a different slant and talks about various ways in which education perpetuates social inequality. One example involves the function of social placement. As most schools track their students starting in grade school, the students thought by their teachers to be bright are placed in the faster tracks (especially in reading and arithmetic), while the slower students are placed in the slower tracks; in high school, three common tracks are the college track, vocational track, and general track.

Such *tracking* does have its advantages; it helps ensure that bright students learn as much as their abilities allow them, and it helps ensure that slower students are not taught over their heads. But, conflict theorists say, tracking also helps perpetuate social inequality by *locking* students into faster and lower tracks. Worse yet, several studies show that students' social class and race and ethnicity affect the track into which they are placed, even though their intellectual abilities and potential should be the only things that matter: white, middle-class students are more likely to be tracked "up," while poorer students and students of color are more likely to be tracked "down." Once they are tracked, students learn more if they are tracked up and less if they are tracked down. The latter tend to lose self-esteem and begin to think they have little academic ability and thus do worse in school because they were tracked down. In this way, tracking is thought to be good for those tracked up and bad for those tracked down. Conflict theorists thus say that tracking perpetuates social inequality based on social class and race and ethnicity.

Social inequality is also perpetuated through the widespread use of standardized tests. Critics say these tests continue to be culturally biased, as they include questions whose answers are most likely to be known by white, middle-class students, whose backgrounds have afforded them various experiences that help them answer the questions. They also say that scores on standardized tests reflect students' socioeconomic



status and experiences in addition to their academic abilities. To the extent this critique is true, standardized tests perpetuate social inequality. As we will see, schools in the United States also differ mightily in their resources, learning conditions, and other aspects, all of which affect how much students can learn in them. Simply put, schools are unequal, and their very inequality helps perpetuate inequality in the larger society. Children going to the worst schools in urban areas face many more obstacles to their learning than those going to well-funded schools in suburban areas. Their lack of learning helps ensure they remain trapped in poverty and its related problems. Conflict theorists also say that schooling teaches a hidden curriculum, by which they mean a set of values and beliefs that support the status quo, including the existing social hierarchy. Although no one plots this behind closed doors, our schoolchildren learn patriotic values and respect for authority from the books they read and from various classroom activities. A final critique is historical and concerns the rise of free, compulsory education during the nineteenth century. Because compulsory schooling began in part to prevent immigrants' values from corrupting "American" values, conflict theorists see its origins as smacking of *ethnocentrism* (the belief that one's own group is superior to another group). They also criticize its intention to teach workers the skills they needed for the new industrial economy. Because most workers were very poor in this economy, these critics say, compulsory education served the interests of the upper/capitalist class much more than it served the interests of workers.

Symbolic Interactionism and School Behavior

Symbolic interactionist studies of education examine social interaction in the classroom, on the playground, and in other school venues. These studies help us understand what happens in the schools themselves, but they also help us understand how what occurs in school is relevant for the larger society. Some studies, for example, show how children's playground activities reinforce gender-role socialization. Girls tend to play more cooperative games, while boys play more competitive sports



Another body of research shows that teachers' views about students can affect how much the students learn. When teachers think students are smart, they tend to spend more time with these students, to call on them, and to praise them when they give the right answer. Not surprisingly, these students learn more because of their teachers' behavior. But when teachers think students are less bright, they tend to spend less time with these students and to act in a way that leads them to learn less. They tested a group of students at the beginning of the school year and told their teachers which students were bright and which were not. They then tested the students again at the end of the school year. Not surprisingly, the bright students had learned more during the year than the less bright ones. But it turned out that the researchers had randomly decided which students would be designated bright and less bright. Because the "bright" students learned more during the school year without actually being brighter at the beginning, their teachers' behavior must have been the reason. In fact, their teachers did spend more time with them and praised them more often than was true for the "less bright" students. This process helps us understand why tracking is bad for the students tracked down.

Other research in the symbolic interactionist tradition focuses on how teachers treat girls and boys. Many studies find that teachers call on and praise boys more often. Teachers do not do this consciously, but their behavior nonetheless sends an implicit message to girls that math and science are not for them and that they are not suited to do well in these subjects. This body of research has stimulated efforts to educate teachers about the ways in which they may unwittingly send these messages and about strategies they could use to promote greater interest and achievement by girls in math and science.

5.1.4 Difference between Educational Sociology and Sociology of Education

Educational sociology is a branch of discipline of sociology which studies the problems of relationship between society and education. It evolved as a discipline designed to prepare educators for their future tasks. It uses the results of sociological researches in planning educational activities and in developing effective methods of realizing these plans. The main aim of educational sociology was to study social interaction. Francis Brown considered that. All education proceeds by the participation of the individual in the social consciousness of the race¹¹. He defined educational sociology as that discipline which applied the general principles and findings of sociology to the process of education. Educational sociology is by definition a discipline which studies education sociologically, with the premise that it recognizes education as a social fact, a process and an institution, having a social function and being determined socially. It is the application of sociological principles and methods to the solution of problems in an educational system.



Educational Sociology threw light on the importance of the interactions of different elements of the society with an individual. It emphasized the progress of the society through the medium of education. The problems of schooling and instructions were looked upon as problems of the society. The educational sociology tried to answer the questions as to what type of education should be given? What should be the curriculum? Why children become delinquent? It threw light on those institutions and organizations and on those social interactions that were important in educational process. It used educational interactions that helped in the development of the personality of the individual so that he becomes a better social being. It was realized that though educational sociology made everyone realize the social nature of education, formulated ideals by which educational planning was guided, used the theoretical knowledge gathered by researches conducted by either sociologists or educational sociologists, there appeared to be confusion as to what the proper dimensions of educational sociology should be. There were differences of opinion regarding what types of researches are to be classified under the head of educational sociology. This led to the thinking that there should be a separate branch of knowledge which can be designated as sociology of education. Soon educational sociology became a historical phenomenon. In 1963, the Journal of Educational Sociology became the Journal of Sociology of Education. Sociology of Education may be defined as the scientific analysis of the social processes and social patterns involved in the educational system.

5.1.5 Need to Study Sociology of Education

Every society has its own changing socio cultural needs and requires an education to meet these needs. Today's needs are conservation of resources, environmental protection, global citizenship etc. Therefore education caters towards meeting of these different needs. Since the needs of the society change education also changes.

Hence there is need for studying sociology of education. It helps in understanding:

- Work of School and Teachers and its relation to society, social progress and development
- Effect of Social Elements on the working of school and society
- Effect of Social Elements on the life of individuals
- Construction of Curriculum in relation to the cultural and economic needs of the society
- Democratic ideologies present in different countries
- Need for understanding and promoting international culture
- Development of Society through the formulation of various rules and regulations and understanding of culture and traditions
- Need for Promotion of Social Adjustment
- The effect of social groups, their interrelation and dynamics on individuals

5.1.6 Functions of Education in Society

Acquisition of knowledge and development of the personality of an individual is no longer presumed to be the main function of education. Functions are assumed to occur without directed effort. From the sociological point of view, education has the following functions:



Assimilation and transmission of culture/traditions: This needs to be done consciously and selectively because traditions need to be selected for transmission as well as omission depending on their value and desirability in today's democratic set-up. In recent times this statement has been taken as meaning "all religions are the same" - that all religions are merely different paths to God or the same spiritual goal. It emphasizes

moral responsibilities in society that people should have towards each other. At the same time education should encourage people to do away with the custom of child marriage, untouchability etc. Education should help in

- Acquisition/clarification of personal values
- Self-realization/self-reflection: awareness of one's abilities and goals
- Self-esteem/self-efficacy
- Thinking creatively
- Cultural appreciation: art, music, humanities
- Developing a sense of well-being: mental and physical health
- Acquisition/clarification of values related to the physical environment
- Respect: giving and receiving recognition as human beings
- Capacity/ability to live a fulfilling life

Development of new social patterns: Today the world is changing very fast due to development of technology and communication. So along with preservation of traditional values, new values, social patterns need to be developed where

- Citizens rooted in their own cultures and yet open to other cultures are produced.
- Global outlook is fostered.
- Knowledge is advanced in such a way that economic development goes hand in hand with responsible management of the physical and human environment.
- Citizens who understand their social responsibilities are produced.
- Citizens who can evaluate information and predict future outcomes are developed – in short who can take part in decision-making
- Who have the capacity/ability to seek out alternative solutions and evaluate them are trained – those who are trained in problem solving.

Activation of constructive and creative forces: Education should help to build up a qualified and creative workforce that can adapt to new technologies and take part in the intelligence revolution that is the driving force of our economies. It should

- Ensure capacity/ability to earn a living: career education
- Develop mental and physical skills: motor, thinking, and communication, social, aesthetic
- Produce citizens who can adapt, adjust according to social environment,
- Produce citizens who can contribute towards the progress of society,
- Produce citizens who will live democratically,
- Create individuals who will make proper use of leisure time,

- Train individuals to adapt to change or prepare for change, better still initiate change in the society,
- Develop individuals who are open to others and mutual understanding and the values of peace,
- Promote knowledge of moral practices and ethical standards acceptable by society/culture
- Develop capacity/ability to recognize and evaluate different points of view
- Develop understanding of human relations and motivations

Did You Know?

Systematic sociology of education began with the work of Émile Durkheim (1858–1917) on moral education as a basis for organic solidarity, and with studies by Max Weber (1864–1920) on the Chinese literati as an instrument of political control.

5.2 THEORETICAL APPROACHES TO SOCIOLOGY OF EDUCATION

Theory means different things to different people. It could be defined as a conceptual scheme designed to explain observed regularities or relationships between two or more variables. Theoretical perspectives are used to provide logical explanation for why things happen the way they do. There are always various interpretations of events in our everyday life. Similarly there are several sociological perspectives on why things happen the way they do in society. These theories result in different interpretations of the same information because they focus on different aspects. In the behavioral sciences, no theory is absolutely true. No theory is a final formulation because new knowledge keeps on modifying or even repudiates existing theories. A theory is not judged productive solely in terms of the answers it gives; but equally in the number of questions it raises.

We are going to take a look at the key aspects of the following theories which have made major contribution to the field of sociology of education:

- Functionalism
- Conflict Theory
- Interactionism
- Open Systems Approach





5.2.1 Functionalism

One of the core perspectives of **sociology** is functionalism, consensus or equilibrium theory. A sociologist using this approach assumes that in society everything (even crime), no matter how seemingly strange, out of place, or harmful, serves a purpose. Functionalism views society as a self-regulating system of interrelated elements with structured social relationships and observed regularities.

Keyword

Sociology is the study of social behavior or society, including its origins, development, organization, networks, and institutions.



Emile Durkheim, is considered to be the first person to recommend that a sociological approach be used in the study of education. He said that society can survive only if there exists among its members a sufficient degree of homogeneity. Education perpetuates and reinforces this homogeneity by fixing in the child, from the beginning, the essential similarities that collective life demands.

- Durkheim attempted to understand why education took the forms it did, rather than judge those forms.
- He points out that, Education is the influence exercised by adult generations on those that are not yet ready for social life. Its object is to arouse and to develop in the child a certain number of physical, intellectual and moral states which are demanded of him by both the political society as a whole and the special milieu for which he is specifically destined.
- Durkheim observed that education takes different forms at different times and places showing that we cannot separate the educational system from the society for they reflect each other.
- He stressed that in every time and place education is closely related to other institutions and to current values and beliefs.
- Durkheim outlined his beliefs about the functions of schools and their relationship to society.

5.2.2 Structural functionalists

Structural functionalism, or simply functionalism, is a framework for building theory that sees society as a complex system whose parts work together to promote solidarity and stability. This approach looks at society through a macro-level orientation, which is a broad focus on the social structures that shape society as a whole, and believes that society has evolved like organisms. This approach looks at both social structure and social functions. Functionalism addresses society as a whole in terms of the function of its constituent elements; namely norms, customs, traditions, and institutions. A common analogy, popularized by Herbert Spencer, presents these parts of society as “organs” that work toward the proper functioning of the “body” as a whole. In the most basic terms, it simply emphasizes “the effort to impute, as rigorously as possible, to each feature, custom, or practice, its effect on the functioning of a supposedly stable, cohesive system”.

Structural functionalists believe that society leans towards equilibrium and social order. They see society like a human body, in which each part plays a role and all are dependent on each other for survival. Institutions such as education are like important organs that keep the society/body healthy and well. Social health means the same as social order, and is guaranteed when nearly everyone accepts the general moral values of their society.

- Structural functionalists believe the aim of key institutions, such as education, is to socialize children and teenagers.
- Socialization is the process by which the new generation learns the knowledge, attitudes and values that they will need as productive citizens.



- Although this aim is stated in the formal curriculum, it is mainly achieved through “the hidden curriculum”, a subtler, but nonetheless powerful, indoctrination of the norms and values of the wider society.
- Students learn these values because their behavior at school is regulated until they gradually internalize and accept them.
- Education must, however perform another function. As various jobs become vacant, they must be filled with the appropriate people. Therefore the other purpose of education is to sort and rank individuals for placement in the labor market
- Those with high achievement will be trained for the most important jobs and in reward, be given the highest incomes. Those who achieve the least, will be given the least demanding (intellectually at any rate, if not physically) jobs, and hence the least income.

Criticism of Functionalism

Functionalism fails to recognize the number of divergent interests, ideologies and conflicting interest groups in society. In heterogeneous societies each sub-group may have its own agenda to further its own interests. It is difficult to analyze individual interactions such as classroom dynamics of teacher-student or student-student interactions from this perspective.

It does not deal with the content of the educational process what is taught and how it is taught. Individuals do not merely carry out roles within the structure, they create and modify them.



Conflict Theory

The perspective of conflict theory, contrary to the structural functionalist perspective, believes that society is full of social groups with different aspirations, different access to life chances and gain different social rewards. Relations in society, in this view, are

mainly based on exploitation, oppression, domination and subordination. The several social theories that emphasize social conflict have roots in the ideas of Karl Marx, the great German theorist and political activist. The Marxist conflict approach emphasizes a materialist interpretation of history, a dialectical method of analysis, a critical stance toward existing social arrangements, and a political program of revolution or, at least, reform. Conflict theories draw attention to power differentials, such as class conflict, and generally contrast traditional or historically-dominant ideologies. Conflict theory is most commonly associated with Marxism, but as a reaction to functionalism and positivist methods may also be associated with critical theory, feminist theory, queer theory, postmodern theory, post-structural theory, postcolonial theory, and a variety of other perspectives. Some conflict theorists like Max Weber believe education is controlled by the state which is controlled by the powerful, and its purpose is to reproduce existing inequalities, as well as legitimize acceptable ideas which actually work to reinforce the privileged positions of the dominant group. Connell and White state that the education system is as much an arbiter of social privilege as a transmitter of knowledge.

Education achieves its purpose by maintaining the status quo, where lower-class children become lower class adults, and middle and upper class children become middle and upper-class adults.

McLeod argues that teachers treat lower-class kids like less competent students, placing them in lower tracks because they have generally had fewer opportunities to develop language, critical thinking, and social skills prior to entering school than middle and upper class kids.

When placed in lower tracks, lower-class kids are trained for blue-collar jobs by an emphasis on obedience and following rules rather than autonomy, higher-order thinking, and self-expression. They point out that while private schools are expensive and generally reserved for the upper classes, public schools- like Municipal schools, especially those that serve the poor, are under - funded, understaffed, and growing worse.

Schools are also powerful agents of socialization that can be used as tools for one group to exert power over others for example, by demanding that all students learn English, schools are ensuring that English-speakers dominate students from non-English speaking backgrounds

This cycle occurs because the dominant group has, over time, closely aligned education with middle class values and aims, thus alienating people of other classes.

Many teachers assume that students will have particular middle class experiences at home, and for some children this assumption isn't necessarily true. Some children are expected to help their parents after school and carry considerable domestic responsibilities



Keyword

Curriculum is broadly defined as the totality of student experiences that occur in the educational process.

in their often single-parent home. The demands of this domestic labor often make it difficult for them to find time to do all their homework and this affects their academic performance.

Where teachers have softened the formality of regular study and integrated student's preferred working methods into the **curriculum**, they noted that particular students displayed strengths they had not been aware of before.

However few teacher deviate from the traditional curriculum and the curriculum conveys what constitutes knowledge as determined by the state and those in power. This knowledge isn't very meaningful to many of the students, who see it as pointless.

Anti-school values displayed by these children are often derived from their consciousness of their real interests.

Sargent believes that for working class students, striving to succeed and absorbing the school's middle class values, is accepting their inferior social position as much as if they were determined to fail.

Fitzgerald states that irrespective of their academic ability or desire to learn, students from poor families have relatively little chance of securing success.

On the other hand, for middle and especially upper-class children, maintaining their superior position in society requires little effort.

Remember

Conflict theorists believe this social reproduction continues to occur because the whole education system is overlain with ideology provided by the dominant group.

The federal government subsidizes independent private schools enabling the rich to obtain good education 'by paying for it. With this good education', rich children perform better, achieve higher and obtain greater rewards. In this way, the continuation of privilege and wealth for the elite is made possible.

In effect, they perpetuate the myth that education is available to all to provide a means of achieving wealth and status. Anyone who fails to achieve this goal, according to the myth, has only themselves to blame.

Wright agrees, stating that the effect of the myth is to stop them from seeing that their personal troubles are part of major social issues. The duplicity is so successful that many parents endure appalling jobs for many years, believing that



this sacrifice will enable their children to have opportunities in life that they did not have themselves. These people who are poor and disadvantaged are victims of a societal confidence trick. They have been encouraged to believe that a major goal of schooling is to strengthen equality while, in reality, schools reflect society's intention to maintain the unequal distribution of status and power

5.2.3 Open System Theory in Education

Open systems theory has profoundly altered how we understand schools as organizations and the demands placed upon educational leaders. Treating schools as if they are independent of their environment would lead to wide misperceptions of the driving factors behind organizational change. Contemporary studies of accountability movements, teacher professionalization, and instructional leadership all benefit from a strongly open systems approach to understanding environmental demands and the resulting adaptation in school policy and its implementation, or lack thereof. Indeed, today scholars are rightfully dubious of work that fails to consider the rich context in which schools develop.

It defines the concept of a system, where “all systems are characterized by an assemblage or combination of parts whose relations make them interdependent”.



The analysis of educational systems falls into two main areas: process and structure. Processes are the action parts of the system bringing structure alive. Examples of processes include teaching, learning, communication and decision making as well as those formal and informal activities that socialize students into their place in school and later life roles. These are dynamic parts of the education system.

Structure of a system includes the hierarchy or roles people play administrators, teachers, staff, and parents and of course students as well as the organization of

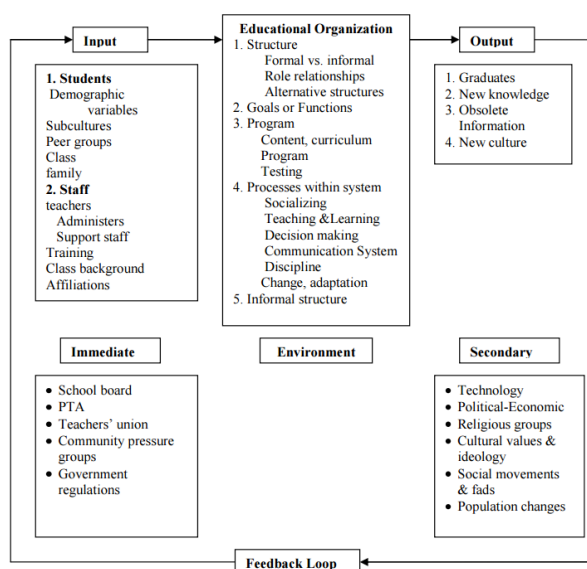
learning, classroom and school lay out, types of school and structure of curriculum. We cannot ignore the schools environment which consists of groups, organizations, other institutions and even the global society outside the school all of which influence school functioning. For example, parents sometimes put pressure on the management to start a co-curricular activity like roller skating or introduce the services of a counselor for the students, communities may provide unequal academic opportunities to different groups of students and the government political economic structures shape policies and resources available to schools.

The Open Systems Approach to Education

The open systems perspective looks at the education system as a whole, integrated entity. This

- Provides a useful way of visualizing many elements in the system;
- Helps to order observations and data
- Represents a generalized picture of complex interacting elements and sets of relationships

The figure shows basic components in any social system. These components are the organization, the environment, input, output and feedback.



Step 1: Organization

Focus your attention at the central box, the organization. This refers to the center of activity. It represents society, an institution (such as education), an organization (such

as a particular school), a subsystem (such as a classroom), or an interaction (such as between a teacher and students or between peers). For purposes of discussion this is referred as the organization'. It is in the organization that the activities take place, showing that it is more than a structure, positions, roles, and functions. Within its boundaries is a structure consisting of parts and sub-parts, positions and roles. Though it is referred as a structure, it is the personnel here who carry out activities and take decisions.

The processes in the system bring it alive. These processes do not take place in a vacuum. The decision makers holding positions and carrying out roles in the organization are constantly responding to the demands from both inside and outside of the organization. The boundaries remain pliable, flexible in order to respond to the demands of the environment. This is called as open system or open boundaries. Students' experiences depend upon their social class boundaries, the responses of the school staff to their behavior within schools and action of students and staff that create school cultures.

Step 2: Environment

The environment refers to everything that surrounds the organization and influences it in some way. Typically environment includes other surrounding systems. For schools an important aspect of environment is financial - from where they get their money. Another critical factor is what rules are imposed on the schools as schools exist in the maze of socio, economic and political expectations such as the recent notification by the government that no child should be detained /failed in any class up to the 8th standard. Another important aspect of environment is employment market and the job skills needed for it.

Organizations depend on environment to get their information and resources. For every school the factors in the environment will differ and change over time. The set of challenges will be different. Interactions with the environment could be desirable or unpleasant. They take place in form of inputs and outputs.

Step 3: Input

An organization receives inputs in terms of information, raw materials, personnel, finances and new ideas from the environment. Persons who belong to an organization are also part of surrounding communities and bring in influences from the environment. For most organizations some inputs are undesirable but unavoidable like new legal restrictions, competition etc. Organizations are able to exert some control over some inputs like selection of teachers, textbooks, and curriculum. They have less control over admissions.

Step 4: output

Output refers to material items and non-material ideas that leave the organization such as products, waste, information, evolving culture and new technology. There may be personnel spanning boundary lines, like salesmen, secretary. Normally speaking for universities and colleges new knowledge is in terms of research papers and articles.

Keyword

Feedback occurs when outputs of a system are routed back as inputs as part of a chain of cause-and-effect that forms a circuit or loop.

Step 5: Feedback

A key aspect of the systems model is the process of feedback. It implies that the organization's leaders are constantly learning about and adapting to changes and demands of the environment through the news it receives. Organizational personnel compare the current affairs with desired goals and environmental **feedback** to determine the new course of action.

Uses of Open Systems approach

- It facilitates analysis of a complex problem by focusing on specific important elements within the system and in the environment. A problem can thus be simplified and outlined more clearly.
- Interactions among elements or variables in the system and in the environment, and their likely effects on the system can be identified and analyzed.
- Likely future developments and their implications can be considered in the same way.
- The tabulating of variables, trends and implications can serve as a useful stimulus to both logical and imaginative thinking, by forcing people to think of various possibilities and changes, and their effects on the problem situation, that is it facilitates brainstorming within a rational framework.
- This leads to understanding of problems and development of alternative solutions that are essential for sound decision-making.
- A systematic analysis of a business problem and likely future developments (whether this be a case study or real life situation) promotes:



- Better decision-making
- Better planning
- Better preparedness
- Adoption of the system concerned (often the firm) to the environment
- The possibility of adjusting relevant variables in the environment in order to achieve the preferred state of the system
- The recognition and consideration of some of the intangible, unquantifiable and future oriented variables which are often overlooked in business situations because it is difficult to get to grips with them.

This could be particularly useful- in analyzing the economic and political environment and in the development of scenarios for future-oriented planning.

5.3 EDUCATION AND SOCIAL STRATIFICATION

In Sociology and Anthropology, social stratification is the hierarchical arrangement of individuals into social classes, castes and divisions within a society. These hierarchies, which may be overtly or covertly preset, or not present at all in some societies, are quite common in state-level societies. In our society we rank people according to the scarce resources they control. Money and property are scarce resources in our society and those who own a great deal of money and property, wealthy people, can use this resource to gain power. It has been said that much respected people also control another scarce resource public respect and that they can use this resource to gain power. Political leaders are likewise powerful because they are in a position to control the members of a political party. This ranking of people according to their wealth, prestige or party position is known as Social Stratification. Stratification separates the rich from the poor, the powerful from the powerless. Those who possess scarce resources have a high rank and those who do not possess them have a low rank. Our place in the stratification system influences every part of our lives; where we live, go to school and work; what we eat how we vote and whom we marry. Our sexual behavior, sports, hobbies and health are all affected by the rank society gives us. Therefore social stratification is an area of great interest to sociologists.



The main features of social stratification are;

1. It is a social and economic categorization of individuals within a societal framework.
2. It is based on Caste, Class, and Status & Power of a Community or Section of People within the framework of a society.
3. Social Stratification exists because of natural differences in peoples abilities.
4. Due to Social Stratification societies tend to be stable and are held together through consensus.
5. It lessens conflicts & provides structure.
6. Social Stratification is a natural & voluntary separation according to race, social & economic status.

There are five basic points which gives clear idea about the causes of social stratification;

- (1) Inequality – Inequality exists because of natural differences in people’s abilities.
- (2) Conflict – Stratification occurs due to conflict between different classes, with the upper classes using superior power to take a larger share of the social resources.
- (3) Power – Power influences one’s definition of self and the importance of ideas in defining social situations.
- (4) Wealth – Difference in the wealth is also one of the causes of social stratification.
- (5) Instability – Instability in the society being the cause of social stratification enhances stability and induces members of the society to work hard

5.3.1 Types of Social Stratification

People’s differing ranks in society are based on class and status. Class rankings are based on wealth, income, and life chances to acquire wealth and income. Status comes from the honor and respect people receive from others. Class and status are sources of power, and they are the criteria used to rank people in a system of stratification. Structural functionalists believe that systems of stratification develop because societies need scarce leadership skills and reward to those who are willing to assume the responsibility of leadership. Conflict theorists contend that stratification develops because certain groups gain a monopoly of the scarce resources through inheritance or conflict and use those resources to maintain their high positions.



- (1) **Caste:** Caste can be defined as a hereditary intermarrying group which determines the individual's status in the social stratification by his occupation, etc.
- (2) **Class:** Social stratification is also based on Class. Class is a status group and in only society the social status of one group always differs from that of another. Class is also a person's economic position in a society. However, as per Weber, Class is not a supreme factor in stratification. He noted that how Managers of corporations or industries control firms they do not own.
- (3) **Status:** Status is a person's prestige, social honor, or popularity in a society. Social stratification is also based on status of a person. Weber noted that political power was not rooted in capital value society, but also in one's individual status. Poets or saints can possess immense influence on society with often little economic growth.
- (4) **Power:** A person's ability to get their way despite the resistance of others. For example, individuals in state jobs may hold little property or status but they still hold immense power.

5.3.2 Stratification and Equality of Educational Opportunity

Social stratification refers to differential access to resources, power, autonomy, and status across social groups. Societies can be stratified on any number of dimensions. In the United States, the most widely recognized stratification systems are based on race, social class, and gender. The challenge for those of us interested in understanding the implications of social stratification and social inequality for mental health is to trace the processes through which macrostructures of social stratification become manifest in the micro conditions of individual lives. Those micro conditions can be objective or subjective, and the effects of objective conditions often depend on how those conditions are subjectively perceived. Thus, the study of social stratification and mental health requires that we think at multiple levels of analysis and about the connections between objective and subjective experiences. Given renewed interest in macro-micro links

among sociologists and the centrality of subjective perceptions in social-psychological theory, the study of social stratification and mental health is a quintessentially sociological project.

Remember

Social stratification implies social inequality; if some groups have access to more resources than others, the distribution of those resources is inherently unequal.



“Even though social stratification is a multi-disciplinary and multi-dimensional field of study, there is a tendency to understand it mainly from the perspective of sociology. Departing significantly from both these viewpoints, a comprehensive understanding of social stratification and mobility drawing essential inputs from major debates and dialogues in various branches of the social sciences.

Equality of Educational Opportunity

Equality is said to exist only when inequality has been removed. But in reality inequality is not totally eliminated. Whatever measures may be taken to ensure equality, inequality will exist to some degree. Thus what the programs of equality do or can do is to narrow down the inequalities. It means elimination of that level or type of Inequality which is considered undesirable or unacceptable within the society. So the purist of equality aims not at total equality in the philosophical sense, but at an equitable distribution of societal resources. Modern society views education as an important societal resource and a means of achieving the goal of egalitarianism. Education is looked upon as a means of raising the social status of an individual in various ways. It is accepted as a basic human need to have a desirable quality of life. Given equal opportunity for general, vocational, technical and **professional education** most citizens have equal status in the society. Education is often considered as an equalizer.

Equality of educational opportunities means that an individual has equal access to education. Equality of educational opportunities is one of the goals of the ideology of Egalitarianism. The Education Commission has observed: The main social objectives of education is to equalize opportunity, enabling the backward or underprivileged classes and individuals to use education as a lever for the improvement of their condition. Every society that values social justice and is anxious to improve a lot of the common man and cultivate all available talent must ensure progressive equality of opportunity to all sections of the population.

Keyword

Professional development is learning to earn or maintain professional credentials such as academic degrees to formal coursework, conferences and informal learning opportunities situated in practice.

Differential standard of Educational Institutions

Children from poor families receive education in substandard institutions which are not properly equipped with teachers, teaching aids and apparatus. Usually urban schools and colleges are of better standard than rural schools and colleges. Differences in the standard of educational institutions ultimately cause inequality in the standard of students.

Positive Discrimination

In order to ensure equalization of educational opportunities certain measures to be taken with immediate effect. These measures may be based on the needs and status of disadvantaged groups, disabled children, and girls.

- *Primary Education:* Primary education should seek to satisfy the basic needs of all people. There should not be any differentiation of curricula at this stage. Equality of educational opportunities at the primary stage requires provision of free and compulsory education for all children without any discrimination.
- *Secondary Education:* Individual differences among boys and girls are more prominent at the secondary stage diversified curricula should be introduced to cater to the needs, interests and capabilities of students.
- *Higher Professional Education:* At the stage of higher education and professional education emphasis should be placed on individual capacity or merit and maintenance of quality and standard.



- *Compensatory Education:* Disadvantaged children have an unstimulating environment. They attend primary schools without prerequisite learning which are necessary for successful completion of primary education.

Equalization of educational opportunity necessitates adoption of a common school system-both at the primary and secondary stages.

It will be a system-

1. Which will be open to all children without any discrimination?
2. Where admission will be based on talent.
3. Which will maintain adequate facilities and reasonably good standards?
4. Where no tuition fee will be charged.
5. Which will meet the needs and aspirations of the middle and lower classes.

Nationalization of education system is an important step to equalize educational opportunities. There should be only one agency in the country to spread and control education. No private agency should be allowed to function in the field of education. Uniform educational facilities can only be provided in a national system of education.

5.3.3 Equalization of Educational opportunity

The equalization of educational opportunities is essentially linked with the equality notions in the social system. The social system which intends to provide equal opportunities for the advancement of all has to make provisions for equal educational opportunities also. In modern industrial society education has become the main agency for socializing new born into law abiding citizens and productive members of the society. Formal education has become almost indispensable because to participate in economic production one needs to learn specialized skills which cannot be acquired through family or any other agency. Due to the indispensability of formal education in advanced industrial societies education is provided by the state as a matter of right for all its citizens. Formal institutions schools, colleges and universities are organized for this purpose.

In most societies today legislations exist guaranteeing equality of the right of education. In fact to realize this ideal of equality of educational opportunities special efforts are made by the welfare states in industrial societies to provide compulsory education to the socially deprived. Special policy measures have been developed to spread modern scientific secular education to rural areas and policy of protective discriminating has been adopted to encourage the traditionally deprived section like SC and ST to take to modern education. However in spite of the creation of a legal framework in most societies to ensure quality of educational opportunity such an ideal continues to be elusive in reality even in the industrially advanced societies.

Bourdon relates the costs and benefits of course selection to family and peer group solidarity. His work has important implications for practical solutions to the problem of inequality of education opportunity. Even if positive discrimination worked and schools were able to compensate for the primary effects of stratification considerable inequality of educational opportunity would remain.

Bourdon argues that there are two ways of removing the secondary effects of stratification. The first involves the educational system. If it provides a single compulsory curriculum for all students the element of choice in the selection of course and duration of stay in the system would be removed. The individual would no longer be influenced by his courses and remain in full time education for the same period of time. He said that more the branching points there are in the educational system point at which the student can leave or choose between alternative courses the more likely working class students are to leave or choose lower level courses. The gradual raising of the school leaving age in all advanced industrial societies has reduced inequality of educational opportunity but the present trend indicates that this reduction will at best proceed at a much slower rate.

Bourdon's second solution to the problem of inequality of educational opportunity is the abolition of social stratification. He feels that this is the direction of economic equality as the most effective way of reducing inequality or educational opportunity. As a result he argues that the key to equality of opportunity lies outside rather than inside the schools. Bourdon concludes: for inequality or educational opportunity to be eliminated, either a society must be unratified or its school system must be completely undifferentiated.

Problems concerning equality of opportunities in education

Education helps in establishing equality and ensuring social justice but the system of education itself can add to the existing inequalities or at least perpetuate the same. Inequalities of educational opportunities arise due to -

- Poverty as the poor cannot afford to meet the expenses of education. Children studying in the rural schools have to compete with the children in urban areas where there are well-equipped schools.
- In the places where no primary, secondary or collegiate educational institutions exist children do not get the same opportunity as those who have all these in their neighborhood.
- Wide inequalities also arise from differences in home environments. A child from a rural household or slum does not have the same opportunity as a child from an upper class home with educated parents.



5.3.4 The Compensatory Education Program

The development of compensatory education programs has traditionally been informed by the belief that disadvantaged students can benefit most from a less challenging curriculum and limited achievement goals. Evaluations effectiveness" reinforce the curriculum deficiency by measuring only the improvement in scores on reading and arithmetic tests, and by failing to deal with the overall achievement of students.

Often there is a lack of clarity about the purpose of **compensatory education** services, with divergent perceptions found among the support staff, the core classroom teachers, and administrators.

Keyword

Compensatory education is offers supplementary programs or services designed to help children at risk of cognitive impairment and low educational achievement succeed.

Most studies indicate that there are few efforts to coordinate various special or supplementary programs with core or regular programs, few procedures for cooperative/joint planning among the various program teachers at the school, and even fewer district- or building-level policies to foster cooperative planning among the various suppliers of programs or services. Thus, students often end up with less instructional time than other students.

For instance, regular classroom teachers often report that the reading resource teachers rarely offer instructional information, suggestions, or materials. Support program teachers are often unable to identify the reading instruction material their remedial students use in the regular classroom.

Regular classroom and reading resource teachers are often confused about who is responsible for which aspects of instructional planning and delivery.

Reading is often taught as an "unrelated skill"--i.e., reading of reading texts--not as a skill needed for other learning and study areas. What is needed is congruence between curricula what is to be taught, in what order, and using which materials, and between the methods of instruction. Conflicts arise when the reading strategies taught and learned in one setting are radically different from those in the second setting, such as emphasis on decoding versus a focus on comprehension.



5.4 EFFECTS OF EDUCATION ON CULTURAL DEVELOPMENT

In the words of Golda Meyer; the purpose of education is to civilize the thousands of barbarians that are born in to this world every hour¹¹. If education fails to bring change in the learner, then it is worthless. Education is considered the most powerful tool in bringing change in man. On one hand, education acculturates an individual; on the other hand, it preserves, transmits and develops the culture of a society. In short, education and culture are mutually interdependent, complementary and supplementary in all their aspects and activities. Thus the relation between education and culture is inseparable.

Culture plays a vital role in man's life. Education of various elements of culture can help man in the adaptation to the natural and social environment, development of individual's personality, socialization of the individual, proper use of leisure, and understanding other cultures and proper meaning of liberality. Education in culture is imparted mainly by the family, society and the school. Considering the importance of culture in man's life and the role played by education in the socialization and acculturation of an individual, it is worthwhile to analyze the changes that have taken shape in our culture. Before embarking on the discussion on the impact of education on culture, let us briefly understand the concept of culture itself. Culture is the key that opens the door to an analysis of human societies and human behavior. For example, take the case of shedding of tears: Why it is different on different occasions in different societies. Why men become saints in some societies for actions that would land them in jail in others. This can be explained better with the prevailing culture of that society. All societies have their culture and they are unique. What we do is greatly conditioned by our culture – eating and drinking, loving and hating, playing and working; so is thinking. All societies seem to have ideas that are peculiar to their culture and that cannot be precisely translated into the language of another society. The problem is that while translating, one has to sacrifice either the flavor of the original or its meaning.

It is the integrated social, biological, and ethnic, modes of behavior of a group or a society. It is implied that even the possession of ideas, attitude, values, etc. from culture.

Remember

The purpose of culture is to give the society by conscious process of learning and experience, patterns of behavior which are found useful for harmonious existence and smooth functioning in all occupations and interactions and thereby individual and group survival and perpetuation.



Invisible Culture

Visible and invisible culture is otherwise called explicit / implicit or overt /covert culture. Much of culture is not only held outside conscious awareness but is also learned and taught outside awareness, hence, neither the cultural insiders nor the newcomers are aware that certain aspects of their culture exist. In multicultural education and in discussions of cultural diversity more generally, the focus has been on visible, explicit aspects of culture, such as language, dress, food habits, religion, and aesthetic conventions. While important, these visible aspects of culture, which are taught deliberately or learned consciously, are only the tip of the iceberg of culture.

Implicit and invisible aspects of culture are also important. How long in clock time one can be late before being impolite, how one conceives or experiences emotional or physical pain, how one displays such pain behaviorally, what topics should be avoided at the beginning of a conversation, how one shows interest or attention through listening behavior, how loud is too loud or not loud enough in speaking, how one shows that one would like the speaker to move on to the next point these are all aspects of culture that we learn and use without realizing it. When we meet other people whose invisible cultural assumptions and patterns of action differ from those we have learned and expect implicitly, we usually do not recognize what they are doing as cultural in origin. Rather we see them as rude or un-co-operative. We may apply clinical labels to the other people-passive-aggressive or suffering from low esteem.

Differences in invisible culture can be troublesome in circumstances of intergroup conflict. The difficulty lies in our inability to recognize others differences in ways of acting as cultural rather than personal. Often we blame those attributing intentions, judging competence- without realizing that we are experiencing culture rather than nature.

Education and Cultural Lag

Due to rapid progress of scientific inventions and technological advancement, material aspect of culture has gone ahead and its area has been greatly widened. The modern society is gradually adopting more and more of these techniques and scientific achievements in their day to day styles of living, while the non-material aspect of culture has been left far behind. The vast difference between the material and non-material culture is known as social and cultural lag. As the pace of material culture cannot be slackened, the need is to speed up the changes in the non-material cultural patterns of thinking and living. Both should proceed together in a corresponding pace as the two wheels of a chariot. Education is the only means to bridge this cultural lag. Education can do eliminate this cultural lag and inspire the general people to march on the road of progress and modernization as they best can.

Cultural Growth and Development

The growth and development of culture of a society is dependent on different factors which govern perception and learning and the development of behavior. Different functions and institutions in societies are need based. In the course of time they give rise to cultural patterns. In other words, the needs determine many acts and functions which are passed on from generations to generations. Culture is, therefore, integrated with socioeconomic conditions and also the biological needs. It is not inherited or transmitted biologically. Culture is constantly undergoing change. Culture is therefore, a dynamic ongoing process. Culture binds the individuals in society together. When new things happen in a society, there is growth and development of culture. Culture is thus the progressive growth into humanization and liberalization of the human spirit.

5.4.1 Education and Culture

Education and culture are intimately and integrally connected. The cultural pattern of a society conditions its educational pattern. A society devoid of any culture will have no definite educational organization. Hence the culture of a country has a very powerful impact on its educational pattern.

The ultimate relationship between culture and education is evident from the fact that one of the major aims education is to impact to the child his cultural heritage. In any human group, the various elements and parts of culture evolve after thousands of years of the experience, and these are handed down as a whole to the succeeding generations. Hence every individual is born into a particular culture which provide him definite patterns of behavior and values which guide his conduct in different walks of life. He has thereby saved the necessity of making fresh experiments every time. Obviously, then, culture plays an important part in man's life in the adaptation to the natural environment, in the adaptation to the social environment, in the development of personality and socialization.

Every society has a culture or a method of operating which is unique to it. To live harmoniously in a given culture, its members must be aware of the various modes of conduct which are acceptable to that culture. It is through the process of education that children and new members are apprised of these facts. Also, in order to survive, the individual must become acquainted with the nature of these things in his environment with which he may have to cope. In very general terms then, it may be said that universally, the purpose of education is to inform the individual about the nature of his culture and the acceptable methods of coping with that culture. The implication, clearly, is that education should teach the students of a particular country how to look at the world and doing things according to the way of doing things of his own country.





If a society has a spiritual pattern of culture, then its educational procedures will emphasize the achievement of moral and eternal values of life. On the other hand, if the cultural pattern of a society is materialistic, then naturally its educational pattern will be shaped for the attainment of material values which promote pleasures of senses and material comforts.

5.4.2 Impact of Culture on Education

As mentioned above, culture and education have a give and take relationship. Both compliments and supplements each other in various aspects.

The following are some of the influences of culture on education:

- The aims and ideals of education are mostly determined by the values and patterns of society.
- Curriculum is conditioned according to the culture of society. It is framed according to the ideals and needs of the society to realize the cultural values.
- Methods of teaching and culture are intimately connected. The changing cultural patterns of a society exert powerful influence upon the methods of teaching also. The shift from the old teacher centered teaching to child centered education is an example.
- Socialized methods like project method, seminar, symposium, discussion, etc. are widely used in the teaching learning process because of the influence of culture.
- Discipline is also influenced by the cultural values. The present cultural patterns of thinking and living are directly linked to our concept of discipline. The concept of repressive discipline of ancient and Middle Ages has been replaced by the modern values of life.
- Text books which are written according to the formulated curriculum and promote and foster cultural ideals and values are welcomed.



- Teacher who has imbibed the cultural ideals and values of the society only can achieve his mission successfully. Only such teacher is able to infuse higher ideals and moral values in children.
- School is a miniature of society. The total activities and programs of the school are organized according to the cultural ideals and values of society. Hence school is the center of promoting, molding, reforming and developing the cultural patterns of the society.

Influence of Education on Culture

Wherever there are human groups there is culture, i. e. a man-made part of environment and learned patterns of behavior. Wherever there is culture, it is diffused and transmitted to succeeding generations by education. Since human beings live in groups, we might say that wherever there are human beings there is culture and education in various forms. School education is limited mainly to literate cultures. The role of education is much smaller in non-literate groups.

Just as culture influences education, much is the same way education also exerts a powerful influence upon the culture of a country.

Following are the various ways by which education influences the culture of country:

- *Preservation of culture:* Each country believes and flaunts the superiority of its own culture over the rest. Hence it tries to preserve its culture in its original form. Education is the only means to complete this task. Thus education preserves the culture of the society.
- *Transmission of culture:* the process of preservation includes the process of transmission as well. Transmission of culture from one generation to another is the best guarantee of its preservation. In the words of Ottaway, the famous sociologist. The function of education is to transmit the social values and ideals to the young and capable members of the society.
- *Development of culture:* The function of education is to bring about the needed and desirable changes in the cultural ideals and values for the progress and continued development of society, without which social progress will stratify and come to a naught. Education cultures individuals, modifies cultural processes by research and deeper investigations into all areas of human requirements.
- *Continuity of culture:* Culture is the life blood of society. Without culture a society is bound to decay and die sooner or later. Education upholds the continuity of culture through its diverse activities and programs. A society establishes schools to preserve and transmit its culture from generation to generation. It is found that some schools try to develop undesirable cultural chauvinism and superiority complexes among its children. Children should be motivated



to learn more and more from cultural interaction among various cultures. Ideally education should help them to develop the qualities of tolerance and adjustment along with mutual give and take attitude. This cultural integration and cultural synthesis is the dire need of the world society in modern times. It is the intangibles that give a nation its character and vitality.

- *Development of personality:* Education employs diverse cultural patterns of thinking, behavior and items of cultural values so that children are physically, mentally, socially and emotionally developed to the maximum extent. Thus education aims at developing the personality of the child.
- *Removing cultural lag:* Material culture develops at a fast pace due to scientific researches and innovations, whereas non-material culture consisting of ideals, values and norms lags behind creating a gulf between the two. Education is the only means to bridge this cultural lag by its activities and programs of development.
- *Attaining unity:* For the unity of mankind, there should be diffusion of culture of various groups in the world. The cultural isolation should go, and there should be no iron curtain between one culture and another. The characteristic mark of an educated man should be a positive attitude towards the goals of culture, that is, towards the ultimate objective values. The attitude should be the cherished product of educational and institutional activity.
- *Correction of cultural ills:* Education is corrective for the cultural ills. By explaining the dimensions of culture, education corrects egoism and false individuation. Educational enlightenment does not imply only aesthetic appreciation of art and beauty, it also means having kind and generous heart and soul. Culture liberates the mind. Literacy and moral education and education in arts constitutes real techniques for realization of the cultural values.
- *Education and racial prejudices and antagonism:* Education reduces racial prejudices and antagonism, which result from ideas about other cultures. Imbibing of one's own culture, taking pride in it and preserving the same is a patriotic act. But resisting any change in it shutting doors to the entry of other cultural patterns and maintaining a strong iron curtain to preserve one's culture shows jingoism. It is not conducive to the cultural growth. Cultural diffusion is good for the individual cultural group, and for the humanity as a whole.
- *Human culture as a whole:* Too much of emphasis on one's own culture will lead to disunity and lack of international understanding which is one of the tasks of education. This is possible by bringing about diffusion of various cultures. Education should treat human culture as whole, —like a flower with different petals, and each petal representing one cultural group. Education should strive for unity in diversity and not over-emphasize diversity.
- *Function of school:* A school is the simplified environment to explain the present



culture of the society and the school education makes the child imbibe the same and even makes its own contribution. The school (in its broader meaning) determines the quality of culture with a view to play the role of cultural construction-agent. Education, being the absorber and reflector of culture, is the best medium for the initiation of the rising generation into the cultural norms and process of the society. Due to the concerted efforts of the government and other agencies in the area of education people have come to realize the importance of education. More and more people are taking interest in education. Parents want to send their children to schools. Of late there is an enhanced demand for English education.

More and more English medium schools International Schools, ICSE, CBSE, and State Board Schools are opened and they all get enough and more students. This is a clear indication of the trend in motion. This is the result of renewed demand for quality education. This has been accelerated by the impact of Globalization also. Coeducation, now a days, receive better acceptance by the society. The intensity of resistance against sex education in schools now faces less opposition. All these can be considered as the positive results of education.



CASE STUDY

THEORETICAL PERSPECTIVES OF PHILOSOPHY OF EDUCATION

The sociology of education is the study of how social institutions and individual experiences affects education and its outcome. Education is It is concerned with all forms of education ie formal and informal education systems of modern industrial societies. It is relatively a new branch and two great sociologist Émile Durkheim and Max Weber were the father of sociology of education. Émile Durkheim's work on moral education as a basis for social solidarity is considered the beginning of sociology of education.

After the second world war it gained entity as separate subject of knowledge. Technological advancement and engagement of human capital(work force) in industrialization America and Europe gave rise to the social mobility .Now it is easier to move up to the upper strata of society gaining technical skills, knowledge. People who were farmer earlier became worker in factories. In that period social mobility was at top gear. And sociologist began to think that education promotes social mobility and undermines the class stratification.

The sociology of education contains a number of theories. Some of the main theories are presented below.

Political Arithmetic

The Political Arithmetic tradition within the sociology of education began with Hogben and denotes a tradition of politically critical quantitative research dealing with social inequalities, especially those generated by social stratification (Heath 2000). Important works in this tradition have been (Glass 1954). All of these works were concerned with the way in which school structures were implicated in social class inequalities in Britain. More recent work in this tradition has broadened its focus to include gender, ethnic differentials and international differences. While researchers in this tradition have engaged with sociological theories such as Rational Choice Theory and Cultural Reproduction Theory, the political arithmetic tradition has tended to remain rather sceptical of 'grand theory' and very much concerned with empirical evidence and social policy. The political arithmetic tradition was attacked by the 'New Sociology of Education' of the 1970s which rejected quantitative research methods. This heralded a period of methodological division within the sociology of education. However, the political arithmetic tradition, while rooted in quantitative methods, has increasingly engaged with mixed methods approaches.

Socialization

Social health means the same as social order, and is guaranteed when nearly everyone accepts the general moral values of their society. Hence structural functionalists believe the aim of key institutions, such as education, is to socialize children and teenagers. Socialization is the process by which the new generation learns the knowledge, attitudes and values that they will need as productive citizens. Although this aim is stated in the formal curriculum, it is mainly achieved through the hidden curriculum, a subtler, but nonetheless powerful, indoctrination of the norms and values of the wider society. Students learn these values because their behavior at school is regulated until they gradually internalize and accept them.

Filling roles in society

Education must also perform another function: As various jobs become vacant, they must be filled with the appropriate people. Therefore, the other purpose of education is to sort and rank individuals for placement in the labor market. Those with high achievement will be trained for the most important jobs and in reward, be given the highest incomes. Those who achieve the least, will be given the least demanding (intellectually at any rate, if not physically) jobs, and hence the least income.

According to Sennet and Cobb however, “to believe that ability alone decides who is rewarded is to be deceived”. Meghan agrees, stating that large numbers of capable students from working-class backgrounds fail to achieve satisfactory standards in school and therefore fail to obtain the status they deserve. Jacob believes this is because the middle class cultural experiences that are provided at school may be contrary to the experiences working-class children receive at home. In other words, working class children are not adequately prepared to cope at school. They are therefore “cooled out” from school with the least qualifications, hence they get the least desirable jobs, and so remain working class. Sargent confirms this cycle, arguing that schooling supports continuity, which in turn supports social order. Talcott Parsons believed that this process, whereby some students were identified and labelled educational failures, “was a necessary activity which one part of the social system, education, performed for the whole”. Yet the structural functionalist perspective maintains that this social order, this continuity, is what most people desire.

Education and social reproduction

The perspective of conflict theory, contrary to the structural functionalist perspective, believes that society is full of vying social groups with different aspirations, different access to life chances and gain different social rewards. Relations in society, in this view, are mainly based on exploitation, oppression, domination and subordination. Many teachers assume that students will have particular middle class experiences at home,



and for some children this assumption isn't necessarily true. Some children are expected to help their parents after school and carry considerable domestic responsibilities in their often single-parent home. The demands of this domestic labor often make it difficult for them to find time to do all their homework and thus affects their academic performance.

Where teachers have softened the formality of regular study and integrated student's preferred working methods into the curriculum, they noted that particular students displayed strengths they had not been aware of before. However few teachers deviate from the traditional curriculum, and the curriculum conveys what constitutes knowledge as determined by the state - and those in power. This knowledge isn't very meaningful to many of the students, who see it as pointless. Wilson & Wyn state that the students realize there is little or no direct link between the subjects they are doing and their perceived future in the labor market. Anti-school values displayed by these children are often derived from their consciousness of their real interests. Sargent believes that for working-class students, striving to succeed and absorbing the school's middle class values, is accepting their inferior social position as much as if they were determined to fail. Fitzgerald states that "irrespective of their academic ability or desire to learn, students from poor families have relatively little chance of securing success". On the other hand, for middle and especially upper-class children, maintaining their superior position in society requires little effort. The federal government subsidizes 'independent' private schools enabling the rich to obtain 'good education' by paying for it. With this 'good education', rich children perform better, achieve higher and obtain greater rewards. In this way, the continuation of privilege and wealth for the elite is made possible in continuum.

Conflict theorists believe this social reproduction continues to occur because the whole education system is overlain with ideology provided by the dominant group. In effect, they perpetuate the myth that education is available to all to provide a means of achieving wealth and status. Anyone who fails to achieve this goal, according to the myth, has only themselves to blame.[3] Wright agrees, stating that "the effect of the myth is to...stop them from seeing that their personal troubles are part of major social issues". The duplicity is so successful that many parents endure appalling jobs for many years, believing that this sacrifice will enable their children to have opportunities in life that they did not have themselves. These people who are poor and disadvantaged are victims of a societal confidence trick. They have been encouraged to believe that a major goal of schooling is to strengthen equality while, in reality, schools reflect society's intention to maintain the previous unequal distribution of status and power.

This perspective has been criticized as deterministic and pessimistic, while there is some evidence for social mobility among disadvantaged students.

It should be recognized however that it is a model, an aspect of reality which is an important part of the picture.

SUMMARY

- The sociology of education is the study of how public institutions and individual experiences affect education and its outcomes.
- It is most concerned with the public schooling systems of modern industrial societies, including the expansion of higher, further, adult, and continuing education.
- Social Foundations inquiry helps to sharpen students' capacities to understand, analyze, and explain educational issues, policies, and practices in order to improve education.
- Social Foundations encourages educators to use "critical judgment to question educational assumptions and arrangements and to identify contradictions and inconsistencies among social and educational values, policies, and practices".
- As most schools track their students starting in grade school, the students thought by their teachers to be bright are placed in the faster tracks (especially in reading and arithmetic), while the slower students are placed in the slower tracks; in high school, three common tracks are the college track, vocational track, and general track.
- A final critique is historical and concerns the rise of free, compulsory education during the nineteenth century. Because compulsory schooling began in part to prevent immigrants' values from corrupting "American" values, conflict theorists see its origins as smacking of *ethnocentrism* (the belief that one's own group is superior to another group).
- Educational Sociology threw light on the importance of the interactions of different elements of the society with an individual.
- Structural functionalism, or simply functionalism, is a framework for building theory that sees society as a complex system whose parts work together to promote solidarity and stability.
- In Sociology and Anthropology, social stratification is the hierarchical arrangement of individuals into social classes, castes and divisions within a society.
- The equalization of educational opportunities is essentially linked with the equality notions in the social system.
- The development of compensatory education programs has traditionally been informed by the belief that disadvantaged students can benefit most from a less challenging curriculum and limited achievement goals.
- A society devoid of any culture will have no definite educational organization. Hence the culture of a country has a very powerful impact on its educational pattern.



MULTIPLE CHOICE QUESTIONS

1. The “Apology” the Plato’s recollection of the speech given by Socrates when Socrates was charged with
 - a. Believing in the rotation of the Earth
 - b. Not believing in the rotation of the Earth
 - c. Believing in gods
 - d. Not believing in gods
2. According to Socrates, physical objects and events are of their ideal form.
 - a. Shadows
 - b. Images
 - c. Parts
 - d. Signs
3. According to the theory of forms (or theory of ideas) material world is a/an of the real world.
 - a. Shadow
 - b. Image
 - c. Part
 - d. Sign
4. The first institution of higher learning in the Western world, “Academy”, was founded by
 - a. Socrates
 - b. Plato
 - c. Aristotle
 - d. John Dewey
5. The “Academy” was founded in
 - a. Athens
 - b. Stagira
 - c. Macedonia
 - d. Chakis



REVIEW QUESTIONS

1. Discuss about sociology of education.
2. Focus on education and inequality.
3. Explain the meaning and scope of sociology of education.
4. What are the functions of education in society?
5. Discuss on various criticism of functionalism in education.
6. Define the equalization of educational opportunity.
7. What are the impacts of culture on education?

Answer to Multiple Choice Questions

1. (d) 2. (a) 3. (b) 4. (b) 5. (a)

REFERENCES

1. Ansalone, G. (2006). Tracking: A return to Jim Crow. *Race, Gender & Class*, 13, 1–2.
2. Ballantine, J. H., & Hammack, F. M. (2009). *The sociology of education: A systematic analysis* (6th ed.). Upper Saddle River, NJ: Prentice Hall.
3. Battey, D., Kafai, Y., Nixon, A. S., & Kao, L. L. (2007). Professional development for teachers on gender equity in the sciences: Initiating the conversation. *Teachers College Record*, 109(1), 221–243.
4. Booher-Jennings, J. (2008). Learning to label: Socialisation, gender, and the hidden curriculum of high-stakes testing. *British Journal of Sociology of Education*, 29, 149–160.
5. Grodsky, E., Warren, J. R., & Felts, E. (2008). Testing and social stratification in American education. *Annual Review of Sociology*, 34(1), 385–404.
6. Hill, D., Macrine, S., & Gabbard, D. (Eds.). (2010). *Capitalist education: Globalisation and the politics of inequality*. New York, NY: Routledge; Liston, D. P. (1990). *Capitalist schools: Explanation and ethics in radical studies of schooling*. New York, NY: Routledge.
7. Jones, S. M., & Dindia, K. (2004). A meta-analytic perspective on sex equity in the classroom. *Review of Educational Research*, 74, 443–471.
8. Oakes, J. (2005). *Keeping track: How schools structure inequality* (2nd ed.). New Haven, CT: Yale University Press.
9. Schildkraut, D. J. (2005). *Press “one” for English: Language policy, public opinion, and American identity*. Princeton, NJ: Princeton University Press.
10. Schneider, L., & Silverman, A. (2010). *Global sociology: Introducing five contemporary societies* (5th ed.). New York, NY: McGraw-Hill.



CHAPTER 6

THE INFLUENCE OF SOCIAL FACTORS, GENDER AND ETHNICITY ON ACHIEVEMENT

LEARNING OBJECTIVES

After studying this chapter, you will be able to:

1. Explain the state of educational achievement
2. Define the gender and achievement
3. Discuss the ethnicity and achievement

"His lack of education is more than compensated for by his keenly developed moral bankruptcy."

– Woody Allen

INTRODUCTION

The growth of concern with social factors and their relationship to educational achievement can be seen to correspond to the rise of policies of access and equality in Western nation states. Perhaps the most significant and enduring achievement of recent studies in relation to social factors in education has been to put questions of class, culture, gender and ethnicity at the center of descriptions of educational processes and systems. This chapter explores the relationship between Social Factors and Achievement in education. We have seen that factors

such as intelligence and motivation are important in the success of individuals, but wider social influences are also highly significant. Research findings relating to class, ethnicity and gender are examined. The issue of equality of opportunity, which is so often taken for granted, is challenged. The assumption that schooling is one of the main determinants of a pupil's success is questioned in relation to the influence of wider social factors.

6.1 THE STATE OF EDUCATIONAL ACHIEVEMENT

According to official statistics from the Department for Education and Skills (DfES) overall educational achievement has increased steadily during the last two decades. End of key stage assessment has shown an increase in pupil attainment in the core subjects of English, mathematics and science. At every level of academic attainment more people hold qualifications and fewer people hold no qualifications. Over 76 percent of young people between the ages of 16 and 18 are involved in full-time education or training.

Educational achievement in higher education has also increased in the past decade with the number of English domiciled students in higher education rising by 25,000 between 1999/2000 and 2004/5.

It might seem that the benefits of educational qualifications and access to higher education have been made available to the population as a whole. There is some truth in this, although what the figures mean in terms of patterns of inequality in society in general needs to be closely examined.

More education for all does not necessarily mean more equal education. There are issues to confront about the distribution of education resources and benefits throughout the population. Inequalities in provision and achievement exist between individuals for a host of complex reasons but also, significantly, between social groups and 'population categories'.

Pupils at different types of school achieve different levels of success in public examinations. Selective schools, whether in the private sector or the maintained sector, have much higher percentages of their pupils achieving top grades than comprehensive (non-selective) schools.

In addition, there are large, and fairly abiding, patterns of inequality associated with specific social groups. Social class, gender and ethnic group have been and remain key factors of inequality in education. The interaction between these three factors produces an even more powerful set of inequalities for many children. 'All pupils have a gender, class and ethnic identity - the factors do not operate in isolation'.

6.1.1 Social Class and Achievement

Social Class and Economic Background

Although social class is felt to be an important factor in educational achievement and has been on the 'agenda' of education studies for some time, it is not a category that is widely used in official statistics of education. Terms such as 'socio-economic status' and 'social advantage and disadvantage' are often used rather than class. Nevertheless, surveys which included class as a significant category have indicated that, by just about every criterion of achievement, middle-class pupils in maintained schools do better than working-class children. This imbalance was documented through a series of reports in the 1950s and 1960s when the question of class became a significant issue in **education policy**. These raised the issue of what kind of schooling was appropriate for a post-war democracy that created opportunities for all.

There has long been a relationship between wealth and education. In Victorian England the rich paid for the appropriate education of their sons as leaders and gentlemen at the expensive public schools. The poor and working class received little education at these times and what was given was largely provided by religious and capitalist benefactors in order to produce God-fearing, obedient and productive workers. Economic change led to the expansion of state education and greater social expectations of the people. This led to the liberal humanist view that Britain had become a meritocracy, in other words, that achievement in society was based upon effort and ability rather than position and power. From the liberal perspective education, whilst teaching us to live together, also offers the opportunity for individuals to develop in line with their ability and interests.

Studies of the earlier twentieth century pointed to the link between poverty and educational achievement. It became clear that other social and cultural factors were linked to these economic conditions and these helped to explain why pupils from middle-class families continued to do better at school.

Although we may be tempted to assume that social change in the direction of equality has been significant, figures for Great Britain indicate that the link between social class, defined by parental occupation, and educational attainment remains strong.

Keyword

Education policy consists of the principles and government policies in the educational sphere as well as the collection of laws and rules that govern the operation of education systems.



The DfES figures show that 16 year olds with parents in higher professional occupations were far more likely to remain in full-time education compared with those with parents in routine occupations. Similarly, participation in further or higher education is strongly influenced by people's social and economic background. The HE sector expanded significantly in the early 1990s so more places became available. The 'widening participation' agenda of the Labor government was intended to defray class inequalities in access to HE but lack of knowledge about what was available or possible led to disproportionate benefits for the middle classes. Even though educational provision has expanded there remains a strong correlation between the type of education received, success in school, progression to university and parental occupation. Children of the upper and middle classes continue to do better in the education system. Whitty suggests that class differentials will only be overcome if policies that address wider economic inequalities are addressed in addition to changes to the education system. Ball and Tomlinson show how middle-class parents have been able to use their understanding of education systems and their social skills, since the end of the Second World War up to the present, to ensure that their children go to the 'best' schools and thus benefit from educational advantage.

Social Theories of Achievement

Social Reproduction

Some theorists coming from a Marxist or social conflict perspective, such as Bourdieu and Passeron (1977) and Bowles and Gintis (1976), portrayed the education system as being one of several mechanisms of social reproduction. By this they meant the way in which those groups in the more privileged and powerful social positions maintain their place from generation to generation. Thus the social inequalities in society are constantly being reproduced over time. Social reproduction theorists considered the education system played a very important part in this process.

The education received corresponds to the future working environments that these pupils can expect and as such prepares young people to take their 'appropriate' place in society. The children of the wealthy go to private schools where they 'learn' how to be successful. Schools in poor areas with predominantly working-class intakes are more likely to suffer from teacher shortages or to be housed in poorer buildings. They tend to be low attaining schools in terms of pupil achievements and most likely to be failing or put at risk by Ofsted in the current English education system. In state schools where there is more of a social mix the middle-class pupils tend to be concentrated in the higher academic groups whilst the working-class find themselves more likely to be placed in the lower teaching sets. This reflects the future positions of pupils in society, which they come to see as 'normal' and expected as they replicate their positions within school.

How do pupils get separated onto different tracks like this? Officially they are grouped according to ability in order that they may be taught and learn more effectively. This grouping can begin at a very early stage in their school life with primary schools in England, for instance, being encouraged to teach pupils in ability groups at least in their literacy and numeracy lessons. However, Bowles and Gintis suggested that actually there is often very little measurable difference between pupils initially and that they are grouped on the basis of very little evidence. In fact grouping can result as much from teacher perceptions as actual academic difference. The pupils who teachers perceive as more able or likely to do well in the future are those that display middle-class characteristics. As time goes on the difference between groups of pupils may be seen to widen and this is due to the increasing effects of being taught differently, experiencing differential teacher expectations and being offered different opportunities through the curriculum.

Cultural Capital

Bourdieu and Passeron suggested that one main way in which education ensured the reproduction of society was by the passing on of cultural values from one generation to the next. Dominant culture is a set of properties, characteristics, behaviors, orientations that dominant class groups already have and that subordinate class groups must strive to acquire if they want to compete for educational success. As it is the dominant middle-class values that schools endorse it is the continued superior position of this group that is ensured. Middleclass children are already attuned to the codes and meanings of schooling, whereas for working-class children these are likely to be opaque.

Pupils who are used to these middle-class codes and 'live' them are able to take most advantage of the education system. Thus middle-class pupils are used, through their socializing experience as children in middle-class society, to conversing with adults in an appropriate manner. Middle-class children better understand how to speak, how to behave with books, how to sit at story-telling time and how to conduct themselves as good pupils in general. They have developed a wide, rich vocabulary, a social awareness and appropriate knowledge to a far greater degree than working-class pupils who have not had the same opportunities. Middleclass children are taught the importance of success at school for their future opportunities and have learned to practise deferred gratification at home that is so important in creating this success. The whole process of schooling, as well as the institutional habits and demands, are likely to be much less amenable to working-class children's culture than to middle-class children's culture.

Social inequalities are not simply based on wealth. Bourdieu introduces the idea of cultural capital - the accumulation of cultural attributes that can be reinvested into education with a positive return for their holder. Bourdieu said that these cultural attributes possessed by middle-class children help them to progress at school and give



Keyword

Cultural values are the core principles and ideals upon which an entire community exists. This is made up of several parts: customs, which are traditions and rituals; values, which are beliefs; and culture, which is all of a group's guiding values.

them an advantage over their working-class peers. Their **cultural values** are in effect an economic advantage to be realized in the future. Thus they can be seen as a form of capital in the sense that an economist would use the term. They are cultural capital and of value to be invested in the same way as money is wealth to be invested for the future. As pupils progress through the various stages of schooling this cultural capital accumulates further and is ultimately high value currency to trade for a well-paid, high status role in society.

Language

As language is such an important part of our means of communication the ability to use and understand language will be a significant factor in success in education. How we learn to read different genres and the range of vocabulary we develop will depend upon our exposure to different stimuli. This is particularly important in the early childhood years. The range of linguistic experience amongst children differs greatly, influenced largely by social background. Bernstein suggested that it was as though there are two different language codes in operation. The restricted code consists of short sentences with relatively simple words. This code gives basic description and relies on a tacit understanding of the area of conversation by all involved who make assumptions that are not verbalized. It relies on other communication apart from just verbal such as hand gestures and facial expressions. This is the sort of language that is used in brief everyday exchanges by everyone.

The elaborate code is, as the name implies, a much more sophisticated form of speech. It involves richer use of language with complex sentence construction and much more detailed explanation. This code does not rely on taken for granted assumptions or other non-verbal communication in transmitting the message. It is more applicable to polite social settings and gatherings. It may be portrayed as a more formal use of language. Due to its richness and more complex nature it is also more appropriate to formal learning situations. It is a form of language more familiar to the middle-class child who will have heard it in conversations between adults and also will have practiced it with some of these adults as well as their own parents. Thus, whilst being the formal language of the middle-classes, it is



also the language used in school by teachers and textbooks. Pupils who are more used to hearing and using such language will not notice any difference in a school setting. Those pupils not used to such language and unable to use it feel less easy in the formal school learning situation, are unlikely to express themselves in the expected manner at school and are more likely to be perceived as less able generally by their teachers. Bernstein suggested that working-class children were not used to hearing or using the elaborate code in their daily lives and so were at a disadvantage when they entered the formal learning environment of the primary school.

Bernstein proposed that language differences lead to different levels of achievement between class groups. In Bernstein's work language is an essential component for a description of the way that social structure and stratification works through education. Experience is organized through language but language differences are related explicitly to social systems. According to this position, language does not simply reflect the world but actively organizes the world into categories of experience. Linguistic systems or dialects reflect different types of social experience, expressing the forms of life and dispositions particular to their social environments. Children therefore come to school from different linguistic environments that are not matched by forms of language used in schools. The acquisition of language and processes of socialization could be said to be one and the same process producing cultural orientations. In effect, language differences represent different 'symbolic orders' for different groups. In schooling, dominant forms of language may relate negatively or positively to the linguistic, symbolic legacies of sections of school populations.

The danger in the position expressed by Bernstein in relation to class, language and education was the attribution of essential qualities to the differences between working-class language and middle-class language, and the potential correlation of working-class culture with less expressive linguistic forms. The use of the distinction between working-class speech as 'restricted code' and middle-class speech as 'elaborated code' became infamous, as it seemed to imply a hierarchy of expressive power. This position was tackled positively in the work of Labov and in the development of sociolinguistics by Halliday, who refined Bernstein's thought with a more acute sense of the arbitrary nature of symbolic linguistic power. Both Labov and Halliday were keen to shift the argument away from the taint of deficit models of working-class language implied by Bernstein. While Halliday reminds us of the social dimension of educational failure, he also flags up the linguistic aspect of educational failure: 'Educational failure is really a social problem, not a linguistic one; but it has a linguistic aspect ... '. This focus on language indicates how cultural difference may be a crucial factor in achievement in education.

Labov's work was significant as a radical departure in debates about language and education, insisting that 'the logic of non-standard English', the grammar and the expressive power of non-standard forms was in all ways comparable with the

standard, dominant and educationally privileged forms. The effect was to deflate the myth of linguistic deprivation, while also indicating that the effect of the domination of standard English was to maintain existing inequalities of access.

In the USA, the question of language has consistently drawn much interest and analysis, especially in relation to the underachievement of large sections of the population, particularly African Americans who have consistently fared less well through state-funded education. Schools are constantly promoting ideas about language and linguistic norms. All pupils do not share these norms equally. Certain groups may actually have quite different linguistic norms as part of their upbringing or lived cultural heritage. This means that many children, black American children particularly, may experience the school as a linguistically and culturally alienating environment.

Rather than have their children and pupils suffer the kind of cultural negation that can come from being unrecognized by the official and unofficial language of the school, some activists adopted an alternative approach. They decided that the best way to ensure that the culture of the school was not alienating for the children from African-American background was to use the language of black Americans, called 'Ebonies'; as a medium of instruction. They took positive measures to celebrate the linguistic heritage of their charges and to teach the characteristics of Ebonies and draw comparisons with so-called standard English. Delpit (1995) and Smitherman (2000) have written about the need to make schools user-friendly, cultural, linguistic environments for African-American pupils and have demonstrated how Ebonies may be used to effect changes in the rates of success for African-American children in state schools. The Ebonies movement has been politically contentious, partly because it challenges the given order of things and partly because it has been misread as an attempt to offer a non-academic curriculum to African-American children.

The Ebonies issue has many implications when examining the use of language in education, particularly concerning the school as a linguistic environment.

- It indicates the extent to which language is a significant factor in educational success and failure.
- It raises questions about the nature and social role of standard English in education, particularly in relation to practices of assessment.
- It highlights the tension between the cultures of pupils in schools and the culture expressed in the dominant practices of the school and the curriculum.

Labelling

Symbolic interactionists see individual existence as always being bounded and impinged on by external forces. We are what we are by process rather than by fixed characteristics or identity. Identity is produced by the relation between your view of yourself and the

way others view and react to you. Identity is always being worked on. It is in a state of flux and it may well vary considerably according to context. In addition, the institutions we inhabit impose social roles upon us like that of pupil or teacher. David Hargreaves' seminal study, indicates how the school effectively (and not always at a conscious level) defines pupils as conformist or non-conformist, successful or not successful. This sets up a dynamic of social relations that produces broadly differentiated subcultural groups in the pupil population. So pupils who find themselves being negatively defined in relation to the dominant values of the school in terms of behaviors, attitudes and academic work may themselves accept this definition. They may also transform it into a positive form of identity so that an alternative form of high status can be achieved by rule-breaking and general non-conformism. In *Deviance in Classrooms*, factors such as appearance, attitudes to discipline, ability to work, 'likeability', relations with other pupils, personality and deviance rating were found to contribute to the way that teachers distinguish and define pupils.

Teachers 'size up' pupils using knowledge gained from their past experiences of teaching, i.e. whether a child is good, naughty, clever, low ability, a 'typical' boy or girl etc., and then react appropriately to a range of classroom situations. Teachers will tend to apply a range of stereotypical experiences that will help them interpret each situation in order to decide how to act. The use of labels and stereotypes is like using an adaptable template to overlay onto social settings to aid understanding and guide actions. Pupils also need to make sense of classroom life and to find themselves a place in this social setting. They become quickly aware of the teacher's position in the classroom and how this varies from teacher to teacher. They will also make initial decisions about classmates. The decisions made by the teachers and pupils about all of those others in the classroom are initially provisional and open to change and negotiation but over time become clearer and more agreed.

Early on in classroom life certain behaviors, however casual, become noted and a label is attached to the 'actor'. It may be to do with such things as (lack of) intellectual ability, temperament, lack of concentration, poor attitude to school, 'coolness'. The label becomes reinforced if the appropriate behavior is repeated, especially if other associated characteristics are also present, such as physical appearance of the pupil, how the pupil speaks to others, who the child's friends are, i.e. whether they are associated with a 'nice' or a rough crowd. The person being labelled is often not aware of a negative label that is being placed upon them until it has actually happened. Subsequent behavior serves to reinforce the label and the expectations of others. Thus we expect naughty boys to behave badly, watch out for any signs of misbehavior and punish it immediately. This may cause resentment and further difficult behavior from these boys as they feel they are being picked on and treated differently from others. This surly response from them will further serve to confirm our opinion of their difficult behavior and bad attitude. Any 'normal' behavior by the boys, even if it takes up the majority of their time in the classroom, is unlikely to be noticed. We only really 'pick



up' on behavior that confirms the label. Thus as labels become reinforced it becomes more difficult for the 'subject' to resist, escape, change, or amend them, though not impossible.

Labelling theory suggests that as types get imposed upon pupils this affects their sense of themselves and their identity. In the long run this will influence their performance and potential to achieve. Labels will mean that others treat them according to their label. Thus certain pupils are 'policed' around the classroom and the whole school more than others as they are instantly recognized by other teachers and pupils. It then becomes even harder for these 'leopards to change their spots' and they will tend to develop a self-image that matches the label.

Thus middle-class pupils who are being naughty are more likely to be seen as high-spirited than be labelled as disruptive pupils. They do not have the associated attributes of someone usually seen as disruptive or anti-school. It is more likely that other reasons for this behavior will be identified and the problem can be 'solved'. However, once a label, such as lacking in ability, disruptive and naughty, has been assigned to a pupil it is difficult to resist. In fact the more a pupil reacts against sanctions and authority the stronger the label of 'problem pupil' becomes.

Keyword

Special education is the practice of educating students in a way that provides accommodations that address their individual differences, disabilities, and special needs

How pupils are labelled can also influence the learning opportunities made available to them. Smith (2001) explains that the labelling of African-American boys in **special education** is influenced by a number of judgements. Access to knowledge by pupils depends on teachers' judgements about the ability of pupils to use it and about their readiness. Social class has been found to be strongly influential in how teachers make judgements about pupils' relative 'abilities'. So it is that 'appropriate' knowledge is directed towards 'appropriate' pupils. From these studies it is clear that through a process of social construction pupils are classified and evaluated in schools.

Related to the labelling process the concept of self-fulfilling prophecy indicates how the definitions that teachers make of pupils can powerfully influence how well they do and is a factor in determining their level of academic school success. Various studies have indicated how teachers react differently to pupils when given different types of information about them.



This implied that if you expect students/pupils to do well then they will often fulfil expectations. This may be due to the teachers helping them and encouraging them more; also the student may work harder because they believe they are able to do what others expect of them. Conversely, if you don't expect pupils to succeed, as a teacher, you may not stretch them as much and will almost prepare them to do less well. As a pupil you will become resigned to others doing better than you. Douglas suggested that the expected low achievement of working class pupils and the expected high achievement of middle-class pupils became effectively a self-fulfilling prophecy.

Reay claims that, despite government rhetoric on both sides of the Atlantic about equity, freedom and choice, very little progress has been made towards social justice and equality in education for the working-classes over the past hundred years. She cites evidence from a number of studies that indicate that social class continues to exert a significant influence upon the educational achievement of pupils and students but has little impact on educational policy. We now turn our attention to gender, another important influence on educational achievement.

6.2 GENDER AND ACHIEVEMENT

In many countries, gender differences in educational success are part of long standing political, public and scientific debates about education. The educational disadvantages of women (but also their difference) were central to debates about gender, by the end of the 20th century attention had turned to boys, their difference from girls and their lack of educational success. Although school grades and transitions are linked to achievement and ability, they are indicative of a type of success in school that does not necessarily equate to aptitude and is, therefore, inextricably constrained by assessment processes. For the individual school students, it can be argued that such aspects of educational success are, in reality, even more important than actual ability, since school grades are usually 'what counts' for the greater part of a continuing educational career, school pathways and the labor market.

The main aims of the special issue are to theories gender inequalities from different disciplinary perspectives and to bring together different methodological approaches. This also involves consideration of practical implications for improving boys' and girls' school outcomes. Within the scientific debate about gender differences in educational success, several aspects are discussed that include long-term perspectives on gender debates about differences of educational careers, school student characteristics as well as institutional settings and the role of the teacher. The special issue comprises a collection of papers that explore different aspects of the topic and deal with gender differences in educational success from a range of disciplinary perspectives, including historical, sociological and psychological approaches.

6.2.1 Gender Differences in Educational Success

From the perspective of gender differences in education today, patterns of gender inequalities that are specific to a certain stage within the educational career need to be considered. What can be recognized at this early stage, though, are gender-typical behavioral and interest patterns in terms of expressions of gendered socialization. Boys, more often than girls, start primary school late after being diagnosed with learning difficulties. In primary school, gender differences in competences develop, with girls scoring more highly in reading and boys outperforming girls in mathematics and sciences. In many countries, more women than men start studying at Higher Education institutions. However, the transition rates to Higher Education – i.e. the percentage of people being eligible to access Higher Education who actually start Higher Education studies – are still higher for men.

There are several theoretical and empirical explanations for the different kinds of gender inequality in education. In terms of the long-term underperformance and underrepresentation of women and the evolution of that situation, an explanation centers around educational investments and educational motivations. Following human capital theory, investments in women's education only pay off when women are able to convert their education into income and status at the labor market. From this perspective, the main factors behind the traditional pattern of lower educational participation in the case of women had been their higher affiliation to the household and to child-rearing activities, as well as their lower opportunities in the labor market. The increasing educational participation of women was strongly linked to the changing gender images and the higher labor force participation of women – partly caused by a stronger demand for labor in service professions. Female life-prospects and life plans altered very much during the last decades, occasioned by a modernization of life plans – in particular, the decreasing social and economic significance of marriage and the increasing importance of labor force participation for earning a living among women – and also the institutional change of the educational and social systems that make education more attractive both to women and men. The increase in educational returns for women is the major mechanism behind the increasing educational motivation of women, their higher participation in upper secondary schooling and their increasing participation in higher education. Therefore, it can be argued that the change in the educational aspirations of girls and the anticipated greater opportunities for women in the labor market (particularly regarding public services) are the main causes of the increase in the educational success of girls. However, there are still persistent patterns in respect of vocational choice and choice of study. Gendered interests and life plans – being related to socialized gender stereotypes – still reinforce work force separation in terms of women more often becoming nurses, teachers or engaging in other service professions, and men being more likely to choose professions that are characterized by higher authority, prestige and status.

Within the scientific debate surrounding boys who fail at school, several aspects have been discussed, focusing on school students and their characteristics, as well as motivational, attitudinal and behavioral issues. Boys lack intrinsic motivation, have less of an interest in school and are more likely to feel alienated at school. Boys also achieve lower scores with regard to their subjective well-being at school. In addition, there are gender differences in behaviors that are relevant to educational success.

Most approaches highlight different behavioral patterns at school: A behavioral cause of the lower educational achievement of boys is linked to non-conformity and antisocial behavior in the school environment. Findings indicate behavior-specific gender gaps: boys indulge more often in more offensive behavior, such as disturbances during lessons and violence; and they conform less. Boys also respond more often to failing experiences and frustration by aggressive and violent behavior. This is associated with lower educational success, as it implies disruptive behavior that diverts boys from successful learning and may be sanctioned by teachers.

6.2.2 The special Issue on Gender and Achievement

In order to capture some of the breadth of the issues discussed above, the papers in this special issue are organized along three axes. From historical and philosophical perspectives, the first axis addresses questions such as how gender as an educational issue and related potential inequalities and (socially constructed) differences became manifest historically, and a theoretical reflection on the debate is provided. Along the second axis, these reflections are followed by sociological perspectives, consisting of papers with a general focus on educational inequalities from a longitudinal perspective, and also comprising papers that provide insights into empirical findings and the debate on gender inequalities in terms of specific countries. The last axis, on psychological perspectives, deals with factors such as identity, students' motivation, personality and intelligence. Again, the main objectives of this special issue include an exploration of gender variations in educational success from a cross-cultural and historical perspective, as well as the search for possible causes of the underperformance of boys. Aspects being discussed include school student characteristics as well as institutional settings and the role of the teachers. In summary, the following areas are central to the special issue:

- New historical perspectives on gender issues of education (gender and education in the sciences, education and citizenship), and biases of gender and sex as categories of research
- Gender and motivation for high achievement at school
- Traditional gender patterns and school achievement
- The teaching profession and the school achievement of boys and girls.

6.2.3 Sex and Gender

It is important to first examine the terms 'sex' and 'gender' that are used to categorize and identify us all. Sex refers to our biological make up. It identifies us as male or female. Biological differences include chromosomes, hormones and physical sexual characteristics such as sexual organs, body hair, physique, etc. Gender refers to the social construction of masculine and feminine. It is what we expect males and females to be 'like' in terms of behavior, appearance, beliefs and attitudes. There has been a continuing debate as to how much of our maleness and femaleness is biologically determined and how much is socially constructed.

A biological determinist, or essentialist position even though we are subject to social constraints, it is our biological make up that plays the major part in determining who we are and how we behave. This viewpoint suggests that even in modern industrial societies our biological sex still to a large extent determines our behavior, so that the two sexes relate to each other in a way that maintains human survival. The family was seen as a functional prerequisite to the maintenance of any society and the conjugal roles of the male breadwinner and the female homemaker/child rearer are presented as being the most appropriate. Though alternatives are seen as possible, there is a view promulgated by these functionalists that the 'normal' roles of men and women, with their biological basis, provide the best 'fit' for any kind of society. So, whilst in some, often traditional, communities these sociologists could point to large extended families and in others, usually modern industrial societies, to nuclear families, the role of women is seen essentially as domestically based in both.

Did You Know?

The functionalist perspective of some early sociologists such as Parsons (1959) and Davis and Moore (1967), whilst exploring the influence of cultural factors on the development of societies, still have a biological underpinning to their theories.

The physical differences between males and females, whilst being less apparent in young children, become more obvious as we grow up and move through adolescence and into adulthood. However, there is a wide variation both within and across the genders in terms of individual physical characteristics. What is deemed as attractive to the opposite sex is different from society to society and changes over time with fashion. Clothing, diet and body building/reducing exercises to change our appearance are all used and with advances in medical science people can radically alter their physical characteristics and even biological



sex. In modern societies and across a range of cultures any presentation of a clear uncomplicated sexual divide would constitute an oversimplification.

Differentiating between notions of sex and gender became more important when early feminist writers such as Oakley (1975) wished to highlight the significance of cultural as opposed to biological factors in explaining the ongoing socially inferior position of women in society. Their argument was that though there are biological differences between the sexes, it was social constructions of gender and sexuality that led to the oppression of women. The biological arguments were seen as part of the male hegemony that perpetuated the myth of male superiority. The whole notion of masculinity and femininity could be seen to be socially rather than biologically determined and could thus be challenged. What still remains unclear is the dividing line between biological and social influences on an individual's gender construction.

6.2.4 Influences upon the Creation of Gender

If we were to consider different societies in history and around the world we see many differences in gender roles. In her now classic anthropological account, Mead (1935) found great variation in the roles of men and women in a study of three tribes in New Guinea. In one tribe both men and women were gentle and submissive with little clear division between the sexes whilst in another men were more aggressive with women being more submissive. In the third, women were more involved in leadership of the group and were more aggressive whereas the males were responsible for domestic tasks, were more 'fussy' about their appearance and tended to gossip. For Mead this illustrated the significance of social expectations upon male and female behavior.

The representation of gender as a binary split between masculine and feminine makes them appear as opposites with everyone falling either side of the sexual binary line. In this way stereotypes of male and female can be presented as diametrically opposed, for example male v. female, hard v. soft, rational v. emotional. Kehily suggests that the dualist creation of gender by society can have direct bearing on our sexuality and sexual identity. Thus from birth we begin to be male or female and to be mistaken for being of the opposite sex from that with which you identify is a significant concern as we seek to maintain our self-identity.

Gender characteristics that stereotype appropriate physical appearance and behavior can cause pressure to conform, particularly on young people who are coming to terms with themselves as they develop. To be identified as different or 'other' can have a significant effect upon the self-image of young people. Kehily (2001) examines the issues of sexuality in school and how identities are negotiated and created. Pupil interaction and perceptions are significant in the 'othering' process. Labels become attached to pupils and some are more difficult to resist or counter than others. Language plays a very powerful part in this process and use of sexual insults such as 'queer' or 'slag'

have lasting repercussions on the identities, future interactions and sexual behavior of the young people involved. Use of such terms, whilst causing conformity amongst many for fear of being seen as different, may actually serve to distance and create outsiders of others.

6.2.5 Masculinities and Femininities

If we carefully examine groups of young people and consider the broad range that exists in terms of behavior, beliefs, values, preferred appearance, etc. we see that it becomes difficult to place them all into too rigid a definition of what constitutes female or male behavior. The majority of boys are not disruptive in the classroom and all girls do not get on with their work quietly. For this reason some writers, speak of masculinities and femininities that allow for greater variation. As Reay says, 'Femininity is not a unified discourse ... femininity is dynamic, various and changing and it is perhaps helpful to think in terms of multiple femininities rather than one femininity'. Swain says that pupils live within the context of their own communities and that these wider contexts influence the local school policies. 'Each school has its own gender regime which consists of ... individual personnel expectations, rules, routines and a hierarchical ordering of particular practices'. Whilst there is a great deal of commonality between schools there is also variation.

Keyword

Male dominance is one of the earliest known and most widespread forms of inequality in human history.

However, **male dominance**, or patriarchy, in many societies is clear. Theories of biological determinism may in fact help to maintain this supposedly 'natural' order of things. Feminists, in particular, point to the patriarchal hegemony that enables these explanations to persist.

6.2.6 Feminist Perspectives

Feminism takes the ideological perspective that women are placed at a disadvantage to men in society by virtue of their gender. Feminists seek to study, explain and highlight these disadvantages with a view to creating change in future power/gender relationships. Wide variations in beliefs exist, from what could be termed moderate to extremist, under the general umbrella term of feminism. Taylor (1995), from the overview



of different feminist groups conducted by Oakley, identified four main sub-categories as follows, though they accept that even this attempt at categorization can only be considered as very generalized.

6.2.7 Policy Approaches to Gender Differences

Historical Developments in Gender Relations and the Schooling of Boys and Girls

The roles of men and women and their relationships are not fixed and have varied over time. This can be illustrated by considering the comparatively short period from Victorian England to the present day. In the early 1800s Britain was very much a patriarchal society. Women were not able to vote, own property or obtain a divorce. Within the middle classes it was considered essential for a young woman to become married and they effectively moved from being controlled by their father to being controlled by their husband. It was men who governed the empire and the society. Men ran businesses and supported the family. Women did not work and were confined to a life that revolved around the home. Boys from the more affluent classes would be educated at public and grammar schools but the education of girls would be primarily left to governesses, would be conducted in the home and would revolve around acquiring the skills and knowledge suitable for a lady. For the working classes life was much harder and both men and women worked, though women did the more menial factory work and were paid less than men. In the early educational provision for the working classes girls were able to attend school as well as boys, though both were taught appropriately to the social expectations of the time.

It took years of pressure and steady change in social attitude for women to gain legal equality with men. They gained the right to divorce and, importantly, to retain their own property upon divorce. After years of campaigning women gained the vote in 1918. However, this was only for those over 30. They did not gain it on equal age terms with men until 1928. It was still legally possible to discriminate in terms of gender. So women could be paid less than men for the same job, and it was possible to refuse someone employment because they were female and therefore considered unsuitable. It was possible to refuse entry to social gatherings on gender grounds. Thus many public houses had male only bars where women were only allowed at the weekends.

From this date women, legally at least, had equality with men. However, whilst there had been these legal changes there were still economic and social differences that were strongly influenced by gender. In employment terms women remained much underrepresented in many, usually more highly paid professions and the average earnings of women remained well below that of men. It has actually been very difficult for women to 'break into' male dominated areas such as medicine, law and

engineering. The term 'the glass ceiling' has been coined to illustrate the invisible but powerful constraints upon the progression of women upwards in society. It was also still largely accepted that a woman's place was really in the home and that the man was the breadwinner. In this way women's employment was largely seen as a temporary occupation before they raised children or as a way of supplementing the main income of the husband when the children were older. Changes in attitude have continued to take place and over the years women have increasingly taken up careers in many areas that previously they did not. Due to changes in employment rights, women and men are entitled to maternity and paternity leave that makes it more possible for a woman to pursue her career and have children. It is also significant that men are employed in some occupations that were previously considered suitable for women only such as nursing. However, whilst there has been a change in social attitudes and lifestyles, it is still not a level playing field. Whilst many women now have more demanding jobs, domestic responsibilities do not seem to have been equally shared and they still take most responsibility for running the household. Women's average earnings still lag behind those of men and they are still underrepresented in many areas of higher paid employment. Social and political attitudes are reflected in education. State education has been provided since the end of the nineteenth century to all pupils regardless of gender. The introduction of the tripartite system saw the development of single sex grammar schools and often, though not always, single sex secondary modern schools. It was the development of new large comprehensive schools from the 1960s onwards that saw boys and girls taught together in their secondary education. However, being taught in the same school did not necessarily mean that they had equal opportunity, nor that gender did not have a significant effect upon a pupil's experiences. This was the time when the women's liberation movement was highlighting gender inequality in society. These inequalities were reflected in the classroom where teachers, peers and parents treated boys and girls very differently. At that time it was not considered politically incorrect to have gender specific stereotypical expectations of pupils so curricular activities were unashamedly contrived around them, for example needlework for girls and metalwork for boys.

In the 1970s and 1980s much feminist research in education was concerned with the perceived underachievement of girls and how the education process worked to maintain this through discrimination and marginalization. The gender differences were maintained and highlighted through the processes of schooling that involved the separation of the genders, differences in uniform, a gender-specific curriculum and differential expectations of behavior. This was further enforced through the attitude of teachers, peers, parents and later, their usually male, employers. Feminist researchers were interested to show how the ambitions of female students remained low and how they were discouraged in a variety of ways from choosing the 'hard' mathematical and scientific subjects so important to future employment prospects in favor of the more 'feminine' arts and humanities.

Curriculum Changes

Strategies were developed to make the curriculum more girl friendly in response to such concerns and there have been many initiatives designed to raise the achievement of girls by raising awareness, altering attitudes, increasing ambition. Consideration was given to the curriculum and teaching methods. A seminal example is the Girls into Science and Technology Project (GIST), a four year project from 1979-83 that investigated the reasons for girls' underachievement in science and technology and encouraged teachers to develop classroom strategies to change this. Similarly, Gender watch was a practical evaluation pack that enabled teachers to monitor gender in all areas of school life with a view to raising awareness and taking positive anti-discriminatory action. These initiatives tended to be individual rather than coordinated and Murphy and Gipps have suggested that although they have worked for many, mainly middle-class, girls, they have been singularly unsuccessful for a great many others and, in fact, have provoked a male backlash.

Whilst this research, raising of awareness and development work was based on the underachievement of girls relative to boys, the actual figures show that the reality was not that straightforward. Even in the 1970s girls were outperforming boys in English and **modern foreign languages (MFL)**. Also, more girls were achieving five or more 0 level passes (equivalent to A*-C, GCSE) than boys. However, because these included subjects that were seen as low status such as home economics and because boys were doing better at maths and sciences, regarded as 'hard' subjects of high status, girls were perceived as underachieving. Also, it should be noted that the tripartite system, in operation before the widespread development of the comprehensive system, had favored boys due to the larger number of places available in boys' grammar schools as opposed to those admitting girls. Thus boys did not need to score as highly as girls in the 11-plus to secure a grammar school education.

The Conservative government came to power in 1979 emphasizing competition, individual achievement and success. The Tories did not trust the liberal education establishment and sought to reform the education system. Whilst not being concerned with the promotion of equal opportunities, one of their reforms, the introduction of the National Curriculum, had

Keyword

Modern foreign languages is generally understood to encompass those languages studied as degree level programmes at higher education providers.



what is now often regarded as a significant impact on the achievements of girls. From its inception all pupils were required to take the whole curriculum. Thus it was no longer possible for boys or girls to 'drop' some subjects in favor of others.

The Conservatives were also responsible for the introduction of league tables at General Certificate of Secondary Education (GCSE) and A level that were used to judge overall school performance. These tables made the achievements of boys and girls more transparent than ever. Since the introduction of these tables it can be seen how the performance of both boys and girls has steadily improved. What has caught the public attention, though, is that the improvement in the results of girls has been greater than that of boys. Whilst continuing to outperform boys in language subjects, girls have caught up boys in maths and the sciences. Concern is now focused on the performance of boys.

6.2.8 Relationship between Gender and Achievement

GCSE and Examination Performance

In 2001/2, 58% of girls in their last year of compulsory education achieved five or more GCSE grades A*-C, compared with 47% of boys. In 2005/6, 63.9% of girls achieved five or more GCSE grades A*-C, compared with 54.3% of boys.

Table 1. Those pupils achieving A *-C in selected subjects at Key Stage 4 as a percentage of all pupils in schools at the end of 2005/06

	Boys	Girls
English	51	67
Maths	52	55
Any science	49	51
Double science	38	41
Physics	8	6
Modern foreign language	26	39
Geography	20	18
History	20	22

Whilst there is a need to be very careful when interpreting statistics such as these on gender and examination performance, we can see from the figures that from 2001/2 to 2005/6 the percentage of all pupils gaining five or more GCSE grades at A*-C has increased. Girls have continued the trend that Francis had noted in relation to O level, that is, attaining a higher percentage of five or more passes at A*-C than boys. What

is significant is when the achievements of males and females are compared for each subject. Girls are now doing better than boys in all the core subjects apart from the single sciences when taken separately, reflecting perhaps the continuing male bias in these subjects.

Explanations for Boys' Achievements

Elwood notes that over the last two decades we have shifted from debates about equal opportunities and improving the educational experiences of girls to those concerning notions of underachievement and male disadvantage. Moral panic developed over boys' underachievement, particularly in the popular press. Clearly this was rather an overreaction. After all, overall results of both boys and girls improved. Girls' improvement has been greater but not by a great deal. The media has portrayed boys as falling behind. They have homed in on the apparent growth of a 'laddish' culture among teenage boys that is anti-study, against school values and leads to underachievement.

Various explanations have been offered to explain why girls are performing better than boys.

- (1) Genetic Differences:- In previous times it has been the assumption, due to male hegemony, that women were the weaker and thus the inferior sex that needed to be protected. This was considered to be in all aspects, not just muscular strength. It is interesting that the consistently higher level of achievement by girls academically can now lead us to the conclusion that this is due to genetic differences, i.e. the intellectual superiority of women. Noble et al (2001) point out that, interesting though this notion is, the evidence is currently very thin. They also warn against the taking up of stereotypes that ignore the fact that difference in achievement between genders is not that large and more importantly that great variations in achievement occur within the genders. Feminist analysts would suggest that the 'moral panic' that has accompanied this perceived failure of boys and the demand to rectify the situation is a reflection of the fear within the male dominated political establishment that there may be some basis to the genetics argument.
- (2) Changes in Society and the Masculine Image:- There have in recent decades been enormous changes in the economy that have had repercussions on how people earn their living, the organization of the family and the amount of leisure time and disposable income available. The traditional occupations based upon heavy industry dominated by male workers that involved strength and training in traditional skills have disappeared. This has had significant effects upon communities based around these industries such as mining, ship-building, steel and deep sea fishing. Newer forms of employment are service based and seen as being more traditionally female. The male is no longer the



only, or even the major 'breadwinner'. Thus the traditional masculine image in working-class communities is no longer applicable as it was even twenty years ago. It is suggested that, whilst many families have more leisure time with more disposable income to spend upon home luxuries, holidays, clothes, etc. and women play more of an active role in society, many working-class boys see no particular role for themselves. They see no need to work hard at school as it will make little difference to their future. At the same time these boys emphasize and play out their masculinities at school where it is important to be seen as 'hard', 'cool', not a 'poof' or a 'SWOT'. Of course it can be argued that working-class boys could always get masculine jobs in the past and so have never really had reason to work hard at school. Perhaps, as Connolly suggests, forms of masculinities and femininities that exist are not just about gender alone but are combinations with social class and ethnicity that 'produce differing and enduring forms of identity'.

- (3) School culture:- It is suggested that the school culture works against the achievement of boys and in favor of girls. There are a number of strands to this point of view.
- It is assumed that the assessment regimes have developed to favor girls with more emphasis on coursework rather than final exams. However, this trend has reversed in recent years with no significant falling back of girls' performance.
 - The curriculum is said to favor girls with little to excite boys and the type of learning is considered not to suit boys' learning styles. This point ignores the nature of many aspects of the curriculum where content is specifically chosen to attract boys. Also, learning styles do vary for girls as well as for boys. Arnot and Miles (2005) suggest that the increasing emphasis on a per formative school system has led to greater resistance from working-class boys who have a history of low achievement. This, they say, is being misinterpreted as a new development termed 'laddishness'
 - Jones and Myhill (2004) noted how beliefs about identity can inform teachers' perceptions resulting in a tendency to associate boys with underachievement and girls with high achievement. Elwood says that boys are now seen as 'poor boys' or 'boys will be boys' or, associated with this second stereotype, 'problem' boys. Proposed solutions to low achievement emanating from these stereotypes involve shifting classroom practices in order to engage boys' interests. She points to a whole raft of initiatives and policies and associated publicity involved in tackling the problem of boys' underachievement.

6.3 ETHNICITY AND ACHIEVEMENT

A further social factor that influences educational achievement is that of 'race' or ethnicity. It is important to consider what the terms 'race' and 'ethnicity' actually mean.

6.3.1 Race

'Race' is a form of classification whereby individuals are grouped according to certain genetically inherited physical characteristics. People are categorized by 'racial' groupings in matter of fact ways and in daily conversations the term 'race' is applied as though the labels given are straightforward. However, apart from being a socially loaded concept, the use of 'race' as a means of categorization is fraught with problems.

Using the term 'race' assumes the existence of a number of clear physical 'types' into which all humans fall. It is these inherited physical characteristics that are then used to identify the races to which people(s) belong. Thus skin color, hair type, body shape are racial characteristics and the idea of 'race' is firmly linked to the idea of physical type. The concept of 'race' portrays certain groups of people as naturally different and represents a biologically determinist view of **human development**. It creates a justification for not treating 'them' the same as 'us' or not feeling guilty about such different treatments. Implicit in theories of 'race' is often an unstated belief that certain mental as well as physical characteristics can also be attributed to 'racial' groups.

Racial classification came to the fore as European powers expanded their colonial empires. Thus the Victorian English (British?) ruled many parts of the globe. This could be portrayed as a result of their national characteristics and moral fiber that were part of their racial superiority. In effect the empire was seen as the natural order of things. The colonists had a duty to guide and care for the colonial peoples that they ruled whom they regarded as inferior. This idea of 'racial' superiority has been used to justify the inhumane treatment and physical domination of one group over others throughout history. Consider how past empires have maintained their power over and treated their conquered peoples, for example, the Roman, British, Spanish and Portuguese empires; the apartheid system in South Africa; Hitler's Germany

Whilst 'race' was used as a means of social categorization, scientists down the years have been unable to give a clear biological basis to the concept. Attempts to create lists of 'races' proved impossible due to the fact that mutually exclusive characteristics could not be identified. Even grouping everyone

Keyword

Human development involves studies of the human condition with its core being the capability approach.



into one of three broad groups of Caucasoid, Negroid and Mongoloid has proved problematic. There is such a range of peoples within each category and also any physical characteristics identified are never totally exclusive to any group. Whatever categorization for 'race' is used there is a great range of differences within each group and at the same time overlap between the categories. Thus the idea of 'race' is effectively a social construction based on prejudiced stereotypes.

6.3.2 Ethnicity

Rather than 'race' the term 'ethnic group' is now more frequently used with ethnic minorities to refer to all groups making the minority. The term 'ethnicity' includes cultural and religious beliefs as well as physical similarities and so is felt to be a more appropriate term that is adaptable to social as well as physical variations. Tizard and Phoenix suggest that 'ethnicity refers to a collectivity or community that makes assumptions about shared common attributes to do with cultural practices and shared history'. As such they suggest that it is largely 'insider' defined. However, both of the terms 'race' and 'ethnic group' can be seen as social constructions whose meaning and applications change over time. They are often used as a means of boundary maintenance and to categorize and emphasize the differences between groups of people.

Remember

The terms 'race' or 'ethnicity' should be seen as being used and evolving within the economic, political and social power relationships of any society at the time.

Confusion is maintained by the use of a range of racially racist-based terms in any documentation or analysis. Thus a range of people(s) from many different origins are included, or conversely excluded, when categories such as 'Asian' are created. The same can be said of the use of the term 'black', which can be used to include African, African-Caribbean and sometimes Asian. What many official monitoring documents now encourage is self-categorization whereby they include a wide range of categories and allow people to place themselves in the one in which they feel they belong or even to add one for themselves if it is not included.

6.3.3 Migration

Human history is one of continuous migration around the globe driven by a variety of causes - wars, trade, employment,

escape from natural disasters such as flood, famine, earthquake, etc. The history of the British Isles certainly reflects this world picture with population movements of those born within the islands, both voluntary and forced, from rural areas to towns and cities and also away into other parts of the world; there have been peoples that have arrived as conquerors from the northern Scandinavian countries, Rome and France; many others have arrived as refugees fleeing political and economic persecution such as the Huguenots, Jews, Poles, Hungarians and Irish. Post-Second World War Britain, until recently, has largely been in an official position of net emigration, i.e. more people leaving the country to live than entering. Gundara (2000) points out that though all of these communities and groups share common experiences of racism and have often struggled against this in similar ways, sometimes coming together in this process, they are very different communities and their diversity must be realized. Thus, though Indian, Pakistani and Bangladeshi communities are often classified as Asian and so regarded as the same by a cool white majority, they are very different in culture, religion, language and economic circumstances. Also, it should be realized how young people from these ethnic groups are further adapting. As with all young people they develop their own ambitions, lifestyles and leisure pursuits that at times cause conflict with their parents. Thus as adolescents they face the conflicts of striving for independence from their family yet seeking support and solidarity from their traditional communities in the face of racism. Gundara, in talking about multiple identities, suggests that black youth are engaged in 'defining themselves in the context of dominant British identity as well as their identity as Black persons in Britain'

6.3.4 Policy Approaches to Combating Racism

Gillborn (2001), whilst warning against the dangers of making over simplistic generalizations, expanded on an earlier typology of Tomlinson (1977) to show the recent history of policy on race since the Second World War up until the current Labor government.

Ignorance, Assimilation and Integration

In the period of ignorance and neglect the official response to migration from the Caribbean and Indian subcontinent was to ignore it and do nothing. By default this was supporting the traditional colonialist views on racial inequality. The assumption was immigrants would do menial, low paid work that reflected their racial status. The late 1950s to the mid-1960s was a period of assimilation followed by integration. During the first part of this period it was assumed that any immigrants would become part of British society. It was expected that 'they' would dress, talk and live like 'us'. Thus over time migrants would become assimilated into British life. This was very much perceived as a one-way process of 'them' becoming more like 'us'. 'Racial incidents' were presented as part of a 'color problem', i.e. the failure of 'colored' people to fully



assimilate. Clearly any issues were seen as emanating from the minority group and not the white majority whose home this had always been. The integrationists realized the impracticality of this policy and that differences in appearance could not be eradicated just by making migrant groups conform in social behavior terms. They emphasized equal opportunity and began to call for more tolerance of cultural diversity. It is worth noting that the Race Relations Act was passed in 1976 outlawing discrimination on the basis of 'race'.

Multicultural Education

The multiculturalism and anti-racist phase, from the late 1970s to the late 1980s, came about during a period of social unrest during which ethnic minority groups protested more openly about the social and economic oppression they faced - high unemployment, poor housing, lack of opportunity. The resistance of ethnic minority youth grew in the form of difficult and disruptive behavior at school, increasing truancy and disturbance on the streets. The result, in the summer of 1981, was a period of significant rioting in a number of urban centers such as Handsworth in Birmingham and Toxteth in Liverpool.

The Swann Report stressed the pluralistic make up of British society. This was seen as a strength and the cultural richness it brought needed to be recognized as leading to a vibrant developing society. However, the report also pointed to the inequality and prejudice that minority groups faced in all areas of their lives. Swann felt that, if not addressed, this inequality would lead to greater tension and civil unrest. The report wanted racism in all its guises to be addressed but particularly what it called institutional racism. This, it stated, was where the official institutions in society, such as the education system, the health service and the police, operate in a way that automatically discriminates against and disadvantages certain groups. The procedures and processes of such institutions needed to be monitored carefully for such practices. The Swann Report also stated that racism should not be seen as primarily a minority issue but rather a white problem. It was members of the white majority who were engaged in racism and discriminatory practices. It was this group that needed to be educated. Swann made the point that education about and against racism was as, if not more, important in areas that were predominantly white.

Multicultural education involved understanding and celebrating difference through education. Thus diversity was reflected in the curriculum by educating about different cultures through, for example, awareness of different forms of music, religious ceremonies and beliefs, languages and diet. This approach also involved the scrutinizing of classroom texts to make them more representative. However, whilst being regarded as a move forward from assimilationism, the multicultural approach has been criticized for being condescending. Multicultural programmes came to be seen as naive and inadequate, largely in terms of how they ignored institutional racism in education. Some even

suggested multiculturalism was itself racist and a cause of disaffection. It was argued that multiculturalism was nothing more than a form of social control, a misguided form of tokenism designed to integrate rather than to enable serious cultural differences to be properly expressed. In spite of these protests, multiculturalism remained (and remains) a position adopted by institutions at different levels of the education system.

Anti-Racist Education

The anti-racist movement, whose proponents believed that a more active stance needed to be taken to oppose racism, took a more radical approach. Racist attitudes needed to be vigorously opposed and policies that emphasized a belief in equality of opportunity clearly and forcefully stated. This approach was adopted by a number of LEAs and local authorities and became associated with left-wing administrations that were targeted for attack by the Conservative government of Margaret Thatcher in the 1980s. Thus this approach soon became discredited as extremist.

European languages were considered as appropriate at this time) parts of the National Curriculum programmes. Ethnic minority pupils, whilst not seeing themselves reflected in the curriculum they were taught, were further alienated by a rigid testing regime that took no account of language differences. Gillborn suggests that by stressing individualism, the market and choice, 'race' inequalities were effectively 'removed from the agenda'.



SUMMARY

- Although social class is felt to be an important factor in educational achievement and has been on the 'agenda' of education studies for some time, it is not a category that is widely used in official statistics of education.
- Even though educational provision has expanded there remains a strong correlation between the type of education received, success in school, progression to university and parental occupation.
- The education received corresponds to the future working environments that these pupils can expect and as such prepares young people to take their 'appropriate' place in society.
- The pupils who teachers perceive as more able or likely to do well in the future are those that display middle-class characteristics. As time goes on the difference between groups of pupils may be seen to widen and this is due to the increasing effects of being taught differently, experiencing differential teacher expectations and being offered different opportunities through the curriculum.
- Middle-class children better understand how to speak, how to behave with books, how to sit at story-telling time and how to conduct themselves as good pupils in general.
- Social inequalities are not simply based on wealth. Bourdieu introduces the idea of cultural capital - the accumulation of cultural attributes that can be reinvested into education with a positive return for their holder.
- Teachers 'size up' pupils using knowledge gained from their past experiences of teaching, i.e. whether a child is good, naughty, clever, low ability, a 'typical' boy or girl etc., and then react appropriately to a range of classroom situations.
- Biological differences include chromosomes, hormones and physical sexual characteristics such as sexual organs, body hair, physique, etc.
- The physical differences between males and females, whilst being less apparent in young children, become more obvious as we grow up and move through adolescence and into adulthood.
- The Conservatives were also responsible for the introduction of league tables at General Certificate of Secondary Education (GCSE) and A level that were used to judge overall school performance.
- 'Race' is a form of classification whereby individuals are grouped according to certain genetically inherited physical characteristics. People are categorized by 'racial' groupings in matter of fact ways and in daily conversations the term 'race' is applied as though the labels given are straightforward.

MULTIPLE CHOICE QUESTIONS

1. **Example of associative social process is**
 - a. Assimilation
 - b. Conflict
 - c. Competition
 - d. None of the above
2. **Education isfor achieving full human potential, developing an equitable and just society, and promoting national development.**
 - a. Constitutional
 - b. Legitimate
 - c. Fundamental
 - d. Authentic
3. **Education is a great leveler and is the best tool for achieving economic and social mobility, inclusion, and**
 - a. disparity
 - b. discrimination
 - c. inequality
 - d. equality
4. **Greater the handicap of the students coming to the educational institutions, greater the demand on the:**
 - a. State
 - b. Teacher
 - c. Society
 - d. Family
5. **Evaluation of the process of curriculum development should be made**
 - a. abruptly
 - b. relatively
 - c. gradually
 - d. continuously

REVIEW QUESTIONS

1. Discuss the social theories of achievement.
2. What is known about gender differences in educational success?
3. What is special issue on gender and education achievement?
4. Explain the historical developments in gender relations and the schooling of boys and girls.
5. Describe the social factor that influences educational.

Answer to Multiple Choice Questions

1. (a) 2. (c) 3. (d) 4. (b) 5. (d)



REFERENCES

1. Ball, S. (2003) *Class Strategies and the Education Market: The Middle Classes and Social Advantage*. London: RoutledgeFalmer. How the middle classes harness market forces to their advantage is a clear theme of this book. Stephen Ball examines the way in which the middle classes maintain their social position and how the education system supports them in doing this. This is a challenging but very important analysis.
2. Browne, N. (2004) *Gender Equity in the Early Years*. Maidenhead: Open University Press. This book examines policy, provision and practice for early years children and the extent to which these promote equity. This is a very useful text for those with a special interest in early years issues.
3. Capel, S., Leask, M. and Turner, T. (2005) *Learning to teach in the secondary school: a companion to school experience*, 4th edn. London and New York: Routledge. This is a comprehensive, up to date text outlining a wide range of pedagogical issues and approaches in an accessible way.
4. Kailin, J. (2002) *Antiracist Education: From theory to practice*. New York: Rowman and Littlefield. This book shows how covert racism is able to permeate all areas of social life and stresses the need to be aware of this in order to counteract it. It outlines the similarities and distinctions between multicultural and antiracist education. It then makes the case for adopting an anti-racist approach. The author gives rich ethnographic accounts of teaching anti-racist education in the US.
5. Kehily, M.J. (2002) *Sexuality, Gender and Schooling*. Shifting agendas in social learning. London: Routledge/Falmer. Using an ethnographic approach, this text examines how young people construct understandings of gender and sexuality. In doing so it considers key debates and issues in this area.





CHAPTER 7

EDUCATIONAL PSYCHOLOGY PROMOTES TEACHING AND LEARNING

LEARNING OBJECTIVES

After studying this chapter, you will be able to:

1. Understand basic concepts of educational psychology
2. Explain methods of studying psychology of learning

"The principle goal of education in the schools should be creating men and women who are capable of doing new things, not simply repeating what other generations have done; men and women who are creative, inventive and discoverers, who can be critical and verify, and not accept, everything they are offered."

– Jean Piaget

INTRODUCTION

Educational Psychology is a combination or overlapping of two separate fields of study; psychology and education. It is a distinct discipline with its own theories, research methods, problems and techniques. Educational psychology is distinct from other fields of psychology due to its focus on understanding the processes of teaching and learning that takes place in formal environments. Educational psychologists study what people think and do as they teach and learn a particular curriculum in

a particular environment where education and training are intended to take place. They help in developing instructional methods and materials used to train people in both educational and work settings. They are also concerned with research on issues of relevance for education, counselling and learning problems. Educational psychology deals with behavior of human beings in educational situation. This means that educational psychology is concerned with the study of human behavior or human personality, its growth, development, guidance under the social process of education. Education is possible in human beings; hence, human learning is the central core of educational psychology.

7.1. BASIC CONCEPTS OF EDUCATIONAL PSYCHOLOGY

Educational psychology involves the study of how people learn, including topics such as student outcomes, the instructional process, individual differences in learning, gifted learners, and learning disabilities. This branch of psychology involves not just the learning process of early childhood and adolescence but includes the social, emotional, and cognitive processes that are involved in learning throughout the entire lifespan.

7.1.1. History of Educational Psychology

Educational psychology is a relatively young subfield that has experienced a tremendous amount of growth in recent years. Psychology did not emerge as a separate science until the late 1800s, so educational philosopher's largely fueled prior interest in educational psychology.

Many regard philosopher Johann Herbart as the “father” of educational psychology. Herbart believed that a student's interest in a topic had a tremendous influence on the learning outcome and believed that teachers should consider this interest along with prior knowledge when deciding which type of instruction is most appropriate.

The tests were originally designed to help the French government identify children who had developmental delays to create special education programs.

In the United States, John Dewey had a significant influence on education. Dewey's ideas were progressive, and he believed that school should focused on students rather than on subjects. He advocated active learning and believed that hands-on experience was an important part of the learning process.

More recently, educational psychologist Benjamin Bloom developed an important taxonomy designed to categorize, and describe different educational objectives. The three top-level domains he described were cognitive, affective, and psychomotor learning objectives.

7.1.2. Major Perspectives in Educational Psychology

As with other areas of psychology, researchers within educational psychology tend to take on different perspectives when considering a problem.

- *The behavioral perspective* suggests that all behaviors are learned through conditioning. Psychologists who take this perspective rely firmly on the principles of operant conditioning to explain how learning happens.
- *The developmental perspective* focuses on how children acquire new skills and knowledge as they develop. Jean Piaget's famous stages of cognitive development are one example of an important developmental theory looking at how children grow intellectually. By understanding how children think at different stages of development, educational psychologists can better understand what children are capable of at each point of their growth. This can help educators create instructional methods and materials best aimed at certain age groups.



- *The cognitive perspective* has become much more widespread in recent decades, mainly because it accounts for how things such as memories, beliefs, emotions, and motivations contribute to the learning process. Cognitive psychology focuses on understanding how people think, learn, remember, and process information. Educational psychologists who take a cognitive perspective are interested in understanding how kids become motivated to learn, how they remember the things that they learn, and how they solve problems, among other things.

Keyword

Psychomotor learning objectives are statements of student outcomes in a lesson or unit which pertain to skill improvement and/or physical fitness development.

- *The constructivist approach* is one of the most recent learning theories that focuses on how children actively construct their knowledge of the world. Constructivism tends to account more for the social and cultural influences that impact how children learn. This perspective is heavily influenced by the work of psychologist Lev Vygotsky, who proposed ideas such as the zone of proximal development and instructional scaffolding. While educational psychology may be a relatively young discipline, it will continue to grow as people become more interested in understanding how people learn.



Teachers might give out tokens that can be exchanged for desirable items such as candy and toys to reward good behavior. While such methods can be useful in some cases, the behavioral approach has been criticized for failing to account for such things as attitudes, cognitions, and intrinsic motivations for learning.

7.1.3. Nature of Educational Psychology

Its nature is scientific as it has been accepted that it is a Science of Education. We can summarize the nature of Educational Psychology in the following ways:

Educational Psychology is a Science

Like any other science, educational psychology has also developed objective methods of collection of data. It also aims at understanding, predicting and controlling human behavior.

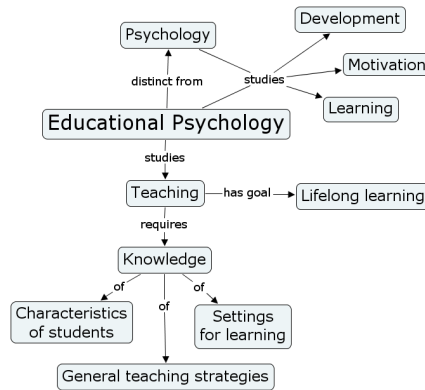
Educational Psychology is a Natural Science

An educational psychologist conducts his investigations, gathers his data and reaches his conclusions in exactly the same manner as physicist or the biologist.

Educational Psychology is a Social Science

Like the sociologist, anthropologist, economist or political scientist, the educational psychologist studies human beings and their sociability.





Educational Psychology is a Positive Science

Normative science like Logic or Ethics deals with facts as they ought to be. A positive science deals with facts as they are or as they operate. Educational psychology studies the child's behavior as it is, not, as it ought to be. So it is a positive science.

Educational Psychology is an Applied Science

It is the application of psychological principles in the field of education. By applying the principles and techniques of psychology, it tries to study the behavior and experiences of the pupils. As a branch of psychology it is parallel to any other applied psychology.

Educational Psychology is a Developing or Growing Science

It is concerned with new and ever new researches. As research findings accumulate, educational psychologists get better insight into the child's nature and behavior.

7.1.4. Feature of Educational Psychology

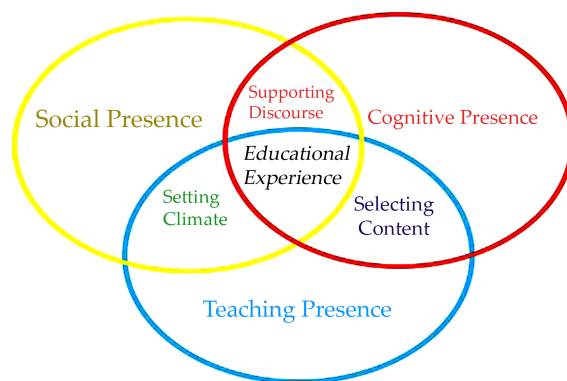
The general aims of educational psychology, as stated before, are understanding, predicting and controlling behavior in learning situations. As the learning situation includes, teacher, learner, classroom environment and evaluation of their interactions, therefore, each objective can be separately treated.

The aims are closely related with the functional aspects of educational psychology. Hence the functional objectives are:

- To evaluate educational theories and put to application the workable part of it;
- To examine contemporary educational practices and suggest the modifications required;

- To critically examine and evaluate contemporary teaching methodology in the light of established principles of learning and motivation in varying conditions of different cultures, different environments and different facilities provided.
- To provide methods for researchers who are scientifically studying educational problems.
- To assess and modify the principles and practical operations according to the set values/beliefs and attitude of a culture and also to maintain the scope for the changes with time.

In order to point out the aims of educational psychology it is better to remember William James, who—as early as 1898— put an important question in psychology; “What we are about”? Educational psychology should provide such answer to this question as it is through learning, through experiences a behavioral change occurs and makes a man what he is.



Educators not only look to educational psychology to learn “what we are” about, but also to learn “what we should be about” in education tomorrow—it is not only to ‘be’ but to ‘become’.

But to achieve it, is a hard task. The world is changing so fast that parents and teachers now see that tomorrow is not a photocopy of yesterday, present is not the replica of the past; learning of their time is totally different from that of nowadays.

We need an image of tomorrow’s society while teaching today and in framing the aims our image must include the likelihood of radical changes—changes that we are today unable to comprehend.

Because the changes that are likely to occur in possible future is not one-sided, not singular, but plural, many-sided and global. Subject to the choices we would make innumerable arrayed options where some lines of development are more likely than others.

An eye to this will help the educators to frame future sensible goals at present time.

The educationists who set the goals should remember and realize that the homo-sapiens, though primarily animals, are most advanced forms of life. Neither are they to regard people as machines, just a little higher or lower than the computer. “A major task of psychology of the future is to help humans learn how to learn and discover, perhaps to help expand the human potential”.

The identification and proper statement of the educational objectives of a lesson is the most important step in instructional planning. When a teacher knows where he is reaching, what is his specific objective, he will be able to decide how he will be designing a lesson. Therefore, getting a clear statement of educational objectives is the first step in the systematic application of psychology to education.

The setting of goals in terms of objectives i.e. to understand, to predict and to control behavior is the behavioral objectives for the teacher. The first behavioral objective for the teacher is understanding the terms “understanding” and “knowing” and these are the key ones of the various educational objectives.

While setting instructional materials the teacher should analyze the objectives in behavioral terms, like knowing, understanding and recognizing the importance of the materials presented.

Therefore, in setting up educational objectives, the objectives are to be interpreted in such behavioral terms as:

- Specific statement of properly stated objective.
- Differentiating between properly stated and improperly stated objectives.
- Expressing educational goals in terms of behaviorally stated objectives.

The test for whether a person—child or adult—“knows”, or “understands” a concept means whether he talks or act appropriately—appropriate to the statement made. In the same way to test whether the person understands a statement made for

Remember

The sensible goals signify that the development of personality or constant individual growth must take into consideration the meaning and purpose of human life.

him, one must witness the fact, watch him talk and act accordingly when confronted with the test situations, or when circumstances arise in the natural course of events.

Therefore, a teacher, when imparting a concept to a student, must check all the aspects of concepts—translate them into behavior (behavioral concepts) and then test his range of understanding (behavioral objective).

The educational objectives, then, help the educator in deciding what is required to evaluate a person's understanding which is in essence, identifying those tests he wants his students to pass after instruction. Such understanding will also pinpoint the 'skills' and 'knowledge' which are involved in the process of understanding.

Teaching these are the educational goals interpreted as proper form for statements of educational objectives, whereas instructional objective is to teach a concept or to teach an understanding of a concept.

Teacher's Objectives

The central theme of all education is learning, and the teacher's objective is to guide and stimulate pupils in their educational growth. The teacher should look into the conditions needed for effective learning and its method of application.

The main behavioral objective of the teacher is to understand the characteristics of children and adolescents and the basic principles of learning, knowledge about the subject matter and bring all these knowledge into the classroom. Each child comes to the school equipped with experiences gathered from his environment in his own way and peculiar to himself.



He uses his experiences so gathered to accumulate variety of .them which he uses again to interpret his new environment and new experiences. Schooling should help them to reshape their concepts whenever necessary so that they may be helpful to

reinterpret them in social context, thereby broadening existing concepts, developing new skills, acquire new attitudes and reorganize behavior. This is how enriched learning takes place. Today student-teacher objectives are often expressed explicitly as outcomes or learning. Such objectives generally include subject matter, knowledge, and learning-oriented attitudes, appreciations, interests and skills. The main and most important teacher's objective is to help children acquire behavior patterns that contribute to effective living.

7.1.5. Scope of Educational Psychology

The scope of educational psychology is ever-growing due to constantly researches in this field. The following factors will indicate the scope of educational psychology:

The Learner

The subject-matter of educational psychology is knitted around the learner. Therefore, the need of knowing the learner and the techniques of knowing him well. The topics include – the innate abilities and capacities of the individuals, individual differences and their measurements, the overt, covert, conscious as well as unconscious behavior of the learner, the characteristics of his growth and development and each stage beginning from childhood to adulthood.

The Learning Experiences

Educational Psychology helps in deciding what learning experiences are desirable, at what stage of the growth and development of the learner, so that these experiences can be acquired with a greater ease and satisfaction.



Learning process

After knowing the learner and deciding what learning experiences are to be provided, Educational Psychology moves on to the laws, principles and theories of learning. Other items in the learning process are remembering and forgetting, perceiving, concept formation, thinking and reasoning, problem solving, transfer of learning, ways and means of effective learning etc.

Learning Situation or Environment

Here we deal with the environmental factors and learning situations which come midway between the learner and the teacher. Topics like classroom climate and group dynamics, techniques and aids that facilitate learning and evaluation, techniques and practices, guidance and counselling etc. For the smooth functioning of the teaching-learning process.

Teacher

The teacher is a potent force in any scheme of teaching and learning process. It discusses the role of the teacher. It emphasizes the need of 'knowing thyself' for a teacher to play his role properly in the process of education. His conflicts, motivation. Anxiety, adjustment, level of aspiration etc. It throws light on the essential personality traits, interests, aptitudes, the characteristics of effective teaching etc. so as to inspire him for becoming a successful teacher.

Though the entire scope of Educational Psychology is included in the above mentioned five key-factors, it may be further expanded by adding the following:

- It studies Human Behavior in educational situations. Psychology is the study of behavior, and education deals with the modification of behavior; hence, educational psychology pervades the whole field of education.
- It studies the Growth and Development of the child. How a child passes through the various stages of growth and what are the characteristics of each stage are included in the study of educational psychology.
- To what extent Heredity and Environment contribute towards the growth of the individual, and how this knowledge can be made use of for bringing about the optimum development of the child; form a salient feature of the scope of educational psychology.
- Educational psychology deals with the Nature and Development of the Personality of an individual. In fact, education has been defined as the all-round development of the personality of an individual; personality development also implies a well-adjusted personality.

- It studies Individual Difference: Every individual differs from every other individual. It is one of the fundamental facts of human nature which have been brought to light by educational psychology. This one fact has revolutionaries the concept and process of **education**.
- It studies the nature Intelligence and its Measurement. This is of utmost importance for a teacher.
- It Provides Guidance and Counselling: Education is nothing but providing guidance to the growing child.

We can conclude by saying that Educational Psychology is narrower in scope than general psychology. While general psychology deals with the behavior of the individual in a general way, educational psychology is concerned with the behavior of the learner in an educational setting.

Keyword

Education is the process of facilitating learning, or the acquisition of knowledge, skills, values, beliefs, and habits.

7.2. METHODS OF STUDYING PSYCHOLOGY OF LEARNING

Educational psychology—being a behavioral science— uses scientific methods of behavioral research. The commonest of all the methods is observation. Educational psychology uses observation not as common-sense view sees it. It uses systematic observation which equates methods with research in the educational field and is also scientific in character. As such, the subject matter of educational psychology is human behavior and every one can observe behavior. But educational psychology avoids subjective observation and employs the method objectively to evaluate behavior and its modification which is a product of learning. An educational psychologist adopts systematic, objective and investigative measures in assessing the effects of learning in the pupils.



Such in-depth scientific probes are necessary if we are to explain, predict and control behavior with any acceptable degree of accuracy. This is in short, scientific observation.

Educational research depends on the use of scientific method which need to follow five steps for its investigation. These steps are:

- Formulating the problem,
- Stating the hypotheses,
- Collection of data from respective fields,
- Testing the hypotheses,
- Interpreting and reporting the findings, and
- Applying the findings.

Researches in educational psychology can be conducted in the classroom, in the laboratory or in the outer field as is necessary.

Laboratory research has sometimes been referred to as pure research, while that conducted in the classroom is known as applied research.

The use of scientific methods in educational psychology has produced profound changes in organization and management of school, curriculum, syllabus making, learning materials, audio-visual aids, effective lesson planning and instruction methods.

A number of scientific teaching methods have been tried out in the classroom researches to get effectiveness in teaching e.g. discovery method, the learner- centered method, the Socratic method, the project method, the laboratory method or the tutorial method—based upon various conditions with various subject matters and with various kinds of students.

7.2.1. Introspection Method

Students at many times, when you have experienced an emotion like anger or fear you begin to think reasons for the state of yours.

You say, “Why have I been annoyed over this or that? Why been afraid of such things” The analysis of your emotional state may take place simultaneously with the emotion or it may be done after the emotional state is over. In whatever manner it is done, it gives you an understanding, though rudimentary of your mind. This method of probing into your mental processes is a method of introduction utilized by psychologists in a much-refined manner.

Meaning of Introspection

Introduction is a method of self-observation. The word 'Introspection is made up of two Latin words. "Intro" meaning within and "Aspection" meaning looking. Hence it is a method where an individual is looking within one self. Angel considered it as "looking inward". In Introduction the individual peeps into his own mental state and observes his own mental processes.

Stout considers that 'to introspect is to attend to the working of one's own mind in a systematic way'.



Introspection method is one of the oldest methods to collect data about the conscious experiences of the subject. It is a process of self – examination where one perceives, analyses and reports one's own feelings. Let us learn this process with the help of an example, suppose you are happy and in the state of happiness you look within yourself. It is said you are introspecting your own mental feelings and examining what is going on in your mental process in the state of happiness. Similarly, you may introspect in state of anger or fear; etc. Introspection is also defined as the notice, which the mind takes of itself.

There are three clear stages in introspection.

1. During the observation of external object, the person beings to ponder over his own mental states. For example, while listening to the music, which is to him pleasant or unpleasant he starts thinking about his own mental state.
2. The person begins to question the working of the own mind. He thinks and analyses: Why has he said such and such thing? Why as he talked in a particular manner? And so on.
3. He tries to frame the laws and conditions of mental processes: He thinks in terms of improvement of his reasoning or the control of his emotional stages. This stage of that of the scientific methods for the advancement of our scientific knowledge.

Characteristics of Introspection

Introspection being **self- observation** has the following characteristics:

- The subject gets direct, immediate and intuitive knowledge about the mind.
- The subject has actually to observe his own mental processes. He cannot speculate about them.

Introduction method was widely used in the past. Its use in modern time is being questioned. It is considered unscientific and not in keeping with psychology which has recently emerged out as a positive science however we may say that it is still being used by psychologists and though its supremacy is undetermined, yet it is not totally discarded.

Keyword

Self-observation is a powerful method not only of self-study but also of self-change.

Merits of Introspection Method

- It is the cheapest and most economical method. We do not need any apparatus or laboratory for its use.
- This method can be used anytime and anywhere you can introspect while walking, traveling, sitting on a bed and so on.
- It is the easiest method and is readily available to the individual.
- The introspection data are first hand as the person himself examines his own activities.
- Introspection has generated research which gradually led to the development of more objective methods.
- It is still used in all experimental investigation.
- It is the only method with the help of which and individual can know his emotions and feelings.

Limitations of Introspection Methods

- In introspection, one needs to observe or examine one's mental processes carefully in the form of thoughts, feeling and sensation. The state of one's mental processes is continuously changing therefore when one concentrates on introspecting a particular phase of one's mental

activity that phase passes off. For example when you get angry at something and afterwards sit down to introspect calmly the state of anger is sure to have passed off and so what you try to observe is not what is happening at that time with yourself but what had happened sometime before.

- The data collected by introspection cannot be verified. An individual may not pass through the same mental state again. There is no independent way of checking the data.
- The data collected by introspection lacks validity and reliability. It is impossible to acquire validity and exactness in self-observation of one's own mental processes.
- The data collected by introspection is highly subjective. It has danger of being biased and influenced by preconceptions of the individual.
- The observer and the observed are the same. Hence there is ample scope for the individual to lie deliberately and hide the facts to mislead.
- Introspection cannot be applied to children, animals and abnormal people. It requires highly trained and skilled workers to introspect.
- Introspection is logically defective because one and the same person is the experiencer and observer. It is not possible for the same individual to act as an experiencer as well as an observer.

7.2.2. Observation Method

Students observe so many things in nature. We also observe the action and behavior of others and form our own notions about these persons. We look at other persons, listen to their talks and try to infer what they mean. We try to infer the characteristics, motivations, feelings and intentions of others on the basis of these observations. So let us study about the observation method employed by psychologists in detail.



With the development of psychology as an objective science of learning behavior, the method of introspection was replaced by careful observation of human and animal behavior to collect data by research workers.

In introspection we can observe the mental process of ourselves only, but in observation, we observe the mental processes of others. Hence Observation is the most commonly used for the study of human behavior.

Meaning of Observation

Observation literally means looking outside oneself. Facts are collected by observing overt behavior of the individual in order to locate underlying problem and to study developmental trends of different types. The overt behavior is the manifestation of court conditions within the individual. The study of overt behavior gives indirectly the clue to the mental condition of the individual. Observation means 'perceiving the behavior as it is.' In the words of Goods, "Observation deals with the overt behavior of persons in appropriate situations." Observation has been defined as "Measurements without instruments." For example students in classroom have been labeled as good, fair or poor in achievement and lazy or diligent in study etc. on the basis of observation, observation is indirect approach to study the mental processes of others through observing their external behavior. For example if someone frowns, howls, grinds his teeth, closes his fists, you would say that the person is angry by only observing these external signs of his behavior. In the process of observation, following four steps are generally required:

Observation of Behavior

The first step involved in the method of observation is directly perceiving or observing the behavior of individuals under study. For example, if we want to observe the social behavior of children we can observe it when they assemble and play.

Recording the Behavior Observed

The observation should be carefully and immediately noted and recorded. Minimum time should be allowed to pass between happening and recording. It will make the observation more objective.



Analysis and Interpretation of Behavior

When the notes of behavior observed are completed, they are analyzed objectively and scientifically in order to interpret the behavior patterns.

Generalization

On the basis of analysis and interpretation of the data collected with the help of observation method, it is possible to make certain generalization. Social –development and behavior of children have been described by child Psychologists on the basis of generalization based upon analysis and interpretation of the data gathered through the observation method.

Types of Observation

There are different ways in which observation can be done, so let us see the different types of observation.

Natural Observation

In natural observation we observe the specific behavioral characteristics of children in natural setting. Subject do not become conscious of the fact that their behavior is being observed by someone.

Participant Observation

Here the observer becomes the part of the group, which he wants to observe. It discloses the minute and hidden facts.

Non-Participant Observation

Here the observer observes in such a position, which is least disturbing to the subject under study, the specific behavior is observed in natural setting without subjects getting conscious that they are observed by someone. Non-participant observation permits the use of recording instruments.

Structure Observation

Here the observer in relevance sets up a form and categories in terms of which he wishes to analyze the problem. The observer always keeps in view

- A frame of reference
- Time units.
- Limits of an act

Unstructured Observation

This is also called as uncontrolled or free observation. It is mainly associated with participant observation in which the observer assumes the role of a member of the group to be observed. Here the individual is observed when he is in his class, playground or when he is moving about with his friends and class follows without knowing that he is being observed.



Merits of Observation Method

Observation is very useful method to study child and his behavior. Student's observation method, being commonly used method psychology has following merits:

- Being a record of actual behavior of the child, it is more reliable and objective.
- It is an excellent source of information about what actually happens in classroom.
- It is a study of an individual in a natural situation and is therefore more useful than the restricted study in a test situation.
- The method can be used with children of all ages. Younger the child, the easiest it is to observe him. This method has been found very useful with shy children.

- it can be used in every situation, physical- activities, workshop and classroom situations as well.
- It is adaptable both to the individuals and the groups.

Limitations

Although observation is regarded as an efficient method for psychological studies, students yet it suffers from the following drawbacks limitations:

- There is great scope for personal prejudices and bias of the observer. The observers interest, values can distort observation.
- Records may not be written with hundred percent accuracy as the observations are recorded after the actions are observed. There is some time lag.
- The observer may get only a small sample of study behavior. It is very difficult to observe everything that the student does or says. As far as possible observation should be made from several events.
- It reveals the overt behavior only- behavior that is expressed and not that is within.
- It lacks **reliability** as each natural situation can occur only once.

Keyword

Reliability is an important construct both in research and practice. Reliability in research shares much with reliability, repeatability and reproducibility.

Essential Guidelines for Making Good Observation

Students looking at the drawbacks an observation method has psychologists have suggested various guidelines to be followed for making good observation. So let us find out which are these essential guidelines for making good observation.

- Observe one individual at a time. It is desirable to focus attention on just one individual at a time in order to collect comprehensive data.
- Have a specific criteria for making observations. The purpose of making observation should be clear to the observe before he or she begins to observe so that the essential characteristics or the behavior of the person fulfilling the purpose can be noted.
- Observations should be made over a period of time. To have a real estimate of the true behavior of a person it



Remember

The observed facts must be recorded instantly, that is just at the time of their occurrence otherwise the observer may forget some of the facts and the recording may not be accurate.

should be observed as frequently as possible. A single observation will not be sufficient to tell us that this is the characteristic of the individual.

- The observations should be made in differing and natural situations in natural settings to increase its validity. For example, a pupil's behavior in the classroom may not be typical of him; therefore he should be observed in variety of settings to know the behavior most typical of the person.
- Observe the pupil in the context of the total situation.
- It is better to have two or more observers.
- Observations should be made under favorable conditions. The observer should be in position to clearly observe what he or she is observing. There should not be any undue distraction or disturbances. One should also have an attitude free from any biases or prejudices against the individual being observed.
- Data from observations should be integrated with other data. While arriving at the final conclusion about the individual, one should put together all that we know about the individual from the other sources then we can give an integrated and comprehensive picture of the individual.

These precautions must be borne in mind in order to have reliable observations.

7.2.3. Experimental Methods

Till now, we saw introspection method and observation method used in psychology of learning. But these methods lack scientific objectivity and validity. Experimental method is the most scientific and objective method of studying behavior. It is the method, which is responsible for assigning the status of Science to psychology. So let us learn more about this Experimental method.

Here the emphasis is on experimentation. Experimentation is where the investigator controls the educative factors to which a group of children are subjected during the period of inquiry and observes the resulting achievement.



Basic Concepts /Essentials of Experimental Method

Experimental research is the description and analysis of what will be, or what will occur under carefully controlled conditions.

- Experiments are always conducted in laboratory. Hence the laboratory is essential.
- Psychological experiments performed in this method essentially require two people; the experiment or group of experimenters who perform experiment and the other is the subject or subjects on whom the experiment is performed.
- The key factor in this method is the controlling of conditions or variables. The term 'Variable' means that which can be varied or changed. By controlling. The variables we can eliminate the irrelevant conditions and isolate the relevant ones. We thus become able to observe the causal relationship between the phenomena keeping all other conditions almost constant. Let us understand this by an example. If we try to study the effect of intelligence on academic by the experimental method, we will need to determine the causative relation between the two phenomena (variables)- i.e. intelligence and academic achievement. One of these variables, the effect of which we want to study will be called the independent Variable and the other the dependent variable. Thus the independent variable stands for cause and the dependent variable is the effect of the cause. Other conditions like study-habits, sex, socio-economic conditions, parental education, home environment, health past learning, memory etc. which exercise a good impact upon one's achievement besides one's **intelligence** are termed "intervening variables". In Experimentation, all such intervening variables are to be controlled, i.e. they are to be made constant or equalized and the effect of only one independent variable e.g. intelligence in present case, on one or more dependent variable is studied. The intervening variables made constant, are hence called as controlled variables.

Keyword

Intelligence has been defined in many different ways including as one's capacity for logic, understanding, self-awareness, learning, emotional knowledge, planning, creativity and problem solving.





Steps in the Experimental Method

Students we have describe above, the basic concepts of experimental method. Here we will describe different steps, which are to be followed in conducting a typical experiment. These steps are as follows.

Raising a Problem

In any experiment the first steps is to identify a problem. For example it has been observed that the students cheat in the examinations. To stop it many recommend strict supervision.

But it has also been seen that even when there is strict supervision there is cheating, hence there crops up the problem of cheating under strict supervision or relaxed supervision. This problem may lead to experimentation.

Formulation of a Hypothesis

The next step in experimental method is the formulation of a hypothesis that “Strict supervision may lead to less copying in the examination as compared to the relaxed supervision. “This hypothesis is now to be tested by experiment.

Making a Distinction between Independent and Dependent Variables

In the example given above the cheating behavior of the students will be dependent variable while the nature of supervision will be the independent variable. It is because by changing the supervision the cheating behavior is expected change. In the present experiment we manipulate the conditions of supervision in order to discover the ways in which they determine the dependent variable that is the cheating behavior. We may observe the effect of supervision in the experimental situation and also the effect of relaxed supervision under similar conditions and with the same group of students.

Controlling the Situational Variables

The experiment will not give valid results unless the situational variables are controlled. If the experiment is conducted with different set of students who have been trained in a different manner or have a different value system then the results will be different in comparison to those who have been subjected to experiment earlier. Similarly the other conditions like the person who is supervising the place of supervision etc. have to be controlled. This means that all those conditions, which might affect the dependent variable, are to be controlled. Since in any experiment there are numerous conditions which are needed to be controlled it is many a time difficult to do so. Hence we take recourse to various types of experimental designs, which we have described earlier.

Analysis of the Results

Once the experiment is concluded the results are analyzed. In our example we may apply simple percentages to find out in which type of supervision a higher percentage of students have copied. Many a times we apply more sophisticated statistics to analyze the results.

Verification of Hypothesis

The last step in the experimental method is the verification of the hypothesis, which we have earlier framed. The result of the experiment exhibits whether the hypothesis which we have earlier framed. The result of the experiment exhibits whether the hypothesis is accepted or refuted. We may find that strict supervision leads to less copying. In that case we may conclude that our hypothesis is accepted. If the results are otherwise then our conclusion will be that the hypothesis is refuted.

Experimental Designs

Students Experimental method is the most precise, planned, systematic and controlled method. It uses a systematic procedure called as experimental design. The term experimental design has two different meanings one is the experimental design which represents the six basic steps we have referred above? Followed in an experiment. The second meaning of experimental design and selecting an appropriate statistical procedure. Experimental design provides important guidelines to the researcher to carry out his research study. Experimental design ensures adequate controls by avoiding irrelevant causes of variability. The layout of a design depends on the type of the problem the investigator wants to investigate. Students you should know that, no one design solves all the problems of a research study.

A variety of experimental designs have been developed by researchers in recent years. These designs differ as these are dependent upon:

- the nature of problem
- the situation
- the subjects and their availability.

Let us study some of the experimental designs used while employing Experiment method. Following are the samples of experimental designs.

One Group Design

One group posttest design: This type of design is the simplest ones. It is commonly called pre-experimental design. Students in such type of experiment no formal comparison is possible for there is no second group with comparison can be made. Let us illustrate with an example: suppose a teacher treats 10 students who are addicted to smoking in a period of three months. At the end of the period six students give up smoking. Such type of designs do not control any of the sources of invalidity.

One group pretest-posttest design: This is also simple design and is considered to be a rather poor design though better than one group posttest design. In this design the experimenter first tests a group on some aspects of behavior and then gives special treatment. He statistically analyses the data and calculates the difference between the pretest and posttest scores of the group.

The paradigm of the design is as follows:

Pretest	Independent variable	Posttest
T_1	X	T_2

Example, suppose in the beginning of the semester, we administer test of educational psychology to students of MA education and then we teach them the subject throughout the semester. At the end of the semester we administer posttest (T_2), and find out the difference between the scores on the initial and final tests.

Two Group Designs

Researches in education and psychology have often been criticized of being loosely controlled. In recent year more rigorous designs have been evolved by using statistics to make researches more scientific more scientific and objective.



Did You Know?

Later, psychologist and philosopher William James made significant contributions to the field. His seminal 1899 text *Talks to Teachers on Psychology* is considered the first textbook on educational psychology. Around this same period, French psychologist Alfred Binet was developing his famous IQ tests.

Generally researchers use two parallel group techniques to see the effects of an independent variable on some dependent variable. Two groups are equated on the basis of significant variable. One group called experimental and the other is called control group. The experimental group is subjected to a certain experience or to a specific treatment whereas the control group is not given any type of special treatment. After providing special treatment to the experimental group, both the groups are administered the same final test. The scores are statistically compared and conclusions are drawn as regards the effect of special treatment on the experimental group.

1. *Randomized Control Group Pretest Posttest Design*: The researcher in this design follows the procedure as given below.
 - He selects subject by random method.
 - Assigns subjects to groups and X (Treatment) to groups by random method.
 - Tests the Ss on the dependent variable.
 - Keep all conditions the same for both the groups except for exposing the experimental S but not the control group to the independent variable for a specific time.
 - Test the 'Ss' on the dependent variable.
 - Finds the difference between the two.
 - Compares the results to see whether the application of 'X' (treatment) caused a change in the experimental group.

- Applies an appropriate statistical procedure.
- 2. *Matched two group design.* A matched two group design is a modification of the totally randomized two group design described above. In this design, both groups are matched in terms of some variable, the experimenter feels he would influence the dependent variable. Suppose we want to test the retention of two types of words closely associated and disassociated. We believe that I. Q. Will influence how well a person can retain words so we match the two groups on I. Q. Let us be more concrete to understand this point.

Multi group Design with one Independent Variable (ANOVAR)

Two group paradigms are most common in education and psychology but events in nature do not always conveniently order into two groups. Sometimes the investigator has to compare the effect of different values of some variable or has to see the effect of several alternative variables on more than two groups. The procedure for carrying out one way analysis of variance (ANOVAR) is the same as for two group design. The distinguishing feature between the two types of investigation is the type of statistical analysis used.

Factorial Design

Factorial design is employed where more than one independent variables are involved in the investigation. Factorial designs may involves several factors.

Small N Design

We have briefly mentioned various experimental designs which are termed as large N group designs. In all large N group designs, the number of subject in classroom situation. In many instances, the psychologist or teacher is faced with situations in which large N is not possible, for example delinquency, problem of indiscipline etc. with the introduction of statistics in psychology, it is possible to conduct scientific research on small N group.

Merits of Experimental Method

Experimental method being most precise and scientific has following merits:

- Experimental method is the most systematic method or getting reliable data.
- Experimental method enables accurate observations due to controlled conditions.
- It allows us to establish cause effect relationship between different phenomena.

- The results obtained are valid and reliable.
- The findings of the experimental method are verifiable by other experiments under identical conditions.
- It helps to protect from the subjective opinions. Hence it provides objective information about the problem.
- it provides adequate information about the problem.
- In experimental method experiments are conducted under vigorously controlled conditions. The experimenter can control the application and withdrawal of independent variables.
- Experimental method increases ones knowledge or psychological facts in child psychology, social and abnormal psychology. It is rightly said the experimental method has made psychology a science.

Demerits of the Method

Experimental method suffers from various following demerits:

- Experimental method is costly and time consuming method as it requires a laboratory and apparatus to conduct it properly.
- Experiments are conducted in artificially determined pattern of behavior. In real life situation it is quite different.
- It needs specialized knowledge and therefore every teacher cannot be expected to conduct the experiment.
- The scope is limited. All problems of psychology cannot be studied by this method as we cannot perform experiments for all the problems that may come up in the diverse subject matter of psychology.
- Accurate measurements in case of human beings are never possible.
- It is difficult to always control the independent variable therefore it is not possible to create desired conditions in laboratory.
- It is not possible to reach certainty in matters of social science s including educational psychology.

ROLE MODEL

JOHANN HERBART (1776–1841): FOUNDING FIGURE OF MODERN PSYCHOLOGY AND EDUCATIONAL THEORY

German philosopher Johann Friedrich Herbart is the founder of the pedagogical theory that bears his name, which eventually laid the groundwork for teacher education as a university enterprise in the United States and elsewhere. Herbart was born in Oldenburg, Germany, the only child of a gifted and strong-willed mother and a father whose attention was devoted to his legal practice. Herbart was tutored at home until he entered the gymnasium at the age of twelve, from which he went on as valedictorian to the University of Jena at a time when such stellar German intellectuals as Johann Gottfried Herder, Johann Gottlieb Fichte, Johann Wolfgang von Goethe, and Friedrich von Schiller were associated with that institution. It was apparently Schiller's *Briefe über die ästhetische Erziehung des Menschen* (Letters concerning the aesthetic education of man), then in progress in 1795, that influenced Herbart to devote himself to philosophy and education.



Career

In 1797 and almost against his will Herbart was persuaded by his mother to accept a position as tutor to the sons of the regional governor of Interlaken in Switzerland. During his three years of work with these three very different boys, aged fourteen, ten, and eight when their relationship began, Herbart confronted in earnest the problems of teaching children, reporting monthly to their father on his methods and the results achieved. During his Swiss sojourn, he was also influenced by the thinking of Johann Heinrich Pestalozzi, whose school at Burgdorf he visited and whose ideas he systematized in 1802 in his *Pestalozzis Idee eines ABC der Anschauung untersucht und wissenschaftlich ausgeführt* (Pestalozzi's idea of an ABC of sense impression investigated and laid out scientifically).

Returning to Germany in 1800, Herbart completed his remaining doctoral work at the University of Göttingen, receiving

his degree in 1802. He remained there as a lecturer in both philosophy and pedagogy until he received an appointment as professor of philosophy in 1805. Chief works related to education from his Göttingen period are *Über die ästhetische Darstellung der Welt als das Hauptgeschäft der Erziehung* (On the aesthetic representation of the world as the main concern of education), published in 1804, and *Allgemeine Pädagogik aus dem Zweck der Erziehung abgeleitet* (General pedagogy deduced from the aim of education), published in 1806. He also published on metaphysics and psychology.

In 1809 Herbart accepted the chair of pedagogy and philosophy at the University of Königsberg, formerly occupied by Immanuel Kant, and began a period of great productivity, ranging across the full spectrum of philosophical investigations. In the midst of work in metaphysics and psychology he also organized a pedagogical seminar for advanced students, attached to a demonstration school in which he and his students attempted to implement his pedagogical ideas, which were then critiqued and revised through the seminar discussions. This seminar, widely imitated by his later disciplines in Germany and elsewhere, was a first step toward trying to approach educational work scientifically.

Herbart left Königsberg in 1833, apparently because of disagreements with the Prussian government over his educational views in relation to state and church power. He returned to the University of Göttingen, where he remained for the last eight years of his life, producing his *Umriss von pädagogischen Vorlesungen* (Outlines of pedagogical lectures) in 1835, in which he attempted to connect more directly his early pedagogical theory and his later psychological work. He gave his last lecture two days before he died of a stroke on August 14, 1841.

Contribution

The legacy of Herbart to education was mediated through two major German disciples, Karl Volkmar Stoy and Tuiskon Ziller, who sought to implement his theories with varying degrees of alteration. Stoy was inspired by Herbart's early lectures in philosophy and pedagogy at the University of Göttingen and, upon qualifying as a lecturer at the University of Jena in 1842, took charge of a local private school that soon attracted students from all over Europe. In 1845 he was appointed professor at the university, then he moved in 1865 to the University of Heidelberg, establishing at nearby Bieltz a normal school based upon Herbartian principles. He returned to Jena in 1874 and established there the pedagogical seminar that would be taken over upon his death in 1885 by Wilhelm Rein, and brought to international renown by the end of the nineteenth century both for its practices and for its incorporation of teacher education into the university. It was there that the majority of Herbartians from other countries, including the United States, developed their ideas.



Rein had studied with the second major disciple of Herbart, Ziller, who had pursued a career in law, being appointed a lecturer at the University of Leipzig in 1853. Like Herbart, a period of teaching during his doctoral work led Ziller to investigate educational questions, and his first works, published in 1856 and 1857, were direct extensions and applications of Herbart's ideas. He established at the University of Leipzig a pedagogical seminar and practice school modeled after that of Herbart at Königsberg. Ziller was instrumental in founding the Verein für wissenschaftliche Pädagogik (Society for Scientific Pedagogy) in 1868, which published a quarterly that disseminated Herbartian ideas, and spread all over Germany as local clubs for the study of Herbartian approaches to educational problems. Ziller wrote *Grundlegung zur Lehre vom erziehenden Unterricht* (Basis of the doctrine of instruction as a moral force), published in 1865, and his *Vorlesungen über allgemeine Pädagogik* (Lectures on general pedagogy), published in 1876, five years before his death. These works provided the Herbartian legacy that Wilhelm Rein as a student of Ziller at Leipzig brought to his work when Rein resuscitated the pedagogical seminar at the University of Jena in 1886, a year after Stoy's death.

The German tradition of Herbartianism distinguishes between the Stoy and Ziller schools, the former being considered truer to Herbart's own ideas and the latter an extension of them more or less justified. Scholarship on both schools continues, centered at the University of Jena since its international conference, *Der Herbartianismus: die vergessene Wissenschaftsgeschichte* (Herbartianism: the forgotten history of a science), in 1997. The investigation of, or even attention to, the fine points of Herbartian theory, was notably lacking in American Herbartianism, although the central ideas remained intact. First and foremost was the development of moral character as the central aim of education. Second was the adoption of Herbart's notion of apperception as the dynamic of learning: the ideas already configured in the mind are stimulated into activity by new information and either integrate that new information through meaningful connections or let it pass if such connections are not made. The essential unity of the ideas present in the mind is reflected in the theory of concentration as a principle for organizing the curriculum, which in relating several subjects to one another in the course of instruction also nurtures the many-faceted interest that is essential to full intellectual and thus spiritual development. Ziller added to these basic ideas the notion of the cultural-historical epochs as a curriculum principle that responds to the recapitulation in the individual of the psychic and cultural development of his group.

Rein and others developed a full eight-year course of study built upon this principle, which was translated and adapted to American use by Charles A. McMurry, one of the major disseminators of Herbartianism in the United States and a student with Rein. Charles De Garmo, on the other hand, brought back to the United States the more conservative Herbartianism of Stoy, whose ideas were mirrored in the secondary schools of the Franckische Stiftungen in Halle established for orphans by August Hermann Francke in 1695 and under the directorship of Otto Frick during De Garmo's doctoral study at the University of Halle. De Garmo also provided for American readers the most thorough survey of the German Herbartians and Herbartian concepts in his *Herbart*

and the Herbartians, published in 1895. It joined a substantial number of translations of work by Herbart and various German Herbartians made available in the 1890s.

American Herbartianism enjoyed a brief burst of national attention in the 1890s because of attempts by U.S. Commissioner of Education William Torrey Harris to stop its spread and the formation of the National Herbart Society in 1895 in response to those efforts. Within seven years the National Herbart Society had become the National Society for the Study of Education and its yearbooks had lost any obvious association with Herbartianism. Within that period at least eight universities were offering heavily Herbartian programs, and the demand for American Herbartian texts, particularly those of Charles McMurry, lasted until nearly 1930. Integrated curriculum, elementary school history teaching, and constructivist learning theory are part of the contemporary legacy of Herbartianism.



SUMMARY

- Educational psychology involves the study of how people learn, including topics such as student outcomes, the instructional process, individual differences in learning, gifted learners, and learning disabilities.
- Educational psychology is a relatively young subfield that has experienced a tremendous amount of growth in recent years.
- The general aims of educational psychology, as stated before, are understanding, predicting and controlling behavior in learning situations.
- Educational psychology—being a behavioral science— uses scientific methods of behavioral research.
- In introspection, one needs to observe or examine one's mental processes carefully in the form of thoughts, feeling and sensation. The state of one's mental processes is continuously changing therefore when one concentrates on introspecting a particular phase of one's mental activity that phase passes off.
- With the development of psychology as an objective science of learning behavior, the method of introspection was replaced by careful observation of human and animal behavior to collect data by research workers.
- In introspection we can observe the mental process of ourselves only, but in observation, we observe the mental processes of others. Hence Observation is the most commonly used for the study of human behavior.



MULTIPLE CHOICE QUESTIONS

1. **The primary aim of educational psychology is**
 - a. To contribute to an understanding of sound educational practices.
 - b. To provide the teacher with a greater appreciation of his role in the education of the child.
 - c. To provide the academic background essential for effective teaching.
 - d. To provide a theoretical framework for educational research.
2. **According to Psychology, all education is**
 - a. Deliberate.
 - b. Functional.
 - c. Purposive.
 - d. Self -education.
3. **General Psychology and Educational Psychology are dissimilar, in that educational psychology**
 - a. Selects and emphasize certain data from general field.
 - b. Is concerned with the child and not with the adult.
 - c. Is concerned with the various aspects of learning.
 - d. Deals only with the applications and not with the theory.
4. **The major contribution educational psychology might be expected to make towards modern education lies in area of**
 - a. A clarification of the goals of modern education.
 - b. A re-evaluation of the principles of progressivism.
 - c. A reconsideration of educational experiences from the stand point of their contribution to pupil growth.
 - d. A refinement of the research techniques through which educational problems might be solved.
5. **Which method has made educational psychology a science?**
 - a. Observation method
 - b. Clinical method
 - c. Survey method
 - d. Experimental method.
6. **The role of teacher in inquiry-based learning is of**
 - a. instructor
 - b. facilitator

- c. delegator
 - d. formal authority
7. In direct instruction method or lecture method the teacher is considered as
- a. partner
 - b. facilitator
 - c. delegator
 - d. formal authority
8. In cooperative learning method, the role of teacher is of
- a. facilitator
 - b. delegator
 - c. facilitator and delegator
 - d. delegator and formal authority
9. In cooperative method teachers act as a delegator means the teacher act as a/an to the students.
- a. resource
 - b. partner
 - c. evaluator
 - d. foster
10. Introspection as a method stands rejected by
- a. Functional school.
 - b. Behaviorists.
 - c. Psychoanalysts.
 - d. Gesralt.



REVIEW QUESTIONS

1. What is educational psychology?
2. Write the major perspectives in educational psychology.
3. Explain the aims and objectives of educational psychology.
4. Describe introspection method along with its merits and demerits.
5. Why is experimental method considered excellent method of collecting data?

Answer to Multiple Choice Questions

- | | | | | | |
|--------|--------|--------|---------|--------|--------|
| 1. (a) | 2. (d) | 3. (a) | 4. (d) | 5. (d) | 6. (b) |
| 7. (d) | 8. (c) | 9. (a) | 10. (b) | | |



REFERENCES

1. "The History of Educational Psychology". Cortland.edu. Retrieved May 5, 2016.
2. Alberto, P. & Troutman, A. (2003) *Applied behavior analysis for teachers* (6th ed.). Columbus, OH, USA: Prentice-Hall-Merrill.
3. Cameron, J.; Pierce, W.D.; Banko, K.M. & Gear, A. (2005). Achievement-based rewards and intrinsic motivation: A test of cognitive mediators. *Journal of Educational Psychology*, 97, 641–55.
4. Carney, R.N. & Levin, J.R. (2000). Fading mnemonic memories: Here's looking anew, again! *Contemporary Educational Psychology*, 25, 499–508.
5. Casini, Lorenzo (2010). "Quid sit anima": Juan Luis Vives on the soul and its relation to the body". *Renaissance Studies*, 24, 496- 517
6. Crocker, Laura D.; Heller, Wendy; Warren, Stacie L.; O'Hare, Aminda J.; Infantolino, Zachary P.; Miller, Gregory A. (2013-06-11). "Relationships among cognition, emotion, and motivation: implications for intervention and neuroplasticity in psychopathology". *Frontiers in Human Neuroscience*. 7: 261. doi:10.3389/fnhum.2013.00261. ISSN 1662-5161. PMC 3678097. PMID 23781184.
7. Day, L.; Hanson, K.; Maltby, J.; Proctor, C.L. & Wood, A.M. (in press). Hope uniquely predicts objective academic achievement above intelligence, personality, and previous academic achievement. *Journal of Research in Personality*.
8. Farrell, P. (2010). School psychology: Learning lessons from history and moving forward. *School Psychology International*, 31(6), 581-598.
9. Hergenhahn, B.R. (2009). *An introduction to the history of psychology*. Belmont, CA: Wadsworth.
10. Horlacher, Rebekka (2011). Schooling as a means of popular education: Pestalozzi's method as a popular education experiment. *"Paedagogica Historica"*: 47, 65-75
11. Kalyuga, S.; Chandler, P.; Tuovinen, J. & Sweller, J. (2001). When problem solving is superior to studying worked examples. *Journal of Educational Psychology*, 93, 579–88.
12. Lucas, J.L.; Blazek, M.A. & Riley, A.B. (2005). The lack of representation of educational psychology and school psychology in introductory psychology textbooks. *Educational Psychology*, 25, 347–51.
13. Mayer, R.E. (2001). *Multimedia learning*. Cambridge, UK: Cambridge University Press.
14. McGoey, K.E. & DuPaul, G.J. (2000) Token reinforcement and response cost procedures: Reducing the disruptive behavior of preschool children with attention-deficit/hyperactivity disorder. *School Psychology Quarterly*, 15, 330–43.
15. Pierce, W.D. & Cameron, J. (2002). A summary of the effects of reward contingencies on interest and performance. *The Behavior Analyst Today*, 3, 222–26. ABO

16. Theodore, L.A.; Bray, M.A.; Kehle, T.J. & Jenson, W.R. (2001) Randomization of group contingencies and reinforcers to reduce classroom disruptive behavior. *Journal of School Psychology*, 39, 267–77.
17. Toomas Lott (2011). “Plato on the Rationality of Belief, *Trames*”, 15, 339-364.
18. Woolfolk, A.E.; Winne, P.H. & Perry, N.E. (2006). *Educational Psychology* (3rd Canadian ed.). Toronto, Canada: Pearson.
19. Zimmerman, B.J. & Schunk, D.H. (Eds.) (2003). *Educational psychology: A century of contributions*. Mahwah, NJ, US: Erlbaum.



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Introduction to Education Studies

Education is one of the key components that bring growth and progress into society. The more people in a society are educated, the more they can provide a beneficial contribution to their environment. This fact increases the importance of education in society and has resulted in governments investing in education more than ever before. Having education in an area helps people think, feel, and behave in a way that contributes to their success, and improves not only their personal satisfaction but also their community. In addition, education develops human personality, thoughts, dealing with others and prepares people for life experiences. Securing a higher income job through education is only possible when people realize the importance of literacy and education for society. Modern society has modern problems and by developing problem-solving skills, the educated sector can solve many human issues. The meaning and importance of education in society only become clear when we see economic growth.

This book is organized into seven chapters. The book presents an introduction to theory and practices in educational psychology. Topics include learning theory, learner characteristics, intelligence, creativity, motivation, measurement and evaluation, and models of teaching appropriate for diverse learners from early childhood through young adulthood.