Chapter 1

Role and Relevance of Information Technology in Music Education

1.1 Education –Definition, Aims and Objectives

The medium of any kind of distribution and proliferation of knowledge is known as education. No knowledge becomes a true knowledge until it enters into the recipient’s innermost self and becomes a part of his personality. The knowledge is derived through hard practice. Knowledge and education are interconnected to each other. The acquisition of knowledge in any subject is derived from faith and curiosity. There should be a genuine faith towards the master (Guru). Continues practice and dedication should also be made part of this process. The realization of self peace and satisfaction, instead of just getting knowledge, is known as Education.

Education is the foundation of human’s all-round development through, which his personality flourishes. Education refines the innate and inherent strengths of a person and resolves his defective strengths and powers and makes him adequate. Education builds the human personality after enhancing his intrinsic qualities. Education is capable of inditing one such person which desires the welfare of his own, along with the welfare of society, Culture, country and the nation. The field of education is infinite and limitless which contains in itself multiple meanings such as learning, developing, direction endorsing (pathfinder) etc. Wisdom is the basis to receive the best education.

“The soul of Indian theory of education lies in the teachings and the philosophy of Vedanta, Upanishads and Nyaya. Vedanta discovers the aims of education, methods of teaching, the curriculum and mechanism of knowledge. An individual has to develop his powers by Vidya, knowledge and Dharma (virtue) and free himself from ignorance and Maya (attachment).”

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1 Bourai, H.H.A. Indian theory of Education, p-1
“Education is the course of evolution and advancement, whereby an individual assimilates knowledge, formulates his own ideals and develops his abilities to use this knowledge in the attainment of these ideals. It is the process of wonderful and remarkable experiences that gives it a more advanced and socialized value with which they can channelize their power in a better way.”

In Hindi language Education refers to the term ‘Vidya’ and in Indian culture Vidya is given a divine place in the society.

According to Bourai (1993) “Vidya comes from the root “vid” (to know) i.e. Knowledge science, learning, lore education, scholarship and philosophy. Ancient educationists considered knowledge as the third eye of man. Vidya shatters illusions, removes difficulties and enables us to resolve the truth value of life. It increases our fame, removes our difficulties and makes us purer and more natural. Knowledge is a source of health and the virtue. Vidya is considered to be the root of all human happiness, increasing our efficiency and enabling us to get fame and wealth by securing respect in public assemblies and royal courts. Vidya thus promotes our material as well as spiritual welfare, both in this, as well as in the life after. Life without Vidya is utterly futile and worthless.”

“Education defined Etymologically -The education term has originated from the Latin word ‘educatum’ by combining two terms ‘E’ and ‘Duco’ which means advancing and making progress. It also means improving and emphasizing.”

“The process of developing the inner abilities and powers of an individual is called Education. The term is often connected with the Latin ‘edcere’ meaning propulsion from the internal to the eternal. This Latin term

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2 Venkateswaran, S. Principles of Education, P-34
3 Bourai, H.H.A. Indian theory of Education, p-50
4 Chandra S.S., Sharma K. Rajendra Sociology of education, p-7
means to educate through a change brought about by practise or usage. Education implies some kind of change for the betterment in a person.\textsuperscript{5}

There is yet another Latin word ‘educere’, which means to bring forth. Education, therefore, means both to bring forth factors as well as bring up an act of bringing out innate human potentialities and developing various intellectual, social, physical, behavioural, aesthetical mental as well as manual faculties of which they are unaware, is called education.

According to Webster’s New International Dictionary of the English language “Education consists of the impartation or acquisition of knowledge, skill or discipline of character.”\textsuperscript{6}

\textbf{Wider meaning of Education}

According to William H. Kilpatrick, “From the broad point of view, all life thoughtfully lived is education.” Education is thus life and life is education. It includes all influences, social, cultural, political, domestic, geographical etc. Even the soil, climate and surroundings educate us. From broader sense “whatever broadens our horizons, deepens our insight, refines our reactions and stimulates thought and feeling, educates us.”\textsuperscript{7}

A man is a learner throughout the journey of his life. On every step of his life, he learns from his relations be it is his parents, his children, his colleagues or his friends. He also pursues knowledge from his environment. In wider view point we can say that all experience which comes through his life becomes his education.

\textsuperscript{5} Raj, (Dr) Sohan, Education: A lifelong learning journey, p-20
\textsuperscript{6} Webster’s New International Dictionary
\textsuperscript{7} Agarwal, J.C. Theory and Principles of Education Philosophical & Sociological Bases of Education, p.11&12
The wider meaning of education includes the following:

- Education is lifetime development of a human being.
- Learning is a continuous process. We gain experience through our surroundings such as family, friends, and from society.
- Sometimes when we are not aware of reality but we receive education unawares.
- We can also say that an individual’s life is education.
- All experience is said to be scholastic and educative.

Narrow meaning of Education

In the words of “John Stuart Mill “the culture which each generation purposefully gives to those who are to be its successors, in order to qualify them for at least keeping up and if possible for raising the level of improvement which has been attained. It thus includes special and specific influences.”

- Such type of education is imparted in planned institutions like schools.
- It is a deliberate, conscious and systematic influence exerted by the mature person i.e. the teacher, on the immature person i.e. the child.
- It is limited to the teaching of readymade material.
- This type of education is intentional rather than incidental.
- Knowledge is considered as the accumulated experience of the human race.
- Education is regarded synonymous with instruction”\(^8\)

Concluding the narrow meaning of Education it can be stated that education is confined to schooling and university instruction. Education starts when the child enters in institution. The success is evaluated in terms of passing the examination. There are deliberate, purposeful and planned efforts.

\(^8\) Agarwal J.C Theory and Principles of Education Philosophical & Sociological Bases of Education, p-11,12
on the part of the teachers to impart knowledge. This type of education is intentional rather than incidental.\footnote{9}{Walia, J.S., Principles and Methods of Education, p-5}

**Education as described by western Thinkers**

**Plato**

“Plato the father of modern knowledge says ‘The training which is given by suitable habits to the first instincts of virtue in children, which leads you always to hate, what you ought to hate and love, what you ought to love, from the beginning of life to the end, in my view will be rightly called education’\footnote{10}{Chaube, S.P. and Chaube, A., Foundations of Education, p-23}”

**Aristotle**

“Education is the creation of a sound mind in a sound body it develops mans faculty, especially his mind.

**Comenius**

“All who are born as human beings need education because they are destined to be real men not wild beasts, dull animals, and clumps of wood.”

**Kant**

“Education is the development in the individual of all the perfection of which he is capable.”

**Pestalozzi,**

“Education is the natural harmonious and progressive development of man’s innate powers”.

**Froebel**

“Education is enfoldment of what is already enfolded in the germ”.

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\footnote{9}{Walia, J.S., Principles and Methods of Education, p-5}
\footnote{10}{Chaube, S.P. and Chaube, A., Foundations of Education, p-23}
John Dewey

“The development of all those capacities in the individual, which will enable him to control his environment and fulfil his possibilities”

T. Reymont

“A process of development from infancy to maturity, the process by which he adopts himself gradually in various ways of his physical, social and spiritual environment”

J.S Mill

“Whatever helps to shape the human being, to make the human being, what he is, or to hinder him from being what he is not, is part of his education.”

Herbert’s view

“Education is the development of good moral character”.

Raiment’s view

“Education is a process of development from infancy to maturity, the process by which he adopts himself gradually in various ways of his physical, social and spiritual environment.”

Redden’s View

Redden’s definition has been regarded as the best definition of education. According to him, “Education is the deliberate and systematic influence, exerted by the mature person upon the immature, through instruction, discipline and harmonious development of physical, intellectual, aesthetic, social and spiritual power of the human being, according to individual and social needs and directed towards the union of the education with his creator as the final end.
Aims and Objectives

The aim of education is the study of the realistic philosophy of life. It is on the Basis of logical grounds and a special emphasis is laid upon four separate sources of knowledge. These are perception, inference, comparison and testimony. Mere sentiments, emotions are not recommended to obtain knowledge. True knowledge alone can lead one towards the truth.

“In ancient India, learning was a part of religion. It was sought as the means to the highest end of life i.e. Mukti or emancipation. Education never meant mere book learning. Intellectual attainments were of far less consequence than the development of moral feeling & character.”

Aims of Education can be concluded as:

- Thoughtful thinking
- Respecting the culture
- Improvement of inventiveness
- Cognizance and utilization of science is significant.
- Connection with extensive perception
- Ethical and supernal Values
- Foundational Abilities.
- Professional capabilities
- Impressive education
- Effectual citizenship
- Physical & Mental Health
- Definitive education
- Education sustains to give us constant Enthusiasm.
- The achievement of harmony
- Eternal awakening of Man.

11Bourai, H.H.A., Indian theory of Education. p-48
Need for Education

“According to Manu Gray hairs do not make a man old, a Youngman who has studied well is alone considered to be really old by the learned gentry. A common saying in India is that a king is respected in his own kingdom, while a learned man is worshipped everywhere.”

Education removes our prejudices and makes us comprehend the diverse viewpoints. It sharpens the intellect, improves the grasping power and develops the faculty of discrimination. It protects us from falling into errors. Education also strengthens our moral being and enables us to stand the severest temptations of life.

Some of the beautiful aspects of education are passiveness and abasement, which simply means a person, should serve others through his kind speech, one should be humble and serve the individual with love and grace. One has equal attitude towards every living thing and should be helpful and solitaire. This knowledge is just like the deep holy river, Ganga. If a person has strong determination, he can fill his little vessel as much as it can hold. We can also acquire that amount and kind of education whose roots and seedlings lie within us.

All of us learn many facts, read many books, hear many opinions, and see many objects- but how a few of them remain in our minds. It may be said in short that all that we have learned from the external world is forgotten and in its place there remains only the mark of its influence. The facts, the details of learning die away, but their influence alone lives on.

Shriman Narayan quoted Vinoba bhave in his book “The quality of education is not to be measured by its length and breadth, but only by its depth. What counts in study is depth, not extent.”

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12 Bourai, H.H.A. Indian theory of education, p-51
13 Narayan, Shriman, Vinoba- His life and work, p-119
“Education as a fundamental question has been troubling the minds of philosophers and thinkers from Socrates and Plato down to Gandhi and Dewey. The word education has a very wide connotation and it is very difficult to give its precise definition. A biologist, a priest, a psychologist, a philosopher a statesman a teacher, a merchant, a shopkeeper and even an artisan will give widely different definitions. Every person in the world gives its own experience of knowledge.”

1.2 Music Education - Different perspectives

Music is considered to have a mutual relation with education and knowledge. Music is an art and is also placed high up among the world’s greatest Arts. Spiritual development and providing the pure joy to a human is the main purpose and Aim of an Art. It makes our heart and minds satisfied. We will get enthusiasm, motivation and peace. Music is considered a supreme position among all arts and fine arts. For this reason Music has proved to be extremely useful in physical and spiritual development of human being.

Our music tradition has its existence since the Vedic age. It was known as Guru Shishya Prampara Disciples were educated by their masters (Guru). There has been an incredible & incomparable Progress in the field Indian Music. So many advancements have been made in the various fields of music. Various music styles and various music traditions ingenerated and then the Gurukulas system became a significant and sacred place in music education.

In Ancient period the study of Vedas was also done under the Gurukulas systems. In which our highly educational & enlightening scriptures such as ‘Atharav Veda’, ‘Rig Veda’, ‘Yajur Veda’ and ‘Sam Veda’ were included. Gradually the teaching work shifted to the educational Institutions and the music teaching methods began to change over the time. Human society has entered in the modern environment. There are advancements with the time in the course of educational system.

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14 Dhiman, O.P., Foundation of Education Philosophy and Sociology of Education, P-3
Though music education is always lively but still few other sections of society do not understand its importance and relevance. Like other subjects they don’t prefer music. In modern time, the importance of Music has regularly explained by various media channels such as, AIR, Doordartion, D.D Bharti, Prasar Bharti etc. But it is still unpopular among the viewers & the listeners. It is understood only as a part of entertainment technology. Due to this the miscommunication, promotion & propagation in the field of music is not up to the satisfactory level. Pt V.D. Paluskar & PT Vishnu Narayan Bhatkhande worked very hard for the popularization of music. They started the music organizations for all people who were interested in the learning of the classical music. It was golden opportunity for a common man to learn music.

“To build out a sensible & intelligent Artist, brilliant, capable and qualified teacher, and discerning listeners through these musical institutes it was the prime goal & Aim of Pt. V.N. Bhatkhande. The student of these institutes must know the theoretical portion of the scriptures as well as harmonize it with the knowledge of practical aspects. It was the main goal.”

“The old music Ustads used to give very little theory of the scripture to their disciples. The main reason was the priority to focus on practical side. The music maestros were themselves not very familiar with the scriptures. But there is no doubt in saying that our Guru’s are known as the saviour of the music, it was due their efforts that the treasure of music has been preserved from generations to generations.”

1.2.1 Aims of music education at school level

Importance of music definitely lies in its objectives. Aims inspire us and guide our actions, with the help of aims a teacher manages to teach according to a particular plan and is able to make a procedure for the subject and its

15 Chandra, Bhaal Pyakshri: Sangeet Shiksha Ank, p-6
16 Ibid p-6
teaching methods. Music education is a vast process for which a teaching plan must already be set. Teaching of music will not be systematically structured without appropriate objectives.

The aims of music education have been determined according to its law these are as under:-

- To facilitate the development of a balanced and truthful character.
- To assist in grooming of physical and mental capabilities.
- Promoting a disciplined attitude, through Practice of rhythmical music.
- To inculcate the sense of rhythm, beats and melody.
- To nurture the expressive behavior.
- Learning to express one’s feelings in an effective manner.
- To develop the enthusiasm for making progress in a society
- To empower person to overcome the hurdles of life enabling him to adapt accordingly in the changing scenarios.
- To promote physical fitness as practice of singing is like an exercise for lungs; it makes them strong and increases the immunity of body in general.
- To promote patriotism in children as various patriotic songs and traditional cultural programs, are held on the one of independence and republic day.
- Developing the talent and confidence of performing on stage in presence of live audience.
- Making child a good listener and a good performer.
- Enabling the students to know and identify the essence of melodious music.
- Enabling students to recognize the place of rhythms and beats in musical notations.
• Developing the curiosity and interest among students after analyzing their capabilities and talent with the help of appropriate musical equipments.
• To promote creativity and imagination
• Appreciating the values of folk music and other cultural facts.

1.2.2 Psychological aspects of Music Education

“The melody of psychology is related to the behavior of mind and brain which provides feedback to the human experiences. “The term Psychology is derived from the Unani words, ‘psych’ and ‘logas’ which means soul and wisdom. Afterwards it was replaced to the word mind and after that the word mind replaced by the word consciousness .At present the term psychology means the science of behavior”\textsuperscript{17}. The modern psychology has testified that every human being by nature has a gift of music. But the understanding and ability to practise this art is not equally present in every human. The existence of Music is everywhere; one can feel it in the rustle of the leaves, in mellow senses of river, in rise and setting of the constellations, etc. It has been proved all over, that tones and rhythms are naturally present in the cycles of entire creation and man’s life. Music is somehow appreciated by every creature, which signifies the richness and supreme power of the music due to its elegance and beauty.

“Psychological aspects are very much important in the Music Educational process. When a child does any work with his own interest, he gets easily noticed by everyone. Music education helps in proper development of a child. A child requires intellect to develop the skill of reciting musical sounds in a proper manner. Compositions of various melodious musical notes also require intellectual skills.”\textsuperscript{18}

\textsuperscript{17} Tivari, Kiran. Sangeet Evam Manovigyaan. p-210
\textsuperscript{18} Seksena, Madhubala. Bhartiya Sangeet shikshan Pranaali Evam uskaa vartmaan star, p-144
Music has an extreme relationship with a man since his childhood. Before learning any alphabets, he brings his ignorant mind on the table of expressions only with the help of lyrical sounds. The parents of a child try to draw his attention by meaningless sounds. And after hearing those particular sounds he generates responses and laughs and get excited.

“Music can be extremely helpful in the all-round development of the child. This is one subject which, single-handedly imparts balance, imagination, insight, comprehension, spontaneity, self-expression, discipline and dynamism while entailing physical training. Through the medium of Music, the child can be inspired to develop interest in academics. This is why educational psychologists have emphasized the principle of hedonism in infant education in which the children are trained through the medium of music and rhythm besides play way.”

“In the language of Prof. Carl seashore it can correctly be said that “psychology aims to describe and explain musical experience and musical behaviour, it investigates the nature of musical talent, it analyses the sensory responses to music, it traces the human drives, which we use to call instincts and impulses that crave music and find their outlet in music; it examines feeling, emotions and musical thought processes, both functionally, and structurally, it traces the development of the musical mind from infancy through maturation and training.”

1.2.3 Elements of Music Education

Music education is divided into two parts, theory and practice, as we find in the domain of learning there are two divisions- ‘Shastra’ and sadhana. Though practice or sadhana plays an important part in music culture, yet theory or shastra is necessary for knowing the means and methods, so as to make practice or sadhana of music a complete process. Practice is essential for

19 Kundu, C.L. and Tutoo, D.N. Educational Psychology -
20 Seashore, Carl. E. Psychology of Music, p-7
realizing the value and theory is necessary for directing the practice in its right way.\textsuperscript{21}

When we think about the theory of Music, so many questions arouses in our mind, ‘what is theory of music? Does it signify the grammatical aspect only? Is it superior to practice, or complementary to practice? Theory may be called a speculative thought which gives exposition and collects the principles of music.

Theory part is complementary to practice and, therefore, theory of music is concerned with ways and means i.e. laws and principles of music to direct music for getting the fruition of practice. Theory of music comprises with the aspects of grammar, history science, acoustics or physics, Iconography, psychology, aesthetics and philosophy which completes the real definition of music.

Theory of Music comprises of the following aspects

- **Grammar** – It determines the laws and principles of Tone, Tune or Melody, Time-Measure, Rhythm, Tempo, etc.
- **History** – It traces different layers of evolution of different materials of music that cover the whole range of time, and thus gives the idea of different characteristics and temperaments of musical forms and manifestations in different ages.
- **Acoustics** -Physics of music determines the nature of voice and sound waves and their characteristics, harmony & scales, simple harmonic motion, frequency and pitch, amplitude and loudness, vibrations of the form of tone and tone quality, tuning process, resonance, velocity of sound in air, wave length, and other materials pertaining to vocal music and musical instruments.

• **Iconography** – It determines evolution and nature of icons or images of different ‘ragas’, so that they can make themselves to be inferred with emotive value, and are visible in the mental spheres of the artistes and of the listeners.

• **Psychology** – It determines mental preparations and attitude of the artistes who create forms or structures of Ragas and Raganis and which can infuse vital energy and life into them.

• **Aesthetics** – It creates emotional sentiments and moods in different tones and tunes. It determines the mental attitude of the artistes who create the model forms of Ragas & Raganis, results the different contemplative forms of ragas and raganis.

• **Philosophy** – It determines the real form and essence of music. Philosophy determines the supreme value of music. It helps the musicians and the listeners to ascertain the real goal which can lead them to eternal and tranquil peace and happiness.

### 1.2.4 Music Education - Historical background

Music is considered to be a performing art, which involves listening and creation of the melodious tunes and rhythm. The beauty of a melody is enhanced not only with the knowledge of writing and reading, but also with the soulful Singing and attachments with the swaras. Indian Classical Music has a theoretical and practical base. A Guru is must for the knowledge of theoretical and practical aspects of music.

Classical Music has been based on the Gurukulas learning Methodology. An ancient teaching methodology of Indian was used to be given to a student personally by his Guru in temples and hermitages.

**Ancient period (2500 B.C to A.D 1200)**

Ancient period is comprises of Vedic period and Classical period. “Time of Vedic Period was 2500 B.C to A.D 200”. It has been called the Golden era of music with all valuable achievements. It was possibly the beginning of
music education “An ancient form of Indian music originated in the Vedic period from 1500 to 500 BC. During this period, Sama Music was developed. Hymns were recited and gradually notes were evolved and instruments of chordophones and drums were used.”

“The Origin of Indian Music lies in the cultural and spiritual values of our country and goes back to the Vedic age. In those times, was handed down orally from the guru (teacher) to the Shishya (disciple). This art was called Sangeet included vocal music, instrumental music & dance. The great sages who dwelt in ashrams (hermitages) imparted instruction to their disciples who used to live with them on the premises. The art of music was regarded as holy and heavenly. The teacher or guru himself used to choose worthy pupils and acquaint with them with the finer aspects of swaras and rhyme along with the hymns of the samaveda. This instructional system of gurukulas continued uninterrupted for hundreds of years.”

The education of Ancient times has a great influence in the order of development of music. Music education has the mixture of the purity of Ancient Vedic period, the virtuousness (divineness) of Mahabharata & Ramayanakal, debauchery of the Mughals, devotion of the devotees, gallantry of the Marathas and the Rajputs.

“The period from 100 A.D to 1200 AD is termed as the classical period in the history of Music education. A versatile Granth Natya Shastra was written in this century by Bharata. Every aspect of music was taken care of in a very scientific and authentic way. It was the period of the Gupta kings who were conducive to the development of music. Music proliferates in this age under the shelter of Chandra Gupta Vikramaditya who was the son of Emperor Samudra Gupta.” In this same period a very comprehensive Granth on music entitled Brihadeshi, was written by Matang. In which various concepts of

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21Iyer, Padma. History of Music, P-216
22Ibid, p-220
23Ibid, p-221
Ragas, Deshi and Margi Sangeet etc have been covered. In the Rajputs period not much progress was made in the field of music. In 12th century a great poet and musician named ‘Jayadeva’ was born whose Geet Govinda is well known to the music world.

According to the S. Prajnanananda “It is generally believed that the classical period began in the 600-500 B.C. At that time, there existed 3 different schools of music, i.e.

1. The Natya school of Bharat of the Natyasashtra
2. The Naradiya Gandharv school
3. Nandikeshvaram School.”

**Medieval period (A.D 1200- 1800)**

Medieval period was the time of many changes in the history of music. In medieval times the ancient classical music tradition became limited to the rigid boundaries of ghranas and became unreachable for general masses. “During this period Sangeetratnakar a great scripture about concepts of Indian classical music was written by “Sharangdev”

“In the ancient period the theory of music was formulated and enriched by the celebrated masters like Bharata Muni, kohala, Yastika, kashyapa, Matang, Parshvadeva, Sharangdev, Vidyarnya etc. It has been presumed that the practicing artists of this period were also well versed in theory. When the Muslims came to rule this country the classical music gradually started loosing contact with the Granthas as the new comers were not conversant with the Sanskrit language. There were mainly performers and their patrons were the Nawabs or the kings, who were themselves well versed in practical music.”

“The Mughals altered the ancient way of music teaching in India .Music that had originated and had developed in the ashrams entered the palaces of"
kings and became the Darbari musicians of mughal era. Royal Princes enjoyed this art in palaces. It became a good source of entertainment for them. They provided a strong platform for the artists to exhibit and talent their art. Under the protection and endowment of royal princes their talent continued to blossom. But it was confined to the royal palaces. Gradually they diverted this into a new tradition of teaching through Ghrana system.  

Ghranas were highly personalized schools of teaching of Indian classical music. Each ustad of every Ghrana had a unique singing pattern. Training was only dependent on the wishes of the ustad. And each every ghranas had its unique specialties in singing a particular raga. It is still present in our modern society to some extent.

“That period when the all the Muslims from outside the frontiers of north India invaded. Generally they were not very fond of music, though some of them supported professional singers in their courts. However, Sufi mystics and some nonconformist Muslims persist to have a mellow spot in their hearts of music. In the court of king ‘Allaudin khilji’ there was a famous musician named Aamir khusro who composed religious preceptor songs for them in praise, new forms of Khyal trana and Qawali was introduced by Hazrat Nizamuddin Aulya. And new talas like farodost, Jhoomra, taraan and Qawali. New instruments like the sitar dhol were also developed by him.”

Modern period (A.D 1800 onwards)

In the Modern period Traditional music started changing very progressively. After the end of the Mughal period, many of the dynasties (Riyasat) developed in the British regime, they extended their patronage to the professional artistes. In this period both vocal and instrumental music was limited to a handful of those fortunate few who could enjoy the pleasures of this art. The Ustads who were patronized by the kings were the music teachers, whose art became irrevocably tied to wealth, splendor and personal prestige.

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28 Kumari, V. Prem. Experiments in music teaching, P-2
29 Iyer, Padma. History of Music, P- 222
This had adversely affected the teachings of the ghranas. Time and curriculum had no longer of any importance. The pupil was made to work very hard with the imitations of the Ustads depending entirely upon ustad’s will and wish.

“During British rule music has an important role in renaissance period of various culture and historical events. It is remarkable that in this period, the promotion of shastra (scriptures), Dissemination and appreciation of the music is more than the mughal period”\textsuperscript{30} In the British rule, though the education expanded got a systematic form, it was devoid of its cultural and spiritual heritage.

The education has become a commercial activity. Its only purpose remained that of getting a job and earning a livelihood. The music (Gana Bazana) was not looked at with respect in this period by the civilized society because it was the profession of harlots

The latter half of the nineteenth hand the first half of twentieth century was the era of national consciousness and awakening a period of renaissance. While there were national movement for independence a class of cultured and educated music lovers were endeavoring to enhance the prestige of music.

Great musicians such as Vishnu Narain Bhatkhande, Surinder Mohan Thakur, Chhamman sahib ,Thakur nawab ali ,Abraham Dikshit ,Wadilal Rajabhaya, Appatulsi, Shri Narainrao Ratanjankar, Prof S.L Joshi, Faiyaz khan Shri Vishnu Digambar paluskar,siyajirao, Madavrao Scandia, Balwantrao Scandia ,Madan Mohan Malaviya, Rabinder Nath Thakur , Clements , Deval, bhalchandra sukathankar , Shankar Rao karanad , M . Fred list worked very hard with their ceaseless efforts in strengthening the music giving a respectable status to it. Music was able to regain its lost prestige in society. The entry of well educated people into the field of music expanded the scope of intellectual and constructive efforts in this field which in due course of time left its great impacts on the music education system.

\textsuperscript{30}Banerjee, Asit Kumar. Hindustani Sangeet Partivartansheelta .p-82
Many such random efforts were already being made in the direction of the development of music instruction of school level but the credit for achieving this goes to two great devotees Vishnu Digambar and Vishnu Narain Bhatkhande.

“In 1901 on 5th May, Vishnu Digambar Paluskar started the “Gandharv Sangeet Mahavidyalaya Mandal’ at Lahore”31. Very soon after this the branches of this institution started in many important cities of India. The style of instruction followed in this school was a mixture of the present form of school level music instruction and the former Ghrana system .With this new system, he was able to train celebrated artistes such as Pt. Onkar Nath Thakur , Pt. Vaman Rao Padhyey , Pt. Vinayak Rao Patvardhan. These musicians helped spread classical musical and the new methods of instruction in it. Shri Vishnu Digambar developed and published the notation system and published about 50 books on music and Established Music schools by implementing new methods and techniques of learning.

Following the footsteps of his Guru, Pt. Onkar Nath Thakur, also established a music college named ‘Shri Kala Bharti’ in 1950.

A single person who can be given credit for complete study and compilation of entire Indian music literature is Vishnu Narayan Bhatkhande. His untiring efforts in this direction brought back the prestige and glory of Indian traditional music. Music had already been divested of its prestige by then.

Bhatkhande developed the culture of holding music conferences all over the country. He organized national conference in Delhi, Banaras and Lucknow. Various vocalists, instrumentalist, specialists and scholars from all over India participated in these conferences. And they discussed the various aspects required for systematization of the teaching of classical music. They also discussed ideas to bring uniformity to the form and rules of the ragas and

31 Kumar, Rishitosh. Sangeet shikshan ke vividh Aayam. P-135
raginis as they were in different parts of India. In 1916 the first Akhil Bhartiya Sangeet Parishad was organized in affiliation with the government of Baroda by Bhatkhande. He was pioneer of the collective music education. He wanted that music should be taught in group education, for this he believed that instead of ghranas system schools should become the place of music teaching. He drafted different syllabi for various classes at different levels of music education and examination. He dreamed of a brilliant future of music in higher education institutes. He founded music schools in different towns of country to run music courses. In these schools music was taught through the traditional ghranas system as well as through the new method of teaching developed by him. He managed to bring out the ancient Vedic teachings from the rigid boundaries of ghranas which was not an easy task. Bhatkhande collected this huge literature and presented it through a notation system in book form. With great struggle and hard work both Vishnu’s help in formation of our certain pattern of syllabi and methods of education. Their endeavor helped the educational institutions to inculcate music as a subject of higher studies in their campuses.

Primary and Secondary Education Smiti which was found in 1929 by the govt. included music as a subject in first second and third classes for girls and as an optional subject for boys. In fourth and fifth classes it was an optional for girls.

“After independence first of its kind was the Sangeet Shiksha Samiti in 1948, 1949 formed by Shri B.G Kher, CM of Maharashtra, headed by Shri G.B Jatthar.”32 This Samiti was asked to give recommendations regarding its various aspects namely:

- The place of music in the education system at different levels.
- Information regarding the proficiency and qualifications of the music teachers in the schools at various levels.

32 Kumari, V. Prem. Experiments in music teaching, P-8
Grants in Aid
Information regarding the syllabus prescribed in various schools.
The Syllabi of the PSC and SSC examinations.
The development of a uniform system of notation for Indian Music.

“In the year 1949 an all India conference of art was organized, where Maulana Abdul Kalama Azad in his residential speech stressed the importance of Fine arts in the development and refinement of human emotions. He said that sensibilities of a person can only be trained by practicing fine arts. He also said that today’s torn individuals and divided conflicts ridden society is due the reason that we had not been practicing and appreciating arts. For our healthy and well balance society training and appreciation of arts should be present among its members. Similarly Mudliar commission in 1952-53 in its report emphasized that subjects like Art, Craft, Music, Dancing and Development hobbies should be given an honorable place in secondary education. Later on in 1964-66 Kothari commission Highlighted the unsatisfactory condition of Fine arts in secondary education and made some experts suggestion.”

The untiring efforts from all the dedicated educationalist and musicians became fruitful, that music received importance in secondary education. It became a subject at higher secondary level intra degree level as well as post graduate level.

Endeavors by government and various universities for upliftment of Music:

- Establishment of Radio Network
- Establishment of T.V Network.
- Establishment of Sangeet Natak Academy.
- Cultural Exchange programs Between Various regions of country.
- Cultural exchange programs between foreign countries.
- Organization of Sangeet sammelans by various universities.

33 Vishwas, Arvind. & Agarwal, suren. Indian educational documents since independence. p.385
- Encouragement to folk music.
- Seminar and symposiums in various universities.
- Research Work in Music.

**Music education in present era**

Music is now a subject from the school level to the universities level. There is various private music academies under which students learn from their teachers. Traditional methods are present in today’s scenario are considered ideal in our society. Various music colleges and independent universities of music are established in different parts of the country.

It is very difficult to make it a group subject in classrooms. It involves an altogether different and personal approach. It demands more capable methods of teaching. Teachers can teach a group of students without compromising the qualities and precision of traditional learning under a guru. It requires a syllabus separate for theoretical knowledge as well as practical skills also enabling the students to understand the depth of music subject as well as to understand the concepts of the ancient principles of Classical music.

Music is now institutionalized to a great extent. Although there are many private and government music institutions in country and also music is taught under various schools, colleges and universities as a subject. But music education in these institutions is not up to the standard.

**Present Music Education System - Weakness and opportunities**

There are so many problems in the present music education system undergoing in various educational institutes. Some of them are as follows:-

1) There is scarcity of time in present education system. Unlike gharanas tradition where there are no boundaries of time. Due to this the ragas, cannot be practice and learned properly by the students.

2) Personal attention is missing in group education of adequate techniques for group training in Music.
3) A pathetic behavior of most teachers towards applying modern techniques of education.
4) Absence of proper infrastructure required for practicing modern teaching methods. For example, projectors and e-books.
5) False Trend of cramming the raga and tunes instead of students own creativity.
6) Students only choose music subject for the sake of getting good marks.
7) Need of proper methodology to clear the theoretical concepts.
8) Up-to-date training of the teachers is required.

Lots of difficulties retard the development in this subject. But it is saddening that very less endeavors are being done to face the challenges. Although scholars and teachers are well aware of the current situations, it is observed that there is lack of adequate teaching techniques in Music. The students pass examination by merely memorizing the ragas and khayal prescribed and in theoretical portion students only crams the written data without even knowing deep knowledge of the concepts. And the teacher too thinks that he has done his duty but this system is harmful.

Teaching techniques applied in formal school education are but a highly distorted version of the guru Shishya system. No new or different technique has really ever been evolved. On the other hand, the present changing socio economic conditions have rendered it impracticable to sustain the Guru Shishya system.

According to Jayshree Banerjee “The present profile of Indian classical music education one must be frank, doesn’t put up a devilishly splendid picture. For one thing it’s teaching method and there is a whole chaos of facile practices here has not been planned out exceedingly well and our music education. We shall soon see, easily gives out and reveals a largely confusing scenario. This is but a reflection to a large measure, of changing times. Caught between our regrets for the past and our fear for our future we have been making do with many an uncertain and unthinking practice in the teaching of
our classical music. It is time then to pause and ask questions. It is time indeed to consider the historical causes of the present unenviable state of affairs in the realm of the music teaching and then plan for the future.”

It is abundantly clear that our education system suffers from lack of systematic and intelligible planning. Hence the world of music education suffers from utter confusion and delusions.

Students can derive full benefit from the subject of music only when appropriately improved and effective teaching techniques are employed. It has been rendered unbearably dry and underrating by being limited and bound into hard and fast rules and their analysis. Hence there is urgent need for reform in this field. Reform can come only if new experiments are undertaken fearlessly. Currently even though there is no dearth of means, there is lack of experimentation in education many music scholars have felt the same. Thus there is an utter need for the development of a teaching method that can fulfill the requirements of modern environment.

1.3 Educational Technology - Concepts, Components, Use and Utility

“The art of teaching consists in making the pupil wish to learn.” – Rousseau

In today’s scientific era, it is essential to teach scientifically. So we need to adapt to our old traditional methods, according to the varying circumstances. Consequences of science and technology will surely contribute in felicitous direction. In the recent times, many advances have been made in the realm of science and technology. A revolutionary change has occurred in many professional and industrial areas due to the new and fast evolving technology. Education is also one such area which is growing very fast in adapting to new technology and trends.

“The technology of education helps to enhance the technique of human learning. Educational technology engages people and is a complicated

34 Jayasri Banerjee ,”The Methodology of teaching Indian classical Music “ p. 11
conjoining process, procedural ideas, formulating, handling, judging and administering solutions to these complications involved in all visible features of human learning. In other words, it is the technology that dictates the design of teaching materials and for the maximum benefit it also uses structural learning interactions.”\textsuperscript{35}

“To define Educational technology more useful approach is- “The application of agenda and techniques for the standardized design of a learning experience known as educational technology.” \textsuperscript{36}

Educational technology is an arranged way of plotting, constructing and calculating, the total procedure of learning and teaching, in terms of particular objectives which are situated on human learning, research and intercommunication and employing an aggregation of human and non-human resources for the effective instructions.

Its primary role is to increase the abundance and influence of whole teaching learning process throughout, to the systematic approach and to putting it to use with modern communication mechanics and also the media.

The role of Technology is to cover each and every possible means, by which Information can be presented through hardware & software. Technology of education is concerned with several intangible aspects such as learner characteristics and behaviour, formation of contents or utilisation of suitable goals of environmental, informative and developmental learning.

We can thus describe educational technology as a systematic structured and planned way of instructions through which a specific group of learners, are led, with understanding, from one stage of attainment to another, till predetermined set of knowledge, skills and attitudes are formed in their behaviour and personality, verifiable through exact evaluation procedures.

\textsuperscript{35} Venkataiah, N., Educational technology, p-3
\textsuperscript{36} Ibid p-2
When a group of learners are in view, their capacities are also to be diagnosed and utilized. The content of instruction also needs to be broken down to manageable unities and sequenced properly.

Today’s era has arrived into an illumination and communication age. Advancement in information communication technology is going to serve with recent and cost-effective accessions for amplifying so that education can reach to children of new generation youngsters and side by side to those who want to continue education to accommodate the demands of explosion of information, the changeful nature of professions. The union between information technology and communication technology has exposed new field of vision for social and economic enlargement on the globe for each and every country.

1.3.1 Concept and Components

Educational technology is considered to be the mixture of two aspects:

(i) Technology of Education – Educational Technology is not a subject but just a tool that contains techniques and methodologies for teaching-learning process. It helps to enhance teaching learning process as it gives add on facilities and features apart from the personal knowledge of teacher. It is just software that includes the courseware i.e. instructional design and development of a subject.

(ii) Technology in Education – It includes the use of audio-video aids along with normal learning process which is known as “hardware in instructional techniques”. Multimedia contents help the student to obtain much better than any other learning process.

1.3.2 Use and Utility

Technology is a science that makes the work easier by providing efficient and correct results. Earlier it was limited to some specific fields only but today’s education is an evidence of boom in education sector. Modern technology has become part and parcel of education. It’s a tool to enhance
teaching and learning. The same way technology helps pupil to learn and gain with innovation and creativity.

Educational technology plays a significant role in present educational context. They are:

1) Behavioural objectives which are converted into learning conditions in frame of reference to educational objectives. It helps to make learning process easier.
2) It helps to analyse the style, symptom and temperament of the learners.
3) A well maintained and organized content.
4) It helps to develop and systematize the performance of the pupils with reference to the accomplishment of educational objectives.
5) A feedback provision makes it possible to modify the behaviours of the pupils.

“Thus education technology is useful enough in developing the cogency of teaching and learning system and maximizing the output through Optimum Use of Resources. A handset of well-equipped educational tools can take the teaching process to a new level. Designated improvements can easily be carried out in a very effective way by using technology in teaching process which results a very effective and efficient learning that helps in arousing the intellectual aspects of the pupils.”

Technology support and tools has taken the learning process to a different level which provides lots of facilities, innovative techniques in order to enhance the achievement of students and expanding the production. This happens because of the use of principles indoctrinated by psychology, sociology and science subjects. The input provided by maximizing their output in a way of their proficiency by this technology. Educational technology focuses on utilizing the available resources up to maximum in learning situation. That in any way is going to benefit the people and the nation.

37Thiyagi, K. Technology and Teaching Learning Skills, p-154
• Population explosion
• Rapid generation of New knowledge
• Development of new strategies
• Controlled Atmosphere
• Importance of the Teacher Role
• Mass extension of Model Teaching
• Beneficial for Teacher Training Colleges
• Improvement of school administration.
• Preservation of teaching models
• Creation of interesting learning situation

1.3.3 Instructional Technology – Concept, Objective and Scope

“Technology of instruction can represent both, technology in Education and technology of Education; however combinations of each that permeate whole teaching learning method which means full for the academics, who teach and also the learners who learn and modify his Behaviour, for his own betterment and also the betterment of the world. Educational Technology shouldn't be confused with teaching or directions for education and learning for engineering, however it ought to be taken by interconnecting all aspects that go an extended approach in shaping the temperament of the learners during a meaningful context.”

The instructional technology can be defined as:

• Instructional technology is the application of knowledge base and learning and also the conditions of learning to boost the effectiveness and potency of teaching and coaching.
• Instructional technology is developing the methodical training concern to learning and teaching.

38 Thiyagi .K., Technology and Teaching Learning Skills, p-154
• Instructional technology could also be outlined as the application of laws, similarly as recent discoveries of science and technology to the method of education.

• Instructional technology is that branch of academic theory and application, involved primarily with the planning and use of messages that manage the educational method.

• Instructional technology is that the application of scientific method to man’s learning conditions.

Objectives:

• Deciding the target, aims and normally the system of a discipline.

• Establishing an interwoven relation of arts, science, and human values.

• Determining the phenomenal assets and strategies for acquiring the motives of education.

• To making improvements in the process of teaching by making amendments in the particular standards.

• Analysing the academic essentials and desires of the society.

• Constructing, making and preparing such tools which can be used for the development of education.

Scope:

A very significant aim of the instructional technology is to enhance the impression of an individual personality, so that it is an area of several incorporative systems which are able to examine and resolve the various doubts of society. Acquainting large masses in the system of teaching and learning is the broad and unlimited scope of instructional technology.

Instructional technology has the under mentioned scopes –

• **Deriving of Educational purposes**: Educational technology formulates objectives and goals of education based on individual and societal needs.
- **Curriculum development:** Prepared aims and goals are performed by preparation of curriculum and co-curriculum inputs. It highlights ways and means in which content selection, transaction and sequencing of teacher learning activities can be carried out.

- **Learning Material and resources:** Various types of learning material like Programmed learning books, computer learning packages, mass media instructions, individualised self instructional package etc are available.

- **Human resource Development:** Team teaching models of teaching, training techniques like microteaching and simulated teaching and classroom interaction analysis can be carried out.

- **Development of Tactics and Strategies:** Different teaching strategies approaches and methods are devised with respect to different types of students.

- **Multi sensory aids Development:** Selection usage and storage of audiovisual aids falls under this approach. It relates to the Hardware aspect like design, fabrication and development of audiovisual aids.

- **Mechanism and Modification of Feedback:** Being the all round development provider of an individual, it incorporates changes in the process based on the feedback mechanisms. Educational Technology has a grip over the entire teaching learning process. It develops tools of evaluation to provide feedback.

- **Learning environment Development:** Illustrations are superior paradigm. It builds a friendly environment for the learners and encourages them.

- **Information Resources Development:** Although it bridges gap between developments in Information Technology and education deriving of e-Libraries, Internet www, etc, which have transforming assets of instructions and also it is extremely different to educational technology.
1.3.4 Educational Technology & Instructional Technology – A Basic difference.

Basic difference between educational technology and instructional technology may be seen inconsequential but both have much more meaning when considered to be in practical aspects.

<table>
<thead>
<tr>
<th>Table 1.1</th>
<th>Comparative Statement of Education &amp; Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education</strong></td>
<td><strong>Instructions</strong></td>
</tr>
<tr>
<td>• It is the physical, intellectual, emotional, social, aesthetic, cultural moral and spiritual development of child. In short Educational Development refers to the overall development of innate potentials of a child.</td>
<td>• The field of instruction is narrow. Instruction means to impart knowledge of specific subjects through teaching. In this way instruction is generally related with mental development, which is merely one of the aspects of development.</td>
</tr>
<tr>
<td>• Child is given priority over education. It caters to the needs and requirements of child over education.</td>
<td>• Teacher is given priority over education. It caters to the needs and requirements of teacher over education.</td>
</tr>
<tr>
<td>• Special consideration is given to the physical and mental levels and interest of a child.</td>
<td>• Child’s interests and his mental level are blatantly ignored.</td>
</tr>
<tr>
<td>• The objective of education is to prepare the child for life.</td>
<td>• The objective of instruction is just to make sure that the child qualifies through the exams set in schools.</td>
</tr>
<tr>
<td>• Education can be provided at given any place and time in the society.</td>
<td>• Instructions are restricted to educational institutions i.e. in schools or colleges.</td>
</tr>
</tbody>
</table>
1.4 Information & Communication Technology (I.C.T) in Education-Definition, Dimensions, Objectives and Significance

Definition

“Information & Communication technology can be described as “the use of both for managing the information efficiently that is storage, processing, retrieval, communication and sharing of all this information for significant purpose in order to uplift social, economic and cultural status.””

“ICT can also be stated as “utilization of different fields of technology in information and communication skills. In a wider view point it can also be used as reference, for the manipulating information networking storage of data and its transmission.”

However it's evident that the employment of ICT in our education system builds the complete teaching learning method which is quite fascinating and effecting for the scholars. So, as to grasp the influence of ICT in our educational system, we’ve got to grasp two basics things, the first is ICT and another is education. ICT itself acts as an umbrella term that contains any style of communication device or we are able to say that any application, like television, radio, phones, computers satellite systems, hardware, softwares and multiple things similarly as alternative applications together with video conferencing and distant learning.

“Such technology is used in conferencing and distance learning. And also used for academic functions, specifically for support and improving the education of scholars and to develop learning atmosphere. ICT is thought about as a sub field of academic Technology.”

In the recent years, we have notice that media is playing a more and more necessary role in every aspect of academic planning. The tactic began

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39 Muthuchamy, I, and Thiagi, K., Technology and Teaching Learning Skills. p-40
40 Ibid p-41
41 Muthuchamy, I. I. and Thiagi, K. Technology and Teaching Learning Skills. p-41
with the utilization of Visual Aids in support of instruction-targeted teaching, evolving until today, we often see audio-visual and audio-video media appointed centre stage prominence, significantly for student customized self-instruction and remote access customized instruction. There is a challenge to develop effective skills in technology. Importance to develop these skills, the professional ought to begin with understand of assorted media, accessible and also the manner each may be elected and utilized in an academic atmosphere.

Dimensions

In view of ICT, education can be categorized in three main categories- E learning, Blended learning and Distance Technology

Figure 1.1
Three Dimensions of ICT
E-learning:

Electronic learning or e-learning may be a general term accustomed talk over with laptop. It enhances learning. It is usually related to the sphere of advanced learning technology (ALT) that deals with each of the technologies and associated methodologies in learning using networking and multimedia system technologies. It is conjointly referred as on-line learning. Distance Education provided the bottom for e-learning development. E learning is often “on demand”. It overcomes temporal order, group action and travel difficulties.

Blended Learning:

Blended Learning is the Combination of multiple approaches to learning. It is typically accustomed to outlines a scenario where ever totally different
delivery strategies are combined along to deliver a selected course. These strategies could embrace a combination of face to face lecture rooms; self paced learning and on-line classrooms.

- Face to face learning like lectures, workshops, displays, tutoring, conference and much more.
- Self paced learning- It provides the pliability to be told in line with the provision of learner’s own time and pace. It happens in an exceedingly sort of ways such as- reading, learning course materials, attending Pre-recorded categories or sessions, reading articles, referred by educator, functioning on assignment & comes and looking & browsing the net.
- Online cooperative Learning: on-line collaboration involves interaction between learners and school members through the online.

**Distance learning:**

![Distance Learning Image]

It's a kind of education, where students work in their own home or at the work place and communicate with colleges and students via email, electronic forms, video conferencing, chat rooms, instant electronic communication and alternative varieties of laptop primarily based on communication. It is additionally referred to as open learning. Most distance learning programs Embrace a computer based training (CBT) System and communication tools to provide a virtual schoolroom. As a result of the web,
internet is accessible from just about all laptop platforms, they serve as the inspiration for several distance learning systems.

Objectives

- Facilitate to enhance memory retention, gradually deepen understanding and increase motivation.
- Learning and promoting novel ideas in the field of e-literacy.
- Promote cooperative learning as well as role taking part in cluster downside finding activities.
- To function as a method of rising potency within the instructional method.
- To produce awareness in the field of education
- To familiarise with the basics of ICT.
- To acquire information of computer languages and code packages
- To develop programming skills in utilization of various code packages in education, computer network and the internet.
- To utilize ICT for finding academic issues.

Significance

- The speedy technological development means education is not any longer “Once in a life time” experience for an individual. It's rather a quality that perpetually should be updated. Hence forth it is very important in today’s society that students should be qualified creatively to identify process and collect the right amount of data.
- The lecturers need to be constantly educated with the rise in the use of ICT. Recent researches and recent interpretations of existing information can be distributed globally within a blink of eye, with the utilization of information technology and electronic communication.
- Information is changing continuously at a rapid speed and old knowledge is becoming obsolete. It has become difficult for the teachers to keep pace with this change. With the increase in amount of
knowledge, expectations from teachers are also increased. Thus it has become crucial to revise the old understanding of the role, played by teachers in educational systems

- Time, area and socio-economic factors no longer provide hindrance in learning.
- Decentralized nature of the new technology frees the learner from any physical barriers.
- Learners have access to a plethora of learning resources.
- Up to date and accurate data from anywhere around the world can be utilize.
- New media permits interactive learning makes a learner an active participant
- New technology permits the learners to receive information in a variety of formats.

1.5 Role and Relevance of ICT in Music Education

Indian music is an integral part of culture of India. Music is widely known as an art, but in current times it is also considered as a subject to study. Like other subjects teaching in music should be accessible to common man.

In this age, the use of electronic means of communication has made a rapid progress in various field of education. Music education has also been affected by it. Using these mediums, Art of music got an international popularity. In fulfilling these aspects, the Area of music should be compressive, People should be familiar with the art of Music as well as the music profession should be full of employments. These mediums of communication are very much important.

In the last few years there have been remarkable changes in the field of science and technology. There is a revolution of information and communication technology in the world. Because of information technology
the sectors of telecom, satellite and computer science has progressed significantly at a very rapid speed.

Information and communication technology has a great impact on every part of human’s life. Also In the cultural field informational and technology has given rise to several new procedures. Computer, internet media has affected our every prospectus of normal life. Therefore field of music is also affected by it.

**Figure 1.2**

**Basics Elements of Information and Communication Technology**

- **Computers**
- **Internet**
- **Media**
- **ICT**

**Computer**

Computer has a very unique place among the various innovative achievements of science and technology. Its main quality is transmitting the information very quickly. In creation of the Indian music, computers has a significant impact. Computers have developed the social foundation of Indian Music. Computer is becoming very useful in dimensions of Indian music. Various uses of computers in music are:-
• Used in recording the music
• Used in preserving the music
• Used in reading and writing database
• Using the internet through it
• Used in making computerized sounds
• Using various hardware and software devices
• Helps in developing multimedia presentation for education and for curricular programs.

Internet

In the modern period, no one neglects the use of Internet. Technology can boost the long forgotten classical music to its glorious period of electrifying music. Teaching of classical music cannot be forced upon education curriculum. But computers are compulsory subject in schools. Every student now a days, know the basic operations, thus it shows that our generation is already well aware of the use of computers and its various applications. The only need is to provide the technical usage in the arena of music also. So that with just a single click, the new doors of musical world are opened in front of us.

Educational Sites for Music and Music Education

• Sage Journals (Journals of music teacher education)
• Music Research
• Taylor & Francis online
• VRME (Vision of Research in music education)
• Indiana University Pries
• Education centre online
• Music Viva
• Bright Hub education
• The E-Learning Coach
• Education Technology & Mobile Learning
• ASCD (Learn teach, Lead)
• Project Based learning Using Web 2.0
• Swar Ganga (music Education)
• Suryagan Can (Indian Classical music)
• Raag hindustani.com
• Swarganga.com
• Suryayam.com
• Shadajmadhyam.com
• Raag-hindustane.com
• Parrikar.org
• Sunil Music Indian Music Page
• artinadia.net
• aliakbarkhanliberary.com
• Carnaticindia.com
• Poshmaal.com (Ragas & Hindustani classical Music)
• Onlineriyaz.com
• Darbar.org
• All music.com
• Karnatik.com
• benarasmusicacademy.com
• Swarsaptak.com
• Sarangi.info

Internet is a medium of communication for the computer and information technology. It is caped on entire universe. It is an immeasurable reservoir of information and knowledge. It is most important in today’s world. Best way to communicate and to get any knowledge in modern world is computer. It is the best medium to promote and preserve Indian music. Various uses of internet in music are as following:-
• Surfing various websites.
• Communication around the world
• Downloading and uploading music, albums videos, and recordings.
• Search engines
• Worldwide web
• Email
• Audio conference
• Video conference
• E learning
• Electronic study materials
• Online music websites

Media

Mixture of various printed and electronic materials to convey or broadcast information is called media.

Figure 1.3
Types of Media

Print Media
- Books, Newspapers
- Magazines, Journals,
- Dictionaries, Postcards etc.

Electronic Media
- Radio, Television, Internet,
- Computers, Sound equipments
Through ICT, it has become very simple to receive all relevant information on any topic from any corner of the world. This facility has been very rapidly developing in the field of music. Music subject has a very vast area, which includes music education, Music pedagogy, Music Publicity and promotion, preserving the practical and theoretical portions of music and in its entire dimensions. ICT has proved a very vital role in all this. Multimedia teachings packages uses the various forms of I.C.T through a teacher to build an effective presentation.

1.6 Introduction to Methodology

1.6.1 Statement of the Problem

"Impact of Multimedia Package in Music on the Achievements of Senior Secondary School Students of Music of Punjab - An Experimental Study"

1.6.2 Objectives

1. Developing multimedia instructional material on selected areas of teaching.
2. Finding out the impact of multimedia instructional material on the achievements of students of music.
3. Taking the objective feedback of students, learning Music concepts through multimedia package and conventional method.
4. Highlighting the use and utility of multimedia packages in Music Education.

1.6.3 Hypothesis

In this experimental study, Null hypothesis was formulated.

For finding out the comparison between the two groups’ experimental group and control group the investigator tested following hypothesis:
There will be no significant difference in the achievement of students learned through multimedia and the students learned through conventional method

### 1.6.4 Sample

A sample of 134 students of +1 and +2 studying in school was selected randomly for the experiment as one of the primary sources. The investigator conducted four experiments. 30 to 40 students were taken in each experiment.

- **Experiment 1** consisted of 32 students Out of 32 total students, 16 students were put each in experimental group and the control group.
- **Experiment 2** consisted of 32 students Out of 32 total students, 16 students were put each in experimental group and the control group.
- **Experiment 3** consisted of 40 students Out of 40, 20 students were put in experimental group and other 20 formed the control group.
- **Experiment 4** consisted of 30 students Out of 30, 15 students were put in experimental group and other 15 formed the control group. All this grouping was done randomly.

### 1.6.5 Sources for Data collection

While using sample as main primary source, different libraries, online research papers from national and international journals, text books, magazines, thesis and dissertations related to various universities have been used as sources for the data collection.

### 1.6.6 Design

Pre test and post test have been opted for design.

### 1.6.7 Tools for Data collection

The following tools have been developed by the investigator to carry out this present study:
1. Multimedia Package
2. Criterion Test (pre test –post test)
3. Questionnaire
4. Interview schedule.

1.6.8 Data Analysis

Data has been analysed through both Quantitative (Statistical) and Qualitative techniques.

1.6.9 Delimitation

1. This research work is limited to students of Senior Secondary group i.e. +1 and +2 classes.
2. The theoretical aspects have been selected and more focused for this Experimental study.
3. The present Study has been limited only to the schools of Hoshiarpur district of Punjab.

Conclusion

Music has a mutual relation with education and knowledge. Although its path leads us to spirituality, yet in the scientific era music can easily be understood simply and very easily. Through the medium of music, goal of self realization can also be fulfilled. Spiritual development and providing the pure joy to a human is the main purpose of Music. It makes our heart and minds satisfied. It inspires us to get enthusiasm, motivation and peace. Music is considered to be a supreme fine art amongst all arts. Music education also imparts both knowledge and experience like other subjects. It can be easily understood with the scientific bases and principles used in it. Advancement in information communication technology (ICT) is going to serve very broadly, so that education can reach to children of new generation youngsters and side by side to those who want to continue education to accommodate the demands of explosion of information, and the changeful nature of professions. The union
between information technology and communication technology has exposed new field of vision for social and economic enlargement on the globe for each and every country. Hence ICT is proving to be a better technology in the field of Music education.