

RESTRICTED

COMMAND AND STAFF TRAINING INSTITUTE BANGLADESH AIR FORCE



Individual Staff Studies Programme (ISSP)

PROFESSIONAL SUBJECT- 1 : EDUCATION PHASE-8 : PART-I

RESTRICTED

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PHASE-8 : PART-I

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CONDUCT OF THE PHASE**Weeks: 08****Period: 80**

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Total Period: 68

INTRODUCTION TO THE PHASE

Training Objective

1. To enable the Education Branch Officers for acquiring sound professional and service knowledge in order to carry out instructional/service duties and responsibilities effectively in relation to this subject.

Enabling Objectives

2. To know the chronological development of the world history of education from the ancient period.
3. To understand the overall history of education in Bangladesh and the educational system in different levels.
4. To comprehend the education imparted in different training institutes of Bangladesh Air Force and the role of the instructor.
5. To familiarize with the organization of Education Branch in Bangladesh Air Force and the role of the education officers.
6. To familiarize with the Library Organization & Administration in Bangladesh Air Force.
7. To familiarize with the Administration of BAF Shaheen School & Colleges.
8. To familiarize with the principal methods of instruction.
9. To familiarize with the concept of education in BAF.

TOPIC-1

EDUCATION AND EDUCATION SYSTEM IN BANGLADESH

Introduction

1. The primary objective in studying the history of education is to gain a broad understanding of the main aspects and problems of education. The use of chronological history of education helps the student to prepare for examinations as well as enhance their level of knowledge. The education has been chronologically developed throughout the world and Bangladesh is not an exception. The historical development of education must be studied in terms of time and the environment.

Historical Development of Education

2. The history of education is chronicle of higher education in both teaching and learning in the human society. Each generation, since the beginning of human evolution and writing, has sought to pass on cultural and social values, traditions, morality, religion, knowledge and skills to the next generation. The history of the curricula of education reflects human history itself, the history of knowledge, beliefs, skills and cultures of humanity. In pre-literate societies, education was achieved orally and through observation and imitation. The young learned informally from their parents, extended family and grand parents. At later stages, they received instruction of a more structured and formal nature, imparted by people not necessarily related, in the context of initiation, religion or ritual. As the customs and knowledge of ancient civilizations became more complex, many skills would have been learned from an experienced person on the job.

3. With the development of writing, it became possible for stories, poetry, knowledge, beliefs and customs to be recorded and passed on more accurately to people of future generations. In many societies, the spread of literacy was slow; orality and illiteracy remained predominant for much of the population for centuries. A formal schooling was available to a small part of the population, either at religious institutions or for the wealthy who could afford to pay for their tutors. The earliest known universities or places of higher education, started teaching a millennium or more ago.

4. Universal education of all children in literacy has been a recent development. Even today, in some parts of the world, literacy rates are below 60 per cent such as in some Asian and most of the African countries. Schools, colleges and universities have not been the only methods of formal education and training. Many professions have additional training requirements, the skills of a trade were not generally learnt in a classroom, but rather by serving an apprenticeship. Nowadays, formal education consists of systematic instruction, teaching and training by professional teachers. This consists of the application of pedagogy and the development of curricula.

Education in Prehistory

5. Most of human history lies in prehistory, the period before the use of writing, and before written history. Throughout prehistory, most education was achieved orally and through observation and imitation. Most humans lived as hunter-gatherers. Some were settled in a given local region and others exhibited a nomadic lifestyle. These tribes had traditions, beliefs, values, practices and local knowledge which were passed orally for generations. The young learned informally from their parents, extended family and kin. At later stages, they received instruction of a more structured and formal nature in the context of initiation, religion or ritual. Some forms of traditional knowledge were expressed through stories, legends, folklore, rituals and songs without the need for a writing system.

6. Gradually the advent of human settlement, development of agriculture and metal work brought new knowledge and skills to be learned and taught by each generation. As communities grew larger, there were more opportunity for some members to specialize in one skill or activity or another, becoming priests, artisans, traders, builders or labourers. Many skills would have been learned from an experienced person on the job. The increased size of communities also brought changes to methods of leadership, politics and organization. Early civilizations replaced the earlier bands and tribes. For example, the Uruk period (4000 to 3100 BC) saw the emergence of urban life in Mesopotamia.

7. In large settlements, social stratification such as a hierarchical arrangement of social class or caste began to develop within the society. There might be a noble or priest or religious leaders because religious beliefs or spirits often formed an important part of a culture. In some societies, the status of women was lower than that of men; in some there were slaves. A person's social class, caste or gender might in turn determine or limit the occupations which he or she might follow and the education that he or she would receive. Before the development of writing, it is probable that there were already epic poems, hymns to gods and incantations (such as those later found written in the ancient library at Ninevah and the Vedas).

Education in Ancient Civilizations

8. Various writing systems were developed in ancient civilizations around the world starting in about 3500 BC. These writing systems would greatly increase the potential for passing knowledge onwards from one person to others. They would also bring the need for education in the skills of writing and reading. The original Mesopotemian writing system had evolved into using a triangular-shaped stylus pressed into soft clay for recording numbers. Around the 26th century BC, Cuneiform (symbols imprinted on a wet clay tablet) began to represent syllables of spoken Sumerian. Also in that period, Cuneiform writing became a general purpose writing system for Sumerians.

9. The world's oldest known alphabet was developed in central Egypt around 2000 BC from a hieroglyphic prototype. One hieroglyphic script was used on stone monuments; other cursive scripts were used for writing in ink on papyrus, a flexible, paper-like material, made from the stems of reeds that grow in marshes and beside river Nile. A variant of the early Greek alphabet gave rise to the Etruscan alphabet and its own descendants, such as the Latin alphabet. The Phoenician system was also adapted into the Aramaic script from which the Hebrew script and also that of Arabic are descended.

10. In China, the early oracle bone script has survived on tens of thousands of oracle bones in the Shang Dynasty. Out of more than 2500 written characters in use in China up to 1200 BC, around 1400 are identifiable as the source of standard Chinese characters. Of several pre-Columbian scripts, the one that appears to have been best developed is the Maya script. The earliest inscriptions Maya date to the 3rd century BC, and writing was in continuous use until 16th century AD. Other surfaces used for early writing include wax-covered writing boards, sheets or strips of bark from trees (in Indonesia, Tibet and the Americas), the thick palm-like leaves of a particular tree, the leaves then punctured with a hole and stacked together like the pages of a book (these writings in India and South East Asia include Buddhist scriptures and Sanskrit literature), parchment (made of goatskin), which was used from at least the second century BC, vellum (made from calfskin), and wax tablets which could be wiped clean to provide a fresh surface (in Roman times).

Formal Education in Ancient Civilizations

11. In many early civilizations, education was associated with wealth and the maintenance of authority, or with prevailing philosophies, beliefs or religion. These are described below one by one in the subsequent paragraphs.

In the Middle East

12. The early logographic system of Cuneiform script took many years to master in Mesopotamia. Thus only a limited number of individuals were hired as scribe to be trained in its reading and writing. Only royal offspring and sons of the rich and professionals went to school. Most boys were taught their father's trade. Girls had to stay home with their mothers. Later, when a syllabic script became more widespread, more of the Mesopotamian population became literate. There arose a whole social class of scribes mostly employed in agriculture. Gradually women as well as men learned to read and write. Massive archives of texts were recovered from the archaeological contexts of old Babylonian scribal schools, through which literacy was disseminated. During the reign of Neo-Assyrian Empire, Cuneiform texts were collected from all over Mesopotamia, and especially Babylonia, in the library in Ninevah, the first systematically organized library in the ancient Middle East, which survives in part today.

13. In ancient Egypt, literacy was concentrated among an educated elite of scribes. Only people from certain backgrounds were allowed to train to become scribes, in the service of temple, pharaonic and military authorities. The rate of literacy in Pharaonic Egypt has been estimated at not more than one percent.

14. Basic education became more widespread around one thousand years later in ancient Israel. The standard education texts were all hand-written until the invention of printing. Despite the introduction of schooling system, many children did not learn to read and write among the Jewish population of Roman Palestine in the first centuries AD and the literacy rate was about 3 percent.

In India

15. In ancient India (during Vedic period), most education was based on the Veda (hymns, formulas and incantations) and later Hindu texts and scriptures. Vedic education included: recitation of the Veda, the rules of sacrifice, understanding of secrets of nature and the skills necessary for an occupation etc. Herbal medicines were also taught in Veda.

16. Education was at first freely available in Vedic society however it became over time more discriminatory as the caste system. The Upanishads is another part of Hindu scriptures date back from 500 BC. These texts encouraged an exploratory learning process in search for truth. The Gurukul system of education supported traditional Hindu residential schools of learning. The teacher imparted knowledge of Religion, Scriptures, Philosophy, Literature, Warfare, Statecraft, Medicine, Astrology and History at the Gurukuls. The corpus of Sanskrit literature encompasses a rich tradition of poetry and drama though many central texts of Buddhism and Jainism have also been composed in Sanskrit.

17. Two epic poems formed part of ancient Indian education. The Mahabharata discusses human goals (purpose, pleasure, duty and liberation), attempting to explain the relationship of the individual to society and the world. The Ramayana explores themes of human existence and the concept of dharma. An early center of learning in India dating back to the 5th century BC was Taxila (Takshashila), which taught the three Vedas and the eighteen accomplishments. It was an important Vedic/Hindu and Buddhist centre of learning from the 6th century BC to the 5th century AD.

In China

18. During the Zhou Dynasty, there were five national schools in the capital city. The schools mainly taught the six arts such as rites, music, archery, charioteering, calligraphy and mathematics. Boys learned arts (music and dance) related to ritual at age twelve and when older, archery and chariot driving. Girls learned ritual, correct deportment, silk production and weaving.

19. It was during the Zhou Dynasty that the origins of native Chinese philosophy developed. Confucius (551BC–479BC), founder of Confucianism, was a Chinese philosopher who made a great impact on later generations of Chinese and on the curriculum of the Chinese educational system for the following 2000 years. During the Han Dynasty, boys were thought ready at age seven to start learning basic skills in reading, writing and calculation. However, education through this period was a luxury.

20. Later, during the Chin Dynasty, a hierarchy of officials was set up to provide central control over the outlying areas of the empire. To enter this hierarchy, the content of the educational process was designed not to engender functionally specific skills but rather to produce morally enlightened and cultivated generalists. Imperial examination system was developed later for the civil service in the Sui Dynasty.

In the Greek and Roman Empires

21. In the city states of ancient Greece, most education was private except in Sparta. Anyone could open a school and decide the curriculum. Parents could choose a school offering the subjects they wanted their children to learn. Most parents sent their sons to schools for at least a few years for learning gymnastics, music and literacy. Girls rarely received formal education. After some schooling, the sons of poor or middle class families often learnt a trade by apprenticeship. The richest students continued their education by studying with sophists. Some of Athens' greatest schools of higher education included the Lyceum (founded by Aristotle) and the Platonic Academy (founded by Plato). In the subsequent Roman Empire, Greek was the primary language of science. Advanced scientific research and teaching was mainly carried on in the Hellenistic side of the Roman Empire in Greek.

22. The education system in the Greek city-state of Sparta was entirely different, designed to create warriors with complete obedience, courage and physical perfection. At the age of seven, boys were taken away from their homes to live in school dormitories or military barracks. They were taught sports, endurance and fighting with harsh discipline. However, most of the population was illiterate.

23. The first schools in ancient Rome arose by the middle of the fourth century BC. These schools were concerned with the basic socialization and rudimentary education of young Roman children. The literacy rate in the third century BC has been estimated as around one percent to two percent. Roman education system developed arranging schools in tiers. But only the Roman elite would expect a complete formal education. Higher education in Rome was more of a status symbol than a practical concern. The average literacy rate was around five percent in the Greco-Roman world with wide regional variations.

Formal Education in the Middle Ages (500–1600 AD)

24. Education formally begins mainly in the middle ages almost all over the world. Subsequent paragraphs describe how education and the education system spread in different parts of the world.

In the Islamic world

25. During the 6th and 7th centuries AD, the Academy of Gundishapour, a Muslim centre of learning, offered training in medicine, philosophy, theology and science. The House of Wisdom in Baghdad was a library, translation and educational centre from the 9th to 13th centuries AD. Works on astrology, mathematics, agriculture, medicine and philosophy were translated there. The House was an unrivalled centre for the study of humanities and sciences. Baghdad was known as the world's richest city and centre for intellectual development of the time.

26. The Islamic world developed a schooling system during the Islamic Golden Age. A systematic way of teaching and spreading knowledge was developed. At first, mosques combined both religious performance and learning activities, but by the ninth century, the Madrasah, a proper school built independently from the mosque. The medieval Madrasahs founded in the 9th century are the first examples of a university.

27. Also in the 9th century, Bimaristan medical schools were formed in the medieval Islamic world, where medical diplomas were issued to students of Islamic Medicine. Al-Azhar University, founded in Cairo, Egypt in 975, was offered a variety of post-graduate degrees in Islamic Law, Islamic Jurisprudence, Arabic Grammar, Islamic Astronomy, Islamic Philosophy and Logic.

28. The origins of the 'doctorate' date back to the "license to teach and issue legal opinions" in the medieval Islamic legal education system. This licence was equivalent to the Doctor of Laws qualification and was developed during the 9th century.

29. Under the Ottoman Empire, the towns of Busra and Edirne became major centers of learning. The Ottoman system of Kulliye, a building complex containing a mosque, a hospital, madrasa, public kitchen and dining areas, revolutionized the education system, making learning accessible to a wider public through its free meals, health care and sometimes free accommodation.

30. In the 15th and 16th centuries, the town of Timbuktu in the West African nation of Mali became an Islamic centre of learning with students coming from as far away as the Middle East. Over time, there was a great accumulation of manuscripts in the area in the fields such as logic, astronomy and history etc.

In China

31. Although there are more than 40,000 Chinese characters in written Chinese, many are rarely used. Studies have shown that full literacy in the Chinese language requires knowledge of only between three to four thousand characters. In China, three oral texts were used to teach children by rote memorization of the written characters of their language and the basics of Confucian thought.

32. From around the 13th century AD until the 19th century, the Three Character Classic, which is an embodiment of Confucian thought suitable for teaching to young children, served as a child's first formal education at home. The text is written in triplets of characters for easy memorization. After learning Chinese characters, students wishing to ascend in the social hierarchy needed to study the Chinese classic texts.

33. The early Chinese states depended upon literate, educated officials for operation of the empire. In 605 AD, during the Sui Dynasty, for the first time, an examination system was explicitly instituted for a category of local talents. The merit-based Imperial Examination System was continued in use for 1300 years upto Qing Dynasty and abolished in 1911 in favour of Western Education System.

34. Theoretically, any male adult in China, regardless of his wealth or social status, could become a high-ranking government official by passing the imperial examination but in reality, most of the candidates came from the numerically small but relatively wealthy land-owning gentry. Under some dynasties, the imperial examinations were abolished and official posts were simply sold, which increased corruption and reduced morale.

35. In the period preceding 1040 – 1050 AD, prefectural schools had been neglected by the state and left to the devices of wealthy patrons who provided private finances. The chancellor of China at that time, Fan Zhongyan, issued an edict that would have used a combination of government funding and private financing to restore and rebuild all prefectural schools that had fallen into disuse and abandoned later.

In India

36. The first millennium saw the flourishing of higher education at Nalanda, Takshashila, Ujjain and Vikramshila universities. Each university specialized in a particular field of study. Takshila specialized in the study of medicine, while Ujjain laid emphasis on astronomy. Nalanda, being the biggest centre, handled all branches of knowledge, and housed up to 10,000 students at its peak.

37. Nalanda was a Buddhist center of learning founded in Bihar, India around the 5th century AD and conferred academic degree titles to its graduates. It has been called one of the first great universities in recorded history. British records show that indigenous education was widespread in India in the 18th century, with a school for every temple, mosque or village in most regions of the country. The schools were attended by students' representative of all classes of society.

In Japan

38. The history of education in Japan dates back to the sixth century, when Chinese learning was introduced at the Yamato court. Foreign civilizations have often provided new ideas for the development of Japan's own culture. Chinese teachings and ideas flowed into Japan from the sixth to the ninth century.

39. By the ninth century, Heian-kyo (today's Kyoto), the imperial capital, had five institutions of higher learning, and during the remainder of the Heian period, other schools were established by the nobility and the imperial court. During the medieval period (1185 – 1600), Zen Buddhist monasteries were especially important centers of learning.

In Europe

40. During the early Middle Ages, the monasteries of the Catholic Church were the centres of education and literacy. Ireland became known as the island of saints and scholars. Monasteries were built all over Ireland and these became centres of great learning.

41. Northumbria was famed as a centre of religious learning and arts. It played an important role in the formation of Insular arts, a unique style combining Anglo-Saxon, Celtic, Byzantine and other elements. After the Synod of Whitby in 664 AD, Roman church practices officially replaced the Celtic ones but the influence of the Anglo-Celtic style continued.

42. During the reign of Charlemagne, King of the Franks from 768 – 814 AD, whose empire united most of Western Europe since the Romans, there was a flowering of scholarship, literature, art and architecture. Charlemagne greatly increased monastic schools and scriptoria in the then Franch.

43. The English monk Alcuin was invited to Charlemagne's court at Aachen, and brought with him the precise classical Latin education that was available in the monasteries of Northumbria. The return of this Latin proficiency to the kingdom of the Franks is regarded as an important step in the development of mediaeval Latin.

Influence after the 15th Century

44. Modern systems of education in Europe derive their origins from the schools of the high Middle Ages. Most schools during this era were founded upon religious principles with the primary purpose of training the clergy. Many of the earliest universities, such as the University of Paris founded in 1160 had a Christian basis. Free education for the poor was officially mandated by the Church at the Third Lateran Council in 1179. Private, independent schools reappeared in medieval Europe during this time but they were religious in nature and mission.

45. The curriculum of the educational institutions of this period was frequently based around liberal arts and was conducted in Latin. In northern Europe, this clerical education was largely superseded by forms of elementary schooling following the protestant reformation. In central Europe, the 17th century scientist and educator John Amos Comenius promulgated a reformed system of universal education that was widely used in Europe.

46. This growth resulted in increased government interest in education. In the 1760s, it was proposed to educate young Russians of both sexes in state boarding schools, aimed at creating 'a new race of men'. Betskoy set forth a number of arguments for general education of children rather than specialized one.

47. Betskoy's work in Russia was soon followed by the Polish establishment in 1773 of a Commission of National Education. The commission functioned as the first government Ministry of Education in a European country. Contributions to the study of education elsewhere in Europe included the work of Johann Heinrich Pestalozzi in Switzerland and Joseph Lancaster in Britain.

48. Under the guidance of Wilhelm-von-Humboldt, a new university was founded in Berlin in 1810 which became the model for many research universities. In the late 19th century, most of West, Central and parts of East Europe began to provide elementary education in reading, writing and arithmetic. Having created primary education, the major nations had to give further attention to secondary education by the time of World War-I. In the 20th century, new directions in education included, in Italy, Maria Montessori's Montessori schools; and in Germany, Rudolf Steiner's development of Waldorf education.

Education in Modern View

49. The first important elementary vernacular schools to develop in Western Europe among the Germanic peoples were those established in the commercial cities. At that time there were practically no such schools in the villages and rural districts. The Protestant Reformation established a theoretical basis for universal vernacular education, namely, the necessity of reading the Bible for religious salvation. In general, vernacular schools were mere makeshifts down to the beginning of the nineteenth century, usually teaching children only the catechism and the bare elements of reading and writing.

50. Secular tendencies culminating in Rousseau's "Emile"-during the 17th and 18th centuries' secular interests developed and gradually overthrew the ecclesiastical control which had dominated life and education for so many centuries. The Emile served as a spark to start an educational revolution which soon developed an entirely secular basis for elementary education. The elementary schools were first secularized on a large scale in Prussia. In England, the struggle for complete secularization is still going on. In the United States, most of the states had developed secular-school systems by the middle of the 19th century.

51. Methods of secularized elementary school were developed by Pestalozzi and his followers. Rousseau's suggestions for reforms in the curriculum and methods of elementary education were taken up by Pestalozzi. Pestalozzi neglected history and literature, however, and the organization of these subjects in the elementary curriculum was especially emphasized by Herbart and his followers, who also emphasized the educational value of interest, apperception, correlation and the systematic organization of units of instruction. It remained for Froebel, an intimate disciple of Pestalozzi, to emphasize the motor processes involved in manual training and other forms of expression and the importance of the social experiences of children while in schools as educative factors. These factors have found practical application in the kindergarten and their application in other parts of the elementary school is now being considered and tested.

52. **Greatest Change in Elementary Education.** During 19th century the development in elementary education took place. The development in the near future promises to be equally so. However, attention is called to the following as being especially noteworthy:

- a. The introduction into the elementary school of industrial and prevocational courses organized as definite preparation for specific vocations.
- b. The endeavour to organize effective moral and civic instruction.
- c. The provision made varying instruction to meet the varying needs of pupils that are due to individual differences in capacities, in economic status and in plans for a career.
- d. The tendency to measure accurately the results of instruction by precise, objective, scientific methods as a means of testing its value, instead of relying on the vague and unproved opinions of theorists or of untrained observers.

History of Education in Bangladesh

53. Education in Bangladesh has evolved in terms of languages of instruction, governance of schools and pedagogical methods. Early education in Bengal was once intertwined with Indian and Islamic Madrasah education. Major changes coincided with the onset of British rule, the creation of Pakistan and the establishment of an independent Bangladesh.

54. Under the British East India Company from 1758 and the British Raj from 1858, education was mainly reserved for the wealthy classes. The language of pedagogy was English, as nuns and other British administrators ran the schools. The few natives who were fortunate to receive an education were either from wealthy families (Nawabs) or families with ties to the British governing body. To receive higher education, such as a university degree, one had to attend schools in England. For example, Mahatma Gandhi travelled to London to study law. As native people were treated as second-class citizens, education was largely withheld from the general population.

55. In 1947, the British left the Indian subcontinent and the territory currently known as Bangladesh came under Pakistani rule as one of the states of Pakistan named as East Pakistan. Education during this period was still very scarce but those who had the means of acquiring it were no longer considered second-class citizens. Although the state language of Pakistan was Urdu and the native language of East Pakistan was Bengali, schools largely continued to function in English. Some schools and colleges such as the Catholic Holy Cross were still taught by Christian missionaries.

56. After the liberation of Bangladesh, a national education commission led by Dr Muhammad Qudrat-i-Khuda was formed in 1972. The commission, popularly known as 'Qudrat-i-Khuda Education Commission-1972', produced a report in 1974. A committee was formed in 1976 for developing national curricula and syllabi in conformance with the recommendations of the report. The second education commission was formed in 1979

with Dr Mofiz Uddin as chair. 'Mofiz Uddin Education Commission' submitted a report in 1988. In 1997, a 56-member committee was formed to update the education system. This committee, known as 'Shamsul Haque Education Committee', submitted an education policy report to the National Assembly. This report took into consideration environment, globalization and gender issues for the first time. 'Mohammad Moniruzzaman Mia Commission-2003' submitted its report in March 2004 and made 880 recommendations on all of the education sub-sectors. Recently a new commission has been approved headed by Dr Kabir Chowdhury in 2010. This commission proposes to have pre-primary education for a year and then primary education up to class eight, secondary education up to class twelve and then tertiary level higher education. It also proposes nationwide exam considering the scholarship after class five and class eight which is already started.

57. Provision of education is listed as one of the fundamental responsibilities of the state in the constitution of Bangladesh. Education-related directives are narrated in articles 15, 16, 17, 19, 28 and 41 of the constitution.

Education System in Bangladesh

58. The three main educational systems in Bangladesh, ordered by decreasing student numbers, are:

- a. General Education System (including English Medium and English Version)
- b. Madrasah Education System (including Quomi Madrasah)
- c. Technical - Vocational Education System

59. Each of these three main systems is divided into four levels as per education policy approved in 2010:

- a. Pre-Primary Level (years 1 to 2).
- b. Primary Level (years 1 to 8) up to class eight.
- c. Secondary Level (years 9 to 12) up to class twelve.
- d. Tertiary Level (after 12) i.e. university level education.

60. Tertiary education in Bangladesh takes place both at government and private universities and some university colleges. Students can choose to further their studies in engineering, technology, agriculture and medicine at a variety of universities and colleges. At all levels of schooling, students can choose to receive their education in English or Bengali. Private schools tend to make use of English-based study media while government-sponsored schools use Bengali. However, English version on Bengali syllabi is a recent development.

61. Cadet colleges are important in the education system of Bangladesh. A cadet college is a special type of school-cum-college established in East Pakistan on the model of English public schools. Military education is compulsory at cadet colleges. The government of Pakistan established the first residential cadet college in Punjab in 1954. Faujdarhat cadet college was the first cadet college in East Pakistan (Bangladesh), established in 1958 in Chittagong. At present there are 12 cadet colleges in Bangladesh including 3 Female cadet colleges.

62. The Madrasah Education System focuses on religious education, teaching all the basics of education in a religious environment. Islamic teachings are compulsory. Religious studies are taught in Arabic and the children also usually serve the related mosques. Students also study some or all of the courses from the General Education System. Madrasahs take in many homeless children and provide them with food, shelter and education. Quomi Madrasah is now under government regulation according to the new education policy - 2010.

63. The Technical and Vocational Education System provides courses related to various applied and practical areas of science, technology and engineering, or focuses on a specific specialized area. Course duration ranges from one month to four years depending on the merit of the course.

Pre-primary and Primary Education

64. Following the EFA, the government of Bangladesh made primary education compulsory for all children between the ages of 6 and 10. However, it is now up to 13 years. This has had a major impact on the system and the overall enrollment rate has increased since from 75% to 95% by 1996. In 1997, the government adopted a five-year Primary Education Development Program (PEDP1). Later in 2003, the concept paper of 'Second Primary Education Development Program' (PEDP2) was approved.

65. Bangladesh has 18 million children in 62,000 primary schools; this is one of the largest primary systems in the world. Over 65% of the primary schools are government primary schools; the rest are registered non-governmental schools but assisted by the government. The government of Bangladesh distributes free books and education kits to the students of primary schools. There are private schools; however, the number of students enrolled in private schools is much fewer, and these schools largely cater to the social elite. Many schools in the secondary level also have primary sections.

66. Presently the primary education level is from year 1 to year 8. The primary curriculum is a competency based curriculum developed by the National Curriculum and Textbook Board (NCTB). The Directorate of Primary Education (DPE) implements the curriculum and also manages the system of primary education. Presently there is a nationwide examination at the end of the fifth year which is also considered as a scholarship examination. The same nationwide examination is planned after eight years of schooling which is also considered as the scholarship examination.

Secondary Education

67. The secondary and higher secondary level was between year 6 and year 12. Now it is between 8 to 12 where the concept of higher secondary level is omitted in the education policy of 2010. There are two nationwide public examinations in this level. The first one is the Primary School Certificate examination at the end of year 8. Then the Secondary School Certificate examination, conducted at the end of year 12. However another public examination held after 5 years of schooling at the end of class five. These examinations are conducted by the seven education boards located in Barisal, Chittagong, Comilla, Dhaka, Jessore, Rajshahi, and Sylhet.

68. On completion of primary education, students (13+) enroll for secondary education that spans 4 years. At the end of this phase of education, some students branch out to join the vocational stream, offered at Vocational Training Institutes (VTI) and Technical Training Centres (TTC) run by the Ministry of Education (MOE) and the Ministry of Labour and Employment respectively. However, students can enroll themselves in technical education after their primary education as per new policy for any vocational training. Students in the mainstream continue in government and non-government secondary schools for a 4 year education in their respective areas of specialization. The students of 'Madrasah Education System' stream also sit for their respective public examinations conducted by the Madrasah Education Board.

69. The students of general education system's English medium streams also sit for their respective public examinations conducted by London/Cambridge University, facilitated by the British Council. Students of technical and vocational stream also sit for their public examinations after their period of study conducted by the Bangladesh Technical Education Board.

Tertiary Education

70. After 12 years of schooling at primary and secondary levels, students (17+) who succeed in passing the Secondary School Certificate examination have the option of specialization in the university or enrolling in the Technical Education System in their respective areas of technological study which they might have done after class eight to obtain a diploma degree. In the General Education System, the student has to obtain HSC certificate to qualify for further education. Students in the Madrasah Education System and English-speaking schools also sit for their respective public examinations. These exams are conducted by the Madrasah Education Board and Cambridge University respectively to qualify for further education.

71. **Undergraduate Education.** Undergraduate education of different duration (three to four years) is offered to students aged 18+ at a number of public and private universities, degree and honours colleges, technical colleges, and specialized institutions. Successful completion of a degree course is a prerequisite for appointment to a white-collar civilian job. Students can enroll in such colleges or Universities for obtaining a formal 'pass' Bachelor degree which is a Three-year long course, or they can obtain a formal 'honours' Bachelor degree which is a four-year long course.

72. **Post-graduate Education.** Post-graduate education, normally of one to two year duration, is provided at universities and affiliated colleges and institutions under National University or at any public or private universities. Then student can obtain M Phil or Ph D degrees afterwards at the respective universities either home or abroad.

73. **Tertiary Education in Madrasah Education System.** In Madrasah Education System, after passing 'Alim', student can enroll in for 2 years long study for obtaining a 'Fazil' level as well as they can go for further general education like earning all over the university degree. After passing successfully they can further enroll into another 2 years long study system to obtain a 'Kamil' level degree.

74. **Tertiary Education in Technical Education System.** In the Technical Education System, students can further pursue their educational carrier for obtaining a Bachelor degree from Engineering and Technology Universities. Then they can enroll into post-graduate studies.

Education Management in Bangladesh

75. The overall responsibility of management of primary education lies with the Primary and Mass Education Division (PMED), set up as a separate division with the status of a Ministry in 1992. While the PMED is involved in formulation of policies, the responsibility of implementation rests with the Directorate of Primary Education (DPE) headed by a Director General.

76. The Directorate of Primary Education (DPE) and its subordinate offices in the district and upazila are solely responsible for management and supervision of primary education. Their responsibilities include recruitment, posting, transfer of teachers and other staff; arranging in-service training of teachers; distribution of free textbooks; and supervision of schools. The responsibility of school construction, repair and supply of school furniture lies with the Facilities Department (FD) and Local Government Engineering Department (LGED). The National Curriculum and Textbook Board (NCTB) are responsible for the development of curriculum and production of textbooks. While the Ministry of Education (MOE) is responsible for formulation of policies, the Directorate of Secondary and Higher Education (DSHE) under the Ministry of Education is responsible for implementing the same at secondary and higher education levels. The NCTB is responsible for developing curriculum and publishing standard textbooks.

Primary and Secondary Levels Management

77. The primary and secondary levels of education are controlled by the eight General Education Boards, each covering a region. In addition, the Madrasah Education Board covers religious education in government-registered Madrasahs, and the Technical Education Board controls technical and vocational training in the secondary level. Six region-based Boards are responsible for conducting the two public examinations; Primary and Secondary, in addition to granting recognition to non-government secondary schools.

78. At the school level, in the case of non-government secondary schools, School Management Committees (SMC), and at the college level, in the case of non-government colleges, Governing Bodies (GB), formed as per government directives, are responsible for mobilizing resources, approving budgets, controlling expenditures, and appointing and disciplining staff. While teachers of non-government secondary schools are recruited by concerned SMCs observing relevant government rules, teachers of government secondary schools are recruited centrally by the DSHE through a competitive examination. In government secondary schools, there is not an SMC. The headmaster is solely responsible for running the school and is supervised by the deputy director of the respective zone. Parent Teachers Associations (PTAs), however, exist to ensure a better teaching and learning environment.

Tertiary Education Management

79. At the tertiary level, universities are regulated by the University Grants Commission. The colleges providing tertiary education are under National University. Each of the medical colleges is affiliated with a public university. Universities in Bangladesh are autonomous bodies administered by statutory bodies such as Syndicate, Senate, Academic Council etc in accordance with provisions laid down in their respective acts.

80. **Technical and Vocational Education Management.** The Directorate of Technical Education (DTE) is responsible for the planning, development, and implementation of technical and vocational education in the country. Curriculum is implemented by Bangladesh Technical Education Board (BTEB).

Non-formal Primary Education

81. There exist a substantial number of NGO-run non-formal schools, catering mainly to the drop-outs of the government and non-government primary schools. Very few NGOs, however, impart education for the full five-year primary education cycle. Because of this, on completion of their two to three-year non-formal primary education in NGO-run schools, students normally re-enter into government/non-government primary schools at higher classes.

82. There are Non-Governmental Schools (NGO) and Non-Formal Education Centers (NFE) and many of these are funded by the government. The largest NFE program is the much reputed BRAC program. However, all NFE graduates do not continue on to secondary school. In NGO-run schools there does not exist any SMC. The style of management differs depending upon differences in policies pursued by different NGOs. Some are centrally managed within a highly bureaucratic set-up, while others enjoy considerable autonomy. Different NGOs pursue different policies regarding recruitment of teachers.

Current Status

83. Current government projects to promote the education of children in Bangladesh include compulsory primary education for all upto class eight, free education for girls up to grade 12, stipends for female students, a nationwide integrated education system and a food-for-education literacy movement. A large section of the country's national budget is set aside to help put these programs into action and to promote education and make it more accessible. Recent years have seen these efforts pay off and the Bangladesh education system is strides ahead of what it was only a few short years ago. The government has newly emphasized the education in larger perspective to educate all in the newly published policy 2010.

Conclusion

84. The educational system of Bangladesh faces several problems. In the past, Bangladesh-education was primarily a British-controlled, upper-class affair with all courses given in English and very little being done for the common people. The Bangladesh education board has taken steps to leave such practices in the past and is looking forward to education as a way to provide a somewhat poverty-stricken nation with a brighter future. Bangladesh has one of the lowest literacy rates in South Asia. One study found a 15.5% primary school teacher absence rate.

85. The low performance in primary education is also matter of concern. School drop-out rates and grade repetition rates are high. Poor school attendance and low contact time in school are factors contributing to low level of learning achievement. Further, the system lacks a sound Human Resource Development and deployment system and this has demoralized the primary education sector personnel including teachers and contributes to poor performance. Poverty is a big threat to primary education.

TOPIC-2

CONCEPT OF EDUCATION IN BANGLADESH AIR FORCE

Introduction

1. A high standard of professional proficiency can be attained only when the foundations of training are laid on a sound educational background. Control of training in the BAF training establishments is exercised at Air Headquarters by Directors; responsible for different types of training. They work in close liaison with the Director of education.

The Aim of Education

2. The aims of all forms of service training are to make personnel efficient in profession. It also inculcates a sense of loyalty and pride in the service and to develop qualities of character. Officers and NCOs will have to develop to a reasonable degree. The aim of all training is to foster capacity of leadership in an organization and to train all ranks to work together as a team.

Education and Service Training

3. The educational element in the service training varies in both content and quality according to the aim and purpose of the course. In all training establishments, educational subjects are closely integrated with other elements of professional training in the training program. The educational subjects such as Mathematics, Mechanics, Physics, Electronics, Aerodynamics, Aero Engine etc and Humanities subjects are taught by education officers and instructors.

Types of Education Imparted in the BAF

4. The Director of Education is responsible for all educational services in the BAF. The following types of education are generally imparted in BAF:

a. **Basic Education.** This type of education is imparted to the new comers at BAFA and RTS. It includes both educations on general and military subjects as per requirements of service. At BAFA, RTS and other BAF Training institution basic education runs parallel to applied education and reinforces it.

b. **Professional Education.** The professional education are conducted at Officers' Training School (OTS), Flying Instructors' School (FIS), Command and Staff Training Institute (CSTI) and Training Wing to provide adequate knowledge on professional subjects to officers and airmen to take their places. During professional education further instruction in theories are also taught.

c. **Applied Education.** This means the teaching of aeronautical subjects and necessary laboratory work done, for example at BAF Academy, Schools of Aeronautics and Electronics. Directorate of Education scrutinizes all syllabi at the BAF Training Schools and Academy.

d. **General Education.** This covers all direct education through coaching and instruction as is the case with private studies of service personnel, preparing for university examinations and indirect education as in correspondence courses.

Functions of the Education Branch

5. The functions of the Education Branch are as follows:
- a. To perform instructional duties at different training institutes which conduct educational and general training of officers and airmen.
 - b. To provide educational and training facilities in such a way that help officers and airmen to develop their professional and technical efficiency.
 - c. To encourage officers and airmen on cultural activities, national interests and current affairs.

Cultural Education

6. In addition to providing the theoretical instruction described above, it is the duty of education officers in training establishments to stimulate the intellectual and moral aspirations of officers and airmen and to help them to develop wider interest and habits of independent thought including reasoned interpretation of the day. To achieve this object some periods in each week are devoted to the study of humanistic subjects including English language, citizenship and current affairs. The object of education is to develop systematically all that is best in the individual as social human being. Education, therefore, must continue till the end of a man's life.

Educational Standard for Training Courses

7. A further function of the Education Branch is to ensure that personnel have the necessary educational background to assimilate their service training. The educational content of recruit and pre-apprentice training is, therefore, most important. A high standard of proficiency can be attained only when the foundations of training are based on a sound educational background. A recruit with an unsound educational background is unlikely to develop to any reasonable degree of essential qualities of discipline and leadership.

Training Advice and Assistance

8. The educational element in training establishments is a part of a coordinated program for which the Officer Commanding (OC of a Training unit) is responsible. Whilst therefore, responsibility for training as a whole with him, he will normally consult the senior education officer on a variety of matters of mutual concern such as proposals for change in the syllabus, assistance to backward trainees and choice of instructional equipment.

Higher Study

9. BAF is always concerned about the professional development and welfare of its members. As such, BAF offers opportunity for higher education to its personnel.

10. **Opportunity for Higher Study of BAF Officers.** The policy related to higher study at home and abroad of BAF Officers is governed by AFO 54-23. However, BAF officers may acquire academic qualification subject to the fulfilments of following:

At Home

- a. After passing ISS Part-I.
- b. If not detailed for any service course.
- c. Expenditure is to be borne by the individual officer.

In Abroad

- a. After passing ISS Part-II and obtained PC.
- b. Eight weeks to 06 months duration will be treated as short duration course. One will be eligible for short duration course if his/her service remains for at least 3 years.
- c. More than 06 months duration (except Post Graduation/MS, M Phil, PhD and Post Doctoral course of any duration) will be treated as middle duration course. One will be eligible for middle duration course if his/her service remains for at least 5 years.
- d. Irrespective of duration Post Graduation, MS, M Phil, PhD, Post Doctoral Research course will be treated as long duration course. One will be eligible for long duration course if his/her service remains for at least 7 years. The existing higher study policy is shown as Annex 'A' to the chapter.

11. **Opportunity for Higher Study of Airmen**. The policy related to higher study of airmen is governed by AFO 54-13. However, airmen may acquire academic qualification subject to the fulfilments of following:

- a. All airmen must apply for obtaining permission for higher study.
- b. Permission may be given to an airman to sit for HSC/Equivalent exam on completion of 08 years of service, having got the substantive Corporal rank and secure 65% marks in Adv Trade Training.
- c. Permission may be given to an airman to sit for university level exams (graduate/post graduate):
 - (1) On successful completion of 14 years of service.
 - (2) To have the substantive Sergeant rank and secure 60% marks in proficiency test for promotion to the rank of Sergeant.
 - (3) Given undertaking to serve BAF for minimum 21 years.
- d. Airmen of Edn Instr and Cy Asst trades may get permission to undergo university level degree after getting promotion to the rank of SWO with an undertaking of serving BAF for 21 years.

বিমান বাহিনী আদেশনামা

নং ৫৪-২৩

বিমান বাহিনী সদর দপ্তর, ঢাকা

৩১ শ্রাবন ১৪০২ বাং

১৫ আগস্ট ১৯৯৫ ইং

শিক্ষাদেশে এবং বিদেশে উচ্চ শিক্ষা গ্রহণের নীতিমালা : বি বা কর্মকর্তাউদ্দেশ্য

১। গণপ্রজাতন্ত্রী বাংলাদেশ সরকার, প্রধান মন্ত্রীর কার্যালয়, সশস্ত্র বাহিনী বিভাগ এর পত্র নং ২২০৭/টি তারিখ ১৯ ফেব্রুয়ারী ১৯৯৪ অনুযায়ী প্রণীত বিমান বাহিনী কর্মকর্তার দেশে এবং বিদেশে উচ্চ শিক্ষা গ্রহণের নীতিমালা উক্ত সশস্ত্র বাহিনী বিভাগ কর্তৃক পত্র নং ২২০৭/টি তারিখ ০৭ আগস্ট ১৯৯৫ এর মাধ্যমে সরকারীভাবে অনুমোদিত হওয়ায় অত্র বিমান বাহিনী আদেশনামা জারী করা হইল। বিমান বাহিনীর এই আদেশনামা অনুসারে চাকুরীরত বিমান বাহিনী কর্মকর্তাগণ দেশে এবং বিদেশে উচ্চ শিক্ষা গ্রহণ করিতে পারিবেন। তবে সার্ভিসের স্বার্থ অক্ষুণ্ন রাখিয়া কর্মকর্তাগণকে এই সুযোগ প্রদান করা যাইতে পারে।

দেশে উচ্চ শিক্ষা গ্রহণ : ডিপে-১মা / স্নাতক (সম্মান) / সমমানের ডিগ্রীর ক্ষেত্রে

২। নিম্নবর্ণিত শর্তাবলী সাপেক্ষে কর্মকর্তাগণ ডিপে-১মা, স্পেসালাইজেশন, স্নাতক, স্নাতক (সম্মান), স্নাতকোত্তর এবং পি এইচ ডি ডিগ্রী অর্জনের জন্য তাহাদেও দায়িত্ব ও কর্তব্যের অবসরে প্রাইভেট অথবা বিমান বাহিনীর সাধারণ অফিস সময়কালের পর সাধারণ/কারিগরী শিক্ষা প্রতিষ্ঠানে পরিচালিত কোর্সে নিয়মিত ছাত্র হিসাবে ভর্তি হইতে পারিবেন :

ক। আই এস এস কোর্সের প্রথম খন্ড পূর্ণ পাস করিতে হইবে।

খ। যদি কোন সার্ভিস কোর্সে নিয়োজিত না থাকেন।

গ। ডিগ্রী অর্জনের নিমিত্তে যাবতীয় খরচ নিজে বহন কতি হইবে।

ঘ। ভর্তিচ্ছু কর্মকর্তাগণকে ভর্তির পূর্বে বিমান সদরের (বিমান সচিব শাখা) অনুমতি গ্রহণ করিতে হইবে। এই উদ্দেশ্যে যথাযথ কর্তৃপক্ষের সুপারিশসহকারে অত্র আদেশনামার ক্রোড়পত্র 'ক' অনুযায়ী ০৩ কপি আবেদনপত্র ভর্তিও সর্বশেষ তারিখের কমপক্ষে ০৩ (তিন) মাস পূর্বে বিমান সদর (শিক্ষা পরিদপ্তর) পৌছাইতে হইবে।

ঙ। ভর্তির জন্য অনুমতি প্রদানের উদ্দেশ্যে শিক্ষা পরিদপ্তর কর্মকর্তাদের দরখাস্তসমূহ সংশ্লিষ্ট বিশেষজ্ঞ পরিদপ্তরের সুপারিম লইয়া বিমান সচিব শাখার অনুমোদনের মাধ্যমে প্রয়োজনীয় কার্যক্রম গ্রহণ করতঃ সংশ্লিষ্ট কর্মকর্তাকে অবহিত করিবে।

৩। প্রতি শিক্ষাবর্ষের জন্য বিমান বাহিনী হইতে সর্বাধিক ১০ (দশ) জন কর্মকর্তাকে নিয়মিত ছাত্র হিসাবে ভর্তির অনুমতি প্রদান করা যাইতে পারে। এই ক্ষেত্রে কোন ব্রাঞ্চেই প্রার্থীর সংখ্যা ১% এর অধিক হইতে পারিবে না। তবে অনার্স কোর্স সমাপ্তকারী ০১ (এক) বছর মেয়াদী মাস্টার্স ডিগ্রী অর্জনে আগ্রহী কর্মকর্তাকে অগ্রাধিকার দেওয়া যাইতে পারে। প্রাইভেট পরীক্ষার্থীদের বেলায় কোন কোটা প্রযোজ্য হইবে না।

৪। দেশে উচ্চ শিক্ষা গ্রহণের জন্য অনুমতিপ্রাপ্ত কর্মকর্তাগণকে পরীক্ষা সময়ের জন্য তাহাদেও প্রাপ্য সার্ভিস/ক্যাজুয়েল লীভ ব্যতীত অন্য কোন সুযোগ সুবিধা প্রদান করা যাইবে না।

৫। দেশে উচ্চ শিক্ষা গ্রহণের জন্য অনুমতিপ্রাপ্ত কর্মকর্তাগণ যাহাতে সংশ্লিষ্ট কোর্স সুষ্ঠুভাবে সম্পন্ন করিতে পারেন সেই জন্য তাহাদের অন্য ঘাঁটিতে বদলীর বিষয় সহানুভূতির সহিত বিবেচনা করা যাইতে পারে।

RESTRICTED

দেশে উচ্চ শিক্ষা গ্রহণ : ডিপে-১মা/স্পেসআলাইজেশন/পোস্ট-গ্রাজুয়েট/স্নাতকোত্তর/এম বি এ/মাস্টার্স/এম এস/এম ফিল/পি এইচ ডি/পোস্ট ডক্টর্যাল রিসার্চ/সমমানের ডিগ্রী অর্জনের ক্ষেত্রে

৬। নিম্নবর্ণিত শর্তাবলী সাপেক্ষে কর্মকর্তাগণ ডিপে-১মা স্পেসআলাইজেশন/পোস্ট-গ্রাজুয়েট/স্নাতকোত্তর/এম বি এ/মাস্টার্স/এম এস/এম ফিল/পি এইচ ডি/পোস্ট ডক্টর্যাল রিসার্চ/সমমানের ডিগ্রী অর্জনের ক্ষেত্রে তাঁদের দায়িত্ব ও কর্তব্যের অবসরে প্রাইভেট অথবা বিমান কাহিনীর সাধারণ অফিস সময়কালের পর সাধারণ/কারিগরী শিক্ষা প্রতিষ্ঠানে পরিচালিত কোর্সে নিয়মিত/খন্ডকালীন ছাত্র হিসেবে ভর্তি হতে পারবেন :

ক। জে সি এন্ড এস সি কোর্সে উত্তীর্ণ হতে হবে ।

খ। পিসি/ই এস সি প্রাপ্ত হতে হবে ।

গ। ঘাঁটি ও ইউনিটে কর্মরত ও সি/ও আই সি এবং ফ্লাইং স্কোয়াড্রনে ফ্লাইং এ নিয়োজিত পাইলটগণ উলে-খিত ডিগ্রী অর্জনের জন্য বিবেচিত হবেন না । তবে তারা ষ্টাফ ডিউটি/ই আর ই/অন্য সকল দায়িত্ব পালনকালে বিবেচিত হবেন ।

ঘ। যদি কোন সার্ভিস কোর্সে নিয়োজিত না থাকেন ।

ঙ। ডিগ্রী অর্জনের নিম্নে যাবতীয় খরচ নিজে বহন করতে হবে ।

চ। ভর্তিচ্ছু কর্মকর্তাগণকে ভর্তির পূর্বে বিমান সদরের (বিমান সচিব শাখা) অনুমতি গ্রহণ করতে হবে । এ উদ্দেশ্যে যথাযথ কর্তৃপক্ষের সুপারিশ সহকারে এ আদেশনামার ফ্রেডপত্র 'ক' অনুযায়ী ০৩ কপি আবেদনপত্র ভর্তির সর্বশেষ তারিখের কমপক্ষে ০৩ (তিন) মাস পূর্বে বিমান সদর (শিক্ষা পরিদপ্তর) পৌঁছাইতে হবে ।

ছ। ভর্তির জন্য অনুমতি প্রদানের উদ্দেশ্যে শিক্ষা পরিদপ্তর কর্মকর্তাদের দরখাস্তসমূহ সংশ্লিষ্ট বিশেষজ্ঞ পরিদপ্তরে সুপারিশ নিয়ে বিমান সচিব শাখার অনুমোদনের মাধ্যমে প্রয়োজনীয় কার্যক্রম গ্রহণ কওে সংশ্লিষ্ট কর্মকর্তাকে অবহিত করবে ।

জ। প্রতি শিক্ষাবর্ষের জন্য বিমান কাহিনী হতে সর্বাধিক ১০ (দশ) জন কর্মকর্তাকে নিয়মিত ছাত্র হিসেবে ভর্তিও অনুমতি প্রদান করা যেতে পারে । এ ক্ষেত্রে কোন ব্রাঞ্চেই প্রার্থীর সংখ্যা ১% এর অধিক হতে পারবে না ।

ঝ। দেশে উচ্চ-শিক্ষা গ্রহণের জন্য অনুমতিপ্রাপ্ত কর্মকর্তাগণকে পরীক্ষা সময়ের জন্য তাঁদের প্রাপ্য সার্ভিস/ক্যাজুয়েল লিভ ব্যতীত অন্য কোন প্রকার সুযোগ সুবিধা প্রদান করা যাবে না ।

ঞ। দেশে উচ্চ-শিক্ষা গ্রহণের জন্য অনুমতিপ্রাপ্ত কর্মকর্তাগণ যাতে সংশ্লিষ্ট কোর্স সুষ্ঠুভাবে সম্পন্ন করতে পারেন সে জন্য তাঁদের অন্য ঘাঁটিতে বদলীর বিষয় সহানুভূতির সহিত বিবেচনা করা যেতে পারে ।

বিদেশে উচ্চ শিক্ষা গ্রহণ

৭। কর্মকর্তাগণ সশস্ত্র কাহিনী বিভাগের অনুমোদনক্রমে, ডিপে-১মা, স্পেসআলাইজেশন, পোস্ট গ্রাজুয়েট, এম এস এম ফিল, পি এইচ ডি, পোস্ট ডক্টর্যাল রিসার্চ প্রভৃতি ক্ষেত্রে উচ্চ শিক্ষার সুযোগ গ্রহণ করিতে পারিবেন । এই সকল ডিগ্রী অর্জনের জন্য কর্মকর্তাগণ বিমান সদরের অনুমোদনক্রমে নিজ উদ্যোগে দাতা দেশ/সংস্থা/শিক্ষা প্রতিষ্ঠান হইতে বৃত্তি সংগ্রহের ব্যবস্থা করিতে পারিবেন অথবা নিজ খরচে উচ্চ শিক্ষা গ্রহণ করিতে পারিবেন । এই ব্যাপারে সকল পত্রালাপ শিক্ষা পরিদপ্তরের মাধ্যমে করিতে হইবে । বিদেশে উচ্চ শিক্ষার ক্ষেত্রে নিম্নোক্ত শর্তাবলী প্রযোজ্য হইবে :

ক। আই এস এস কোর্স ২য় খন্ড পূর্ণ পাস করিতে হইবে এবং পিসি প্রাপ্ত হতে হবে । উলে-খিত ডিগ্রী অর্জনের ক্ষেত্রে শিক্ষা জীবনের এস এস সি ও এইচ এস সি তে প্রথম বিভাগ থাকতে হবে । শিক্ষা-জীবনের সকল পরীক্ষায় ন্যূনতম ৫০% মার্কস থাকতে হবে এবং কোন তৃতীয় বিভাগ থাকতে পারবে না ।

খ। মেয়াদ নির্বিশেষে সেমিনার, ওয়ার্কশপ, মিটিং সিম্পোজিয়াম ইত্যাদির ক্ষেত্রে প্রার্থীর বয়সসীমা এবং শিক্ষাগত যোগ্যতা নির্ধারিত থাকবে না ।

গ। মেয়াদ নির্বিশেষে বৃত্তির ক্ষেত্রে অবসর গ্রহণের কাছাকাছি পৌঁছিয়াছেন (শেষ বৎসর) এমন কর্মকর্তাকে মনোনীত করা যাইবে না ।

ঘ। ৮ (আট) সপ্তাহ হইতে ৬ (ছয়) মাস মেয়াদেও কোর্সকে স্বল্প মেয়াদী কোর্স হিসাবে গণ্য করা হইবে । এই জাতীয় কোর্সের জন্য প্রার্থীর কমপক্ষে ৩ বৎসর চাকুরী বাকী থাকতে হইবে ।

ঙ। ৬ (ছয়) মাসের বেশী মেয়াদের কোর্স (যে কোন মেয়াদের পাষ্ট গ্রাজুয়েশন/এম এস, এম ফিল, পি এইচ ডি, পোস্ট ডক্টর্যাল রিসার্চ ব্যতীত) কে মধ্য মেয়াদী কোর্স হিসাবে গণ্য করা হইবে । এই জাতীয় কোর্সের জন্য প্রার্থীর কমপক্ষে ৫ বৎসর চাকুরী অবশিষ্ট থাকিতে হইবে ।

চ। মেয়াদ নির্বিশেষে পাষ্ট গ্রাজুয়েট, এম এস এম ফিল, পি এইচ ডি, পোস্ট ডক্টর্যাল রিসার্চ কোর্সকে দীর্ঘ মেয়াদী কোর্স হিসাবে গণ্য করা হইবে । এই জাতীয় কোর্সের জন্য প্রার্থীর কমপক্ষে ৭ বৎসরের চাকুরী অবশিষ্ট থাকিতে হইবে ।

ছ। বৃত্তি প্রদানকারী দেশ/সংস্থা কর্তৃক প্রার্থীর বয়স ও শিক্ষাগত যোগ্যতা নির্ধারিত থাকিলে সেই ক্ষেত্রে এই অনুচ্ছেদের খ হইতে চ উপঅনুচ্ছেদে বর্ণিত নিয়মাবলী কার্যকর হইবে না ।

জ। সংস্থা/ব্যক্তিগত উদ্যোগে সংগৃহীত বৈদেশিক বৃত্তির মাধ্যমে বিদেশে উচ্চ শিক্ষা গ্রহণ অথবা ব্যক্তি বিশেষের নামে প্রেতি বৃত্তি, সেমিনার, কর্মশালা, সভা ইত্যাদি যোগদানের জন্য বৈদেশিক সাহায্যের অতিরিক্ত অর্থেও প্রয়োজন হইলে কর্মকর্তার নিজ অর্থ ব্যয়ে বৃত্তির সদ্যবহার করা যাইবে ।

ঝ। নিজ খরচে অথবা দাতা দেশ/সংস্থা/শিক্ষা প্রতিষ্ঠানের বৃত্তির মাধ্যমে বিদেশে উচ্চ শিক্ষা গ্রহণে আগ্রহী কর্মকর্তাগণ সংশ্লিষ্ট কোর্স এবং বৃত্তি সম্পর্কিত বিস্তারিত তথ্য এবং প্রয়োজনীয় কাগজপত্রসহ ০৩ (তিন) কপি আবেদনপত্র যথাযথ কর্তৃপক্ষের সুপারিশসহকারে কোর্সে অংশগ্রহণের কমপক্ষে ০৩ (তিন) মাস পূর্বে বিমান সদরে (শিক্ষা পরিদপ্তর) পৌছাইতে হইবে ।

ঞ। কর্মকর্তার আবেদন প্রাপ্তির পর শিক্ষা পরিদপ্তর বিশেষজ্ঞ পরিদপ্তরের মতামত গ্রহণ করিয়া ভর্তি এবং বৃত্তি সংগ্রহের অনুমতি প্রদানের উদ্দেশ্যে প্রয়োজনীয় ব্যবস্থা গ্রহণের জন্য বিমান সচিব শাখাকে জানাইবে ।

ট। তদনুযায়ী বিমান সচিব শাখা সশস্ত্র বাহিনী বিভাগের অনুমতি লাভের জন্য প্রয়োজনীয় ব্যবস্থা গ্রহণ করিবে ।

ঠ। ভর্তি এবং বৃত্তি সংগ্রহের বিষয়টি সশস্ত্র বাহিনী বিভাগ কর্তৃক অনুমোদিত হইলে এতদবিষয়ে পরবর্তী কা্যক্রম গ্রহণের জন্য বিমান সচিব শাখা সংশ্লিষ্ট কর্মকর্তা এবং পিডিসিকে নির্দেশ প্রদান করিবে ।

ড। বিদেশে উচ্চ শিক্ষা গ্রহণে অনুমতিপ্রাপ্ত কর্মকর্তাকে কোর্স সম্পন্ন করিবার উদ্দেশ্যে প্রয়োজনীয় সময়কালের জন্য অত্র আদেশনামার ৭ নং অনুচ্ছেদে বর্ণিত ছুটির শর্তাবলী অনুযায়ী বিমান সচিব শাখায় বিদেশ গমনের কমপক্ষে ০১ (এক) মাস পূর্বে আবেদন করিতে হইবে ।

ছুটি

৭। কর্মকর্তাদের নিজ উদ্যোগে সংগৃহীত বৃত্তির মাধ্যমে অথবা নিজ খরচে বিদেশে উচ্চ শিক্ষা গ্রহণের বিষয়টি সশস্ত্র বাহিনী বিভাগ কর্তৃক অনুমোদিত হইলে বিমান সচিব শাখা সংশ্লিষ্ট কর্মকর্তার আবেদনের প্রেক্ষিতে নিম্নোক্ত ছুটি প্রদান করিতে পারিবে :

ক। কোনক্রমেই কোন কর্মকর্তাকে তাঁহার মেয়াদকাল ০৫ (পাঁচ) বছরের অধিক সময়ের জন্য ছুটি মঞ্জুর করা যাইবে না ।

খ। শুধুমাত্র পি এইচ ডি বা তার সমতুল্য ডিগ্রীর ক্ষেত্রে এককালীন ৩৬ (ছত্রিশ) মাস পর্যন্ত শিক্ষা ছুটি প্রদান করা যাইতে পারে । ইহার অতিরিক্ত ছুটির প্রয়োজন হইলে বিশেষ বিবেচনায় উক্ত কর্মকর্তার অর্জিত ছুটি হইতে ০২ (দুই) মাস পর্যন্ত ছুটি মঞ্জুর করা যাইবে । ৩৮ (৩৬+০২) মাস অতিক্রম পর ছুটির প্রয়োজন হইলে উক্ত কর্মকর্তাকে আরও সর্বাধিক ২২ (বাইশ) মাস পর্যন্ত অসাধারণ ছুটি প্রদান করা যাইতে পারে । তবে অসাধারণ ছুটি ভোগকালে উক্ত কর্মকর্তা বেতন ও ভাতাদি পাইবেন না এবং চাকুরীর জ্যেষ্ঠতাও দাবী করিতে পারিবেন না । অর্থাৎ, সাধারণ ছুটির কাল সংশ্লিষ্ট কর্মকর্তার কোয়ালিফাইং সার্ভিস হইতে বাদ যাইবে ।

গ। উপ-অনুচ্ছেদ ৭খ-তে বর্ণিত কোর্স ব্যতীত, অন্যান্য কোর্সের জন্য সাধারণভাবে এককালীন ১২ (বার) মাস পর্যন্ত শিক্ষা ছুটি মঞ্জুর করা যাইতে পারে। বিশেষ ক্ষেত্রে এই ছুটি আরও ১২ (বার) মাস পর্যন্ত বৃদ্ধি করা যাইবে। ইহার অতিরিক্ত বিশেষ বিবেচনায় উক্ত কর্মকর্তার অর্জিত ছুটি হইতে ০২ (দুই) মাস ছুটি মঞ্জুর করা যাইতে পারে। ছুটির মেয়াদ (১২+১২+০২) ২৬ (ছাব্বিশ) মাস অতিক্রান্ত হইলে ইহার অতিরিক্ত সর্বোচ্চ ৩৪ (চৌত্রিশ) মাস পর্যন্ত বেতন ও ভাতাদি পাইবেন না এবং চাকুরীর জ্যেষ্ঠতা দাবী করিতে পারিবেন না। অর্থাৎ অসাধারণ ছুটির কাল সংশি-ষ্ট কর্মকর্তার কোয়ালিফায়িং সার্ভিস হইতে বাদ যাইবে।

ঘ। শিক্ষা ছুটি এবং বিশেষ বিবেচনায় ছুটি ভোগকালীন সময়ে উক্ত কর্মকর্তার বেতন ও ভাতাদি দেশীয় মুদ্রায় প্রদান করিতে হইবে।

চ। সামরিক বাহিনীর কর্মকর্তাদের জন্য সশস্ত্র বাহিনী বিভাগ কর্তৃক দেশে ও বিদেশে পেশাগত প্রশিক্ষণের প্রচলিত ব্যবস্থা এই আদেশনামার আওতাভুক্ত হইবে না।

বাংলাদেশ বিমান বাহিনী প্রধানের আদেশক্রমে :

শমসের আলী
এয়ার কমডোর
সহকারী বিমান বাহিনী প্রধান (পরিচালন ও প্রশিক্ষণ)

পদাধিকার বলে :
এইচ এম শিবলী ফারুক
উইং কমান্ডার
পরিচালক, প্রশাসনিক সমন্বয় পরিদপ্তর
সংশি-ষ্ট কার্যালয় : শিক্ষা পরিদপ্তর (বিমান সদর/১১০৪৪/শিক্ষা)

পরিবর্তন
বিমান বাহিনী আদেশনামা
নং ৫৪-২৩ক

বিমান বাহিনী সদর দপ্তর, ঢাকা
জ্যৈষ্ঠ ১৪১৪ বাংলা
২২ মে ২০০৭ ইং

শিক্ষা

দেশ এবং বিদেশে উচ্চ শিক্ষা গ্রহণের নীতিমালা : বি বা কর্মকর্তা

বিমান বাহিনী আদেশ নং ৫৪-২৩ তারিখ ১৫ আগষ্ট ১৯৯৫ এর ক্রোড়পত্র 'ক' হুবহু বাতিল করতঃ এতদসংগে সংযুক্ত পরিবর্তিত ক্রোড়পত্র 'ক' অনুমোদনের তারিখ হতে কার্যকরী হবে।

এস এম জিয়াউর রহমান
এয়ার ভাইস মার্শাল
বিমান বাহিনী প্রধান
বাংলাদেশ বিমান বাহিনী

পদাধিকার বলে :

মোঃ হুমায়ুন কবীর
গ্রুপ ক্যাপ্টেন
পরিচালক, প্রশাসনিক সমন্বয় পরিদপ্তর

মূল কার্যালয় : শিক্ষা পরিদপ্তর

(বিমান সদর/ ১১০০৩/শিক্ষা)

"প্রত্যয়ন করা যাইতেছে যে, এই প্রকাশনায় এমন কোন বিষয় অন্তর্ভুক্ত নাই, যাতে সরকারী অনুমোদনের প্রয়োজন আছে"।

চৌধুরী মুঃ জাফরউল-হ
গ্রুপ ক্যাপ্টেন
পরিচালক, শিক্ষা পরিদপ্তর

ক্রোড়পত্র 'ক'
বি বা আ নং ৫৪-২৩ক
তারিখ : ২২ মে ২০০৭

দেশে উচ্চ শিক্ষা গ্রহণের জন্য আবেদন : বা বি বা কর্মকর্তা

১। আমি নিম্নস্বাক্ষরকারী উচ্চ শিক্ষা গ্রহণে আগ্রহী । এই উদ্দেশ্যে আমার ব্যক্তিগত এবং কোর্সের বিবরণ নিম্নে পেশ করিলাম :

ক।	পদবী	:
খ।	নাম	:
গ।	বিডি নম্বর	:
ঘ।	শাখা	:
ঙ।	কমিশন প্রাপ্তির তারিখ	:
চ।	বর্তমান নিযুক্তি তারিখ	:
ছ।	চাকুরীতে সমাপ্ত কোর্সের নাম এবং তারিখ	:
জ।	ভর্তি হইতে ইচ্ছুক কোর্সের নাম এবং সময়কাল	:
ঝ।	কোর্স পরিচালনাকারী প্রতিষ্ঠানের নাম	:
ঞ।	কোর্সে ভর্তির এবং পরীক্ষার সম্ভাব্য তারিখ	:

২। আমি এই মর্মে অঙ্গীকার করিতেছি যে, আমি চাকুরীতে কোন কোর্সে নিয়োজিত নই । উপরোক্ত কোর্সে অংশগ্রহণে আমি আমার পেশাগত কোন ক্ষতি করিব না কিংবা আমার উপর অর্পিত দায়িত্ব পালনে কোন প্রকার অনিহা প্রকাশ করিব না । উক্ত কোর্সে অংশগ্রহণকালীন সময়ে আমি আমার অন্যত্র বদলীতে কোন প্রতিবন্ধকতা সৃষ্টি করিব না । আমি উক্ত কোর্সের পরীক্ষায় উত্তীর্ণ হইবার পর প্রশংসাপত্র /সনদপত্রের সত্যায়িত অনুলিপি বিমান সচিব শাখায় প্রেরণ করিব ।

তারিখ : স্বাক্ষর :
নাম :
পদবী

এই মর্মে প্রত্যয়ন করা যাইতেছে যে, বর্ণিত কর্মকর্তার উলে-খিত কোর্সে অংশগ্রহণ তাহার পেশাগত কাজে অথবা অন্যত্র বদলীতে কোন প্রতিবন্ধকতা সৃষ্টি করিবে / করিবে না ।

গুপারিশ করা হইল / হইল না

তারিখ : অধিনায়ক
শাখা/ইউনিট/স্কোয়াড্রন

গুপারিশ করা হইল / হইল না

তারিখ : এয়ার অধিনায়ক / ঘাঁটি অধিনায়ক

অনুমোদিত/অনুনমোদিত

] তারিখ :

বিমান সদর

Conclusion

12. The educational system of Bangladesh Air Force is continually upgrading. Presently the duration of airmen training is increased. Education cannot be completed without a competent instructor. Beside the relevant training aids and class room facilities, the instructor must be trained to solve the educational problems and impart quality training to the trainees of all levels.

TOPIC-3

EDUCATION SERVICES IN BAF

Introduction

1. The Armed Forces of the People's Republic of Bangladesh are divided into Army, Navy and Air Force as separate autonomous services. Every force has distinctive professional services which demands whole time devotion of its members. Air Force carries out its tasks both primarily and at secondary level. However, the preliminary functions of Air Force are:

- a. To attack on enemy offensive power and on those military, industrial and administrative centre essential to its power of resistance.
- b. To defence against air attack.

2. To carry out these functions, the BAF must possess highly trained personnel. A high standard of professional proficiency can be attained only when the foundation of training is laid on a sound educational background. To achieve the goal, Directorate of Education is established at Air Headquarters to look after the education of the BAF personnel.

Educational Organization at Air HQ

3. With a view to achieve the required standard; the Directorate of Education is functioning under the Assistant Chief of Air Staff (Operations & training). The Directorate of education is composed of the following appointments:

- a. **Director of Education.** He is responsible to ACAS (O&T) for matter connected with education in the BAF and acts as an adviser on such matter. He is to maintain close liaison with Directorate of Training to achieve the optimum training standard of the BAF Educational Institutions. The establishment vacancy for the Director is of the rank of Group Captain. However, D Edn will be responsible to ACAS (O&T) for the fol:

- (1) To formulate policies on edn trg of Offrs, Airmen & MODCs of BAF.
- (2) To take nec act to update the syllabi and précis of edn subj in all trg inst.
- (3) To formulate policies for pursuing higher edn on own arng by BAF pers at college and university level.
- (4) To prep annual budget, administer and con the Edn Grant.

- (5) To formulate and issue policies governing the admin of BAF libraries.
- (6) To determine the edn qual for the enrolment of offr and edn instr in BAF.
- (7) To take nec act iro posting of edn offr and edn instr in the trg inst as per the dmd of different Bases/Units.
- (8) To set criteria and approve the trg policies regarding ISS and JCS courses conducted at CSTI.
- (9) To process the cases for nec approval of hiring guest speakers at different trg inst of BAF.
- (10) To prep syllabus, conduct exam and process the result of Staff College Entrance Exam (SCEE).
- (11) To process the registration formalities for M Sc in Mil Studies Course of the offr undergoing Staff College Course at DSCSC and pub the result of part-I of M Sc in Mil Studies Course.
- (12) To rep BAF in the Governing Body/Council Meeting of Cdt Colleges.
- (13) To rep BAF in the meeting of Sena-Kallayan Sangstha in connection with the approval of edn stipends.
- (14) To take nec steps to pub Bimansena and Egale in time.
- (15) To take nec steps for the annual procurement of books, mag, journals and newspapers for BAF.
- (16) To take nec act for the editing and pub of AFD Journal (as reqr).
- (17) To prepare ques papers and eval the ans-scripts of the Selection Tests for BLPC candidates.
- (18) To formulate and update the AFO/AFI related to edn.
- (19) To administer, con and maint BAF Cen Library.

b. Director of Education is also responsible to ACAS (A) for following matters related to BAF Shaheen Schools and Colleges.

- (1) To formulate policies for admin of BAF Shaheen Schools and Colleges.
- (2) To prep Academic Calendar and Syllabus for BAF Shaheen Schools and Colleges.
- (3) To arng Annual Council Meeting for BAF Shaheen Schools and Colleges.
- (4) To carr out insp of BAF Shaheen Schools and Colleges and give nec directives.
- (5) To take nec steps for the selection of Principals/Headmasters in BAF Shaheen Colleges/Schools.
- (6) To take approval of new proj of BAF Shaheen Schools and Colleges.
- (7) To take approval and alt of new wks svcs for BAF Shaheen Schools and Colleges.
- (8) To prep the pay scales for the teaching and non-teaching staffs of BAF Shaheen Schools and Colleges.
- (9) To take the approval for pub the annual mag of BAF Shaheen Schools and Colleges.
- (10) To ensure the proper ut of Shaheen College Central Fund.
- (11) To take nec act to arng Inter Shaheen Competitions of BAF Shaheen Schools and Colleges.
- (12) To comm/co-ord with different ministries/org in processing the proj for the estb of new Shaheen School/College as well as in resolving the unsettled issues of existing Shaheen Schools and Colleges.
- (13) To process the project for establishing new BAF Shaheen Colleges/Schools and to co-ord/communicate with different Ministries/Instls for unsettled matters of existing BAF Shaheen College/School.

c. **Deputy Director of Education (Edn Trg).** He is responsible to Director Education for planning posting of officers of education branch and airmen of education instructor trade, looking after training aspects of different courses in different institutes of BAF. The vacancy for the post is Wg Cdr. DD Edn (Edn Trg) will be responsible to D edn for the fol:

- (1) To ensure the vetting of syllabus and précis of edn subj of trg inst for conducting professional trg in BAF.
- (2) To ensure procurement and sup of books as dmd by different BAF libraries.
- (3) To act as Member Edn in the Annual Insp Team and to take action as per Annual Insp Report.
- (4) To ensure the annual/half yearly audit of BAF libraries.
- (5) To ensure purchase and sup of Dailies/Mag/Periodicals for different BAF Libraries/estb.
- (6) To collect reqr no of write ups, info etc and to take nec sy clearance for those in pub AFD Journal/Bimansena/Eagle.
- (7) To take nec steps reqr for the prep of AFD Anirban, BAF Anirban & AFD Durbar Prog.
- (8) To submit the annual budget for Edn Grant in time and ensure the expenditure as per existing regulations.
- (9) To process the applications of BAF offrs for pursuing higher edn.
- (10) To process the applications for granting Compensatory Chance in SCEE and ISS exam.
- (11) To collect reqr no of appr write-ups for pub as supplementary in different dailies on the occasion of different natl days.
- (12) To arng different trg prog for edn instr.
- (13) To scrutinize the annual mag pub by BAF Shaheen Schools & Colleges and to take nec act for approval of pub.

(14) To supervise the overall activities of all BAF Shaheen Schools and Colleges and activities of different projects related to BAF Shaheen Colleges.

(15) To carry out Academic and Admin Insp in all Shaheen Schools and Colleges and prepare the Insp Report.

(16) To ensure discipline and look after the welfare of the persons working at Dte Edn.

(17) To maintain records of all important/historical events of BAF.

(18) To supervise the activities BAF Central Library.

d. **Deputy Director of Education (Gen Edn).** He is responsible to Director Education for looking after the activities of all BAF Shaheen Colleges, publication of different journals and other tasks as assigned by Director.

e. **Assistant Director of Education (Training).** The Assistant Director of Education (Trg) is responsible to the Director of Education and looks after the educational syllabus and training methods of all BAF Training Institutes. He is to conduct general training scheme for officers and education scheme for airmen. The establishment vacancy for the post is of the rank of Squadron Leader.

f. **Assistant Director of Education (Exam).** An officer of the rank of Squadron Leader is responsible to look after the correspondence relating to ISS Examination and other related exams.

g. **Assistant Director of Education (Library).** An officer of the rank of Squadron Leader is responsible for provisioning and distribution of books to all BAF libraries and Information Rooms.

4. **Responsibilities of the Directorate of Education.** The Directorate of Education is responsible for planning and guiding the formal education in BAF. The main functions of this directorate in relation to service training in the BAF are:

a. Implement and pursue policies and directives of Air HQ regarding general education scheme and basic training of BAF personnel.

b. To formulate policies and issue instructions regarding basic educational and practical training programmes of different training institutes.

c. To guide BAF Training Institutes for preparing/updating the syllabuses, précis on educational subjects.

- d. To formulate policies and issue instructions regarding ISS Course, JC&S Course, Staff College Entrance Exam and to scrutinize and approve syllabuses and precis/study materials of the above courses/exams.
- e. To formulate policies, control and administer Education Grant to facilitate General Education in BAF.
- f. To formulate policies and issue instructions regarding establishment, effective control and administration of libraries in BAF and laboratories in BAF Training Institutes.
- g. To make necessary arrangement for publication of Bimansena Journal, Eagle and AFD Journal as and when require.
- h. To formulate policies and issue instructions regarding better administration and control of BAF Shaheen Schools and Colleges so as to cater proper education to the children of BAF personnel. On the other hand, establish new BAF Shaheen Schools and Colleges in BAF installations.
- j. To formulate policies and issue instructions regarding higher education of BAF personnel.
- k. To make necessary arrangement for purchase of local/foreign books/magazines/journals/dailies and library books for BAF.
- l. To represent BAF in the meeting/conference of Cadet College, Sena Kallayan Sangstha and other organization/department for co-ordination of educational matters of BAF or the children of BAF personnel.
- m. To comm/co-ord with different ministries/org in processing the proj for the estb of new Shaheen School/College.
- n. To resolve the unsettled issues of existing Shaheen Schools and Colleges.

Responsibilities of Base Education Flt / Duties of the Base Education Officer

5. A post of Base Education Officer for each Base is established at Base Education Flt in the TO&E of the BAF. The Base Education Officer advises the Base Commander on educational matters and is directly responsible to him for carrying out the Base education task. The functions of the Base Education Officer are:

- a. To ascertain as fully as possible the educational needs of the Base and to prepare for the consideration of the Base Commander, a programme of educational work and related matters.
- b. To be responsible for the proper use and care of the educational materials provided for the Base Reference/Technical libraries and also for the general direction and supervision of the information room.
- c. To organize hobbies clubs and encourage airmen to spend the leisure hours in constructive pursuits.
- d. To organize and supervise the education of children of BAF personnel.

Handing Over and Taking Over an Education Flight

6. Great care must be exercised in handing over or taking over an Education Flight. The procedures for handing/taking over an Education Flight are as follows:

- a. Form-37 should be checked with the copy held by the Base equipment officer, and Form-22 with the copy held by the barrack warden. A physical check should be carried out periodically.
- b. The reference library should be audited.
- c. All class registers should be inspected.
- d. All financial records should be examined. In particular, the education officer should explain to his successor any outstanding financial matter in connection with correspondence courses, local purchases and the reference library.
- e. The list of returns required should be inspected and the last annual inspection report discussed.
- f. Routine office arrangements should be explained.
- g. Records of students should be examined.
- h. Records of all Base educational and cultural activities should be checked.
- j. The domestic arrangements within the education flight should be discussed.
- k. The education officer should introduce his successor to the concerned commanders of the Base.
- l. The education officers concerned in handing over and taking over should not be content with the formal checking of inventories and records. They should discuss the different aspects of the work of the education flight, visit other sections, and generally cover all points of particular local interest and importance.

General Duties

7. The Base Education Officers can be employed on duties other than educational duties such as welfare activities and cultural education at the Base. But the non-specialist service duties allotted to education officers are not to be such as to interfere with the efficient discharge of their primary responsibilities in connection with service education.

Organisation in Training Institutions

8. Training is conducted on the general principle that the officer on the appropriate specialist branches are responsible for training while the actual instruction is divided between the specialist officers and education officers according to the nature of the subject. In general, specialist officers deal with the practical and applied sides of the training, while the education officers are connected with the theoretical aspect of training with general education and with instructional technique. Each training establishment has specified functions and education officers are deployed as required.

Duties of the Senior Education Officer

9. The senior Education Officer may be on the strength of the Base or of the training unit which forms part of the Base. He is responsible to the Commanding Officer for all educational works on the Base and in the training units and therefore controls the whole education staff. He will normally work through the Base Commander for General Education Scheme matters and through the Officer Commanding, Training Institutions for educational work which forms part of the training courses. Where the Senior Education Officer is of the rank of Wing Commander, he will be called the Director of Studies. He is directly responsible to the Base Commander for matters relating to the trainees' studies.

Conclusion

10. Base Education Officer is basically responsible for the smooth functioning of the Training institutes of the Base in relation to education and educational matters of BAF personnel. He is also responsible for the educational enhancement of the children of the Base.

TOPIC-4

EDUCATION IN TRAINING ESTABLISHMENTS OF BAF

Basic Education for the Flight Cadets at BAF Academy

1. The aim of the Bangladesh Air Force Academy (BAFA) is to train them who all are selected as future Air Force Leaders. Presently, BAFA is affiliated with BUP (Bangladesh University of Professionals) from the year 2009.

2. Following the heroic contribution of Air Force personnel in the Liberation War, the need of having an academy to train future Air Force leaders was earnestly felt. The idea was crystallized in 1973 and the academic activities started under the name of BAF Cadets' Training Unit (CTU) at Kurmitola, Dhaka in November 1974. The CTU was shifted to Jessore in April 1977 and re-named as the Cadets' Training Wing (CTW). With the growing need of time, the CTW was re-modelled as a full-fledged Academy and renamed as Bangladesh Air Force Academy (BAFA) in April 1982. The Academy was initially affiliated with Rajshahi University and later on with the National University for awarding BSc (Aeronautics) graduation degree to the Flight Cadets. Presently, it is under BUP for the same purpose. Today with its wide curriculum of flying, academic, general service and command and leadership training, the Academy is on a firm footing to develop the young trainees from home and abroad as all round officer.

3. **Training Objectives.** The training objectives of the BAF Academy are aimed at fostering the honoured tradition of duty, honour and patriotism. The training curriculum is meticulously designed to train and develop officer like and war fighting qualities in Flight Cadets. With these training philosophies in perspective, the Academy has the following objectives:

- a. To prepare each flight cadet as a future leader of Air Force with the highest degree of discipline and patriotism.
- b. To develop leadership and character building qualities through General Service Training.
- c. To develop the auxiliary and extra-curricular faculties of Flight Cadets.
- d. To enlighten Flight Cadets and newly commissioned officers with the light of education by imparting academic training on degree level education, Engineering, BAF and professional subjects for achieving professional excellence.
- e. To make valiant and efficient pilots, conducts basic flying training to the Flight Cadets and basic jet, transport and helicopter conversion flying training to the newly commissioned pilots.

4. **Honour Code.** To inculcate the spirit of Air Force tradition, leadership and character building through an honour code – “Discipline, Integrity and Excellence in all we do.” The Academy nurtures the values of honour code with great dignity.

5. **Types of Training.** The training program in BAFA is tailored according to the need of today's world comprising subjects of diverse specialties. The Academy runs its training programs broadly in two forms: one for the flight cadets, who are trained to become pilots. The other one is for flight cadets, who are trained to become ground branch officers. However, Engg br flt cdt are trained for Level-1 of Aeronautical Engg at the 3rd and 4th term. The duration of training for all Flight Cadets is two years, which include ten weeks joint service training with Bangladesh Army and Bangladesh Navy. To undertake these diverse training activities in smooth and efficient manner, the Academy is organized in a three prong structure with Flying, Academic and Cadets Training Wing.

6. **Cadets' Wing (CW).** The Cadets' Wing provides a solid leadership foundation through a wide array of military training programs. Each cadet is provided with the opportunity to learn and practice leadership methods first, through follower ship and later in leadership positions in different activities of the Cadets' Wing. The training is aimed at transforming a raw civilian into a disciplined air force officer through intense physical and mental training. The physical training includes different types of drill, weapon training, health run, mile test and games. Service knowledge and leadership technique training is provided to cadets through formal classes, task assignment, counselling, supervision, guidance and practical exercises. The instructors of this wing assess the Command and Control skills like bearing and turn out, voice, capability and effectiveness in handling parade, self confidence, emotional stability, maturity and physio-dynamic quality of the Flight Cadets. With such all round training, the Cadets' Wing moulds a new cadet into an officer in the BAF. It is divided into three squadrons:

- a. **No1 Cadets Squadron.** It looks after the training, administrative and discipline aspects of all Flight Cadets of No 1 Squadron.
- b. **No 2 Cadets Squadron.** It looks after the training, administrative and discipline aspects of all Flight Cadets of No 2 Squadron.
- c. **General Service Training Squadron.** It conducts all types of general service training to the Flight Cadets of the Academy.

7. **Academic Training Wing (ATW).** The Academic Training Wing is responsible for imparting academic training to the Flight Cadets and newly commissioned officers of Bangladesh Air Force. ATW is grooming up the enrolled Flight Cadets as educated and professional officers through the induction of updated knowledge by experienced instructors. It is systematically ensuring the smooth conduct of academic education through the constant support of four squadrons namely Aero Science Squadron, Humanities Squadron, Business Studies Squadron and Training Support Squadron.

8. ATW is now conducting courses on three types of Bachelor Degrees under BUP. The duration of these degree courses is 3 years. ATW was first affiliated to Rajshahi University in the year 1984 to conduct B Sc (Aeronautics) course. Subsequently, it was affiliated to National University in 1993 to conduct the same course. Besides, B Sc (Aeronautics) degree, it started conducting Bachelor of Arts and Bachelor of Business Studies courses under the National University in the year 2004 and 2006 respectively. At present, it is affiliated to BUP in the year 2009 to conduct all three degree courses. This Wing is conducting all three types of Bachelor Degree Courses by maintaining a high standard of education. In addition, ATW is conducting Level-1 of B Sc (Aeronautical) Engineering Course under MIST for the BAF cadets. Every year the graduated officers are awarded with Bachelor Degree certificates through a colourful ceremony. The different squadrons under ATW are enumerated below:

- a. **Aero Science Squadron.** This squadron conducts training on science related subjects to make the trainees professionals. A total of eight science subjects are taught to the trainees namely Physics, Mathematics, Aerodynamics, Aero Engine, Airmanship & Aviation Physiology, Meteorology, Armament, and Navigation. This squadron is also responsible for conducting Bachelor of Science (Aeronautics) course for the Flight Cadets and under trainee officers under BUP. Presently this Sqn is also providing Engg Edn for Level-1 course of MIST.
- b. **Humanities Squadron.** This squadron imparts training on humanities and Bangladesh Air Force related subjects namely English, Bangla, Organization & Administration, Service Writing, Bangladesh Air Force Law, Military History, Air Power, Operational Message Writing, Current Affairs, Computer, Security & Intelligence, Psychology and Political Science. Humanities Squadron is responsible for conducting Bachelor of Arts Course for the Flight Cadets and under trainee officers under BUP.
- c. **Bachelor of Business Studies Squadron.** This squadron imparts training on commerce related subjects like Management and Accounting. This squadron is also responsible for conducting Bachelor of Business Studies Course for the Flight Cadets and under trainee officers under BUP.
- d. **Training Support Squadron.** This Squadron is responsible for providing training equipment and materials to other squadrons as per the requirement of training. It also looks after different labs like Physics, Aero-Engine, Aero-dynamics, Language, Psychology and Computer Labs.

9. ATW also conducts training of special courses like 'Special Purpose Short Service Commission', 'Branch List Permanent Commission' etc under the instruction of Air Headquarters. Flight Cadets of these special courses are taught Organization & Administration, Service Writing, Security & Intelligence, Management, Bangladesh Air Force Law, Instructional Technique, English, Air Power and professional subject according to their background.

10. From the year 2009, the first year course (Level-1) of four years Engineering Course conducted at Military Institute of Science and Technology commenced at ATW. The Level-1 syllabi include Physics, Chemistry, Mathematics, English, Engineering Ethics, Mechanical Engineering and Electrical Engineering subjects with sessional (practical). The Level-1 is divided into 02 six monthly terms namely Term-1 and Term-2. For making the officers resourceful professionals, ATW imparts training on Instructional Technique to the instructors, Human Resource Module and the Computer training for the newly commissioned officers. It has a resourceful library with books of all fields of knowledge. ATW also arranges extra curricular activities like After Dinner Literary Activities (ADLA) and Education Visit for the Flight Cadets besides normal academic training.

11. **Flying Training Wing (FTW).** The Flying Training Wing of BAF Academy conducts basic flying training for Flight Cadets and jet & helicopter conversion training for newly commissioned officers. The basic flying training is accomplished over a period of one year in two terms. Flight Cadets fly 120 hours in Chinese origin PT-6 piston engine trainer aircraft. After successful completion of basic training, pilots are divided into three streams: fighter, transport and helicopter. The respective conversion training is conducted in next six months. Now different trainings are described below:

a. **Basic Flying Training.** No 11 Squadron is vested with the important responsibility of providing basic flying training to the future pilots of BAF. The Flight Cadets step into this squadron in their third term. Adequate classes are taken by the instructors on aircraft manual, operating procedures, relevant orders and publications etc. The basic flying training syllabus of 120 hours comprises 119 sorties. The main phases of flying are: General Flying, Instrument, Navigation, Formation, Night and Advance aerobatics.

b. **Jet and Tpt Conversion Training.** No 15 Squadron is responsible to conduct the basic jet/transport conversion training in USA origin T-37B aircraft. In basic jet training, the trainee officers fly a total of 25 hours, which encompasses General Flying, Instrument, Navigation, Close Formation, Battle Formation, Tail Chase, Ground Controlled Interception and Night Flying. On the other hand, in transport conversion training, the trainee officers fly a total of 26 hours which includes General Flying, Instrument and Navigation, Formation and Night Flying phases.

c. **Hel Conversion Training.** No 18 Squadron is responsible to conduct helicopter conversion training in Bell-206 helicopter for the selected officers. This training is designed for six months, out of which two months are for ground training. The trainee officers fly a total of 45 hours within next four months. The syllabus includes General Flying, Instrument, Navigation, Formation, Special Operation and Night Flying.

12. **Assessment on Officers' Like Qualities (OLQ).** The Flight Cadets are assessed on various traits of Officer Like Qualities like discipline, integrity, loyalty, determination, assertiveness, initiative, enthusiasm, courage, teamwork, social skill, verbal expressions and self confidence etc by the instructors of three wings of the Academy. Instructors of CW and ATW assess all the Flight Cadets on these traits of OLQ. Instructors of FTW assess the same for the Flight Cadets of GD Br in 3rd and 4th Terms.

13. **Extra-Curricular Activities in the Academy.** A number of extra curricular activities are carried out to build up cadets' physical abilities and broaden their mental faculties. Some of the important events are:

- a. Education Visit.
- b. ADLA (After Dinner Literary Activities)
- c. Survival and Leadership Camping.
- d. Games and Sports
- e. Cultural Programmes

Basic Professional Education for Officers at Officers' Training School (OTS)

14. OTS is entrusted with the responsibility of imparting basic professional training, Intermediate Professional Training and Other training as per the instruction of Air HQ to all ground branch officers except the officers of Air Defence Weapon Controller branch. This institute was established on 24 July 1980. Initially, the school started with the basic professional training of the officers of technical branch only. Gradually a few basic courses for the officers of non-technical branch were included. It became a full-fledged training institution in 1985. The school shifted to its present location at BAF Base Matiur Rahman, Jessore in the year 1990.

15. **Types of Course.** Normally following courses are conducted at OTS:

- a. Technical Courses on Aerospace Technology, Avionics Technology, Armament & Photo Technology, Logistics, Initial Forecasting and Air Traffic Control Course.
- b. Non-Technical Courses on Admin Officers Course, Education Officers Course, Legal Officers Course and Financial Management Course.
- c. Intermediate Professional Course.
- d. Basic Professional Course (BPC).

EDUCATION TRAINING IN DIFFERENT COURSES FOR BAF OFFICERS

Command and Staff Training Institute (CSTI)

16. It was established on 12 July 1976. The Primary responsibility of the institute is to conduct Junior Command and Staff (JCS) Course to ensure effective training on Command and Management skill to the junior and mid-level officers. Later, it was decided to conduct the promotion examination of the officers and a correspondence course named as Individual Staff Studies was introduced in BAF for the junior and mid level officers. Individual Studies School (ISS) was established on 15 October 1980 for smooth conduct of the correspondence course. Subsequently, structural reform of JC&SS and ISS was carried out and was re-organized as Command and Staff Training Institute (CSTI) on 28 April 1983.

17. **Types of Training.** CSTI conducts two types of officer's training program and these are as follows:

- a. **Individual Staff Studies Course.** It is a correspondence course and conducted in two parts. First part (Part-I) is conducted for the officers who has completed 06 months of commissioned service. Second part (Part-II) is conducted for the officers who have successfully qualified Part-I and completed four years of commission service. Each part consists of 9 phases of different subjects. The examinations (Part-1 & Part-II) are conducted simultaneously round the year.
- b. **Junior Command and Staff Course.** This course is conducted for the duration of 12 to 13 weeks. It covers a wide range of reading, lecture program, discussions, visits and classroom presentations.

Fighter Controller Training Unit (FCTU)

18. It was established on 03 March 1983 to train Air Defence (AD) professionals of BAF. The first organized Air Defence Weapon Controller (ADWC) Course started here on 04 August 1983. AD trade related courses for airmen are also conducted here. Training on AD is provided to Officers, Cadets and Airmen at their different stages of career. Synthetic and live interception training is provided to the ADWC cadets and officers.

19. **Courses Taught.** Theories of Air Defence including Air Defence detection, control and weapon system, Air Traffic Control, Navigation, Meteorology, Aero-Dynamics including theory of Flights and Aero-Engine are the theoretical subjects taught. Air Defence Control procedure, Radar Operation, Cabin familiarization, Computer, Synthetic interception in simulator Workstations and Live interceptions are the practical training conducted here.

20. **Simulator.** FCTU has modern and fine equipment and suitable instructors. Its Admiral Radar Controller Simulator (ARCS) is fully computerized and has 12 workstations. Each station can simulate 250 ac, a good number of airfields, weather, 4 Radar stations under ECM and ECCM condition. A controller can practice GCI as many as he can conduct simultaneously and the FCOs can practice reading, recording and surveillance duties.

Flying Instructors' School (FIS)

21. It conducts the professional course named as Flying Instructors' Course (FIC). After graduating from this course, pilots achieve QFI (Qualified Flying Instructor) qualification. It was established on 01 October 1976. On its inception, FIS used to impart training on Air Tourer aircraft and subsequently it switched over to PT-6 aircraft. FIS is capable of conducting the FI course for 20 students together.

22. FIS provides training for fighter pilots, transport pilots and helicopter pilots. Flying Instructors' Course is of 24 weeks duration; 08 weeks for the academic training and 16 weeks for the flying training. Academic Training is also provided for the duration of the whole 08 weeks covering the subjects like Instructional technique, Aerodynamics, Aero-Engine, Airmanship, Meteorology, Navigation, Instrument, Aviation Physiology and Aviation Psychology.

Flight Safety Institute (FSI)

23. It came into being on 25 May 1990. The Institute is self sufficient to provide theoretical and practical training with its own crash component laboratory. Practical laboratory facilities are also provided by Bangladesh Atomic Energy Centre and Bangladesh Standard Testing Institute (BSTI). Following courses are conducted in FSI:

- a. **Flight Safety Course.** The purpose of this course is to impart working knowledge of aircraft accident prevention techniques, the motivation and the abilities required to conduct an effective accident prevention programme. Two courses are scheduled each calendar year for BAF officers.
- b. **Safety Programme Management Course.** This course is organized and conducted for the Master Warrant Officers, Senior Warrant Officers, Warrant Officers and airmen of BAF. The purpose of this course is to provide the supervisors with working knowledge of safe aircraft maintenance, accident prevention technique, the motivation and the abilities required to conduct an effective accident prevention programme.
- c. **Quality Control Service Course.** This course is organized and conducted for the Master Warrant Officers, Senior Warrant Officers, Warrant Officers and airmen of BAF. The purpose of this course is to provide the students with a working knowledge of the Quality Control Services to enable them carrying out effective inspection of pre-service and in-service equipment/items/materials of BAF to ensure that the quality of equipment/items/materials conforms to a pre-determined standard.

Basic Education for the Recruits at Recruits' Training School (RTS)

24. It was established in 1975 as a part of Training Wing of BAF Base Zahurul Haque. From 17 January 1981, RTS started functioning as an independent unit. Presently its facilities can train and accommodate 600 or more Recruits at a time. The training curriculum fully caters for all challenges and needs of producing high standard of airmen for BAF. It is now located at BAF C&M Unit, Shamsheernagar.

25. The Primary role of RTS is to impart initial and disciplinary training to airmen Recruits and other training as may be required by the BAF. It is a place where the development of sense of discipline, hard Work, honour, patriotism and the acquisition of knowledge is fostered to the recruits to enable them to tackle appropriate military and academic subjects. They develop deep appreciation of airmen's traditional code of behaviour and instil in themselves the regimentation, obedience and discipline.

Education Training at Training Wing for Airmen

26. Training Wing was established in 1975 as a wing of BAF Base Zahurul Haque for conducting professional training of BAF airmen. It started its academic activities in 1977 with 17 airmen. With the passage of time, the institution is now well equipped with more accessories. It conducts the professional training of BAF airmen in their respective trades. The training system at Training Wing for airmen is as follows:

- a. **Pre Trade Allocation Training (PTAT).** On successful completion of training at RTS recruits are passed out as AC2 and report to Training Wing. They undergo Pre Trade Allocation Training (PTAT) for 13 weeks and are allocated with 24 different trade groups.
- b. **Trade Training Basic (1st Term).** After the trade allocation, BAF airmen continue their basic training for a duration of 39 weeks. All AC-2 will be promoted to the rank of AC-1 after completion of 88 weeks of training (36 weeks at RTS, 13 weeks PTAT and 39 weeks theoretical class of Trade Training Basic. Thereafter, they are to undergo practical training in the field for a duration of 13 weeks.
- c. **Trade Training Advanced (2nd Term).** The advance training also continues after the Basic training for a duration of 52 weeks for the entire technical trades (except ATC and Met trades) and 36 weeks for the rest of the trades. Besides, a provision of hands on training (practical training in the field) like OJT is kept for a duration of 16 weeks. Promotion to the rank of LAC will be awarded after completion of the Trade Training Adv at Training Wing.
- c. **Management Course.** Airmen of the rank of Sergeant having willing to re-engage for service are undergo Management Course at Training Wing for a duration of 08 weeks.

Conclusion

27. Air Force is always equipment-oriented organization. As such, the right personnel are to be placed behind the appropriate equipment in order to maximize the expected output. There is no substitute of training for an organization that deals with high tech arsenals. BAF is also no exception to those circumstances. Since its inception training has been emphasized for all the personnel as a priority basis. BAF personnel are relentlessly working to ensure that the training standard is not compromised at any cost for any trade/branch and all our efforts are directed to this goal.

TOPIC-5
THE EDUCATION FOR CHILDREN OF SERVICE PERSONNEL

Introduction.

1. The responsibilities for the education of children of service personnel no less than for the children of civilians rests upon the parents and the educational authority of that area in which the children reside. Normally service children will attend a suitable school under the auspices of the educational authority under the same conditions as for other children living in the same area unless the parents make alternative arrangements for their education e.g. by sending them to a recognised or unrecognized or independent or government school of their won choice.
2. On certain Bases where suitable means of education are not available BAF authorities have provided educational facilities and made these facilities the responsibility of education officer.
3. Experience shows that certain difficulties confront the parents when they want to have adequate arrangements for the education of their children. BAF bases are normally situated at places from where the schools are at a considerable distance. Again the periodic postings present special problems to parents in securing for their children a progressive education undisturbed by frequent changes of school curriculum. These and other difficulties are of concern to education officers at their respective levels who must, therefore, collaborate with the educational authorities of the area to seek a satisfactory solution.
4. It is to be appreciated that while the responsibility for the education of children of BAF personnel rests with the parents and the civil educational authorities of the area, it is also the concern of the Directorate of Educational Service BAF in the interests of well being of the service personnel that the facilities afforded to all such children are adequate and meet the requirements.

School on BAF Bases

5. The following schools have been established at BAF Bases by the BAF:

a. **Dhaka area.**

- | | | | |
|-----|-----------|---|--|
| (1) | Tejgaon | : | Golden Eagle Nursery, Dhaka. |
| (2) | Tejgaon | : | BAF Shaheen College, Dhaka. |
| (3) | Tejgaon | : | BAF Shaheen English Medium Shool, Dhaka. |
| (4) | Kurmitola | : | BAF Shaheen College, Kurmitola. |
| (5) | Kurmitola | : | Golden Eagle Nursery, Kurmitola. |

b. **Chittagong area**

- (1) Chittagong : Golden Eagle Nursery, Chittagong.
- (2) Chittagong : BAF Shaheen College, Chittagong.

c. **Jessore area**

- (1) Jessore : Golden Eagle Nursery, Jessore.
- (2) Jessore : BAF Shaheen College, Jessore.

d. **Pharkanchonpur** : BAF Shaheen School, Pharkanchonpur.

e. **Shamshernagar** : BAF Shaheen School, Shamshernagar

Children's Education - A Problem

6. There is no uniform system of education in the country. Schools are not very well equipped nor are the surroundings clean and healthy. There are different systems of education.

7. The principle types of Schools are:

- a. Kindergarten/Pro-Primary Schools.
- b. Primary Schools - Municipal/Board/Govt.
- c. High Schools - Govt and Public Schools.
- d. Missionary Schools (Convent Schools).
- e. Private/Denominational Schools.
- f. Vocational or Industrial Schools.

At the Missionary schools fees are very high and admission restricted. In some of the big towns Government Schools and Convent Schools have a better standard of teaching but they are always overcrowded and admission usually depends on the position of candidates on the waiting list.

8. BAF has established Shaheen Colleges and the teaching standards are quite satisfactory. Local resources are at best limited. Children are sent to local government schools where such school exist.

BAF Arrangements

9. **General Supervision**. It is the duty of education officers to exercise a general supervision of the arrangements made for the education of children of service personnel. The BAF maintains contact with the Ministry of Education, with the missionary institutions and with the educational authorities of the area. At Bases, education officers are required to advise the officer commanding bases on children's education.

10. **Duties of the Base Education Officer.** He should endeavour to establish and maintain good liaison with the education authorities of the area and with the heads of local schools. At the same time he will have to exercise discretion in his approach to civilian education officers bearing in mind that parents should preferably made representations concerning their children's schooling direct to the school authorities concerned.

BAF Shaheen School and College Administration

11. As per para-49 of Bangladesh Gazette dated 08 June 2009 (SRO no-99-Law/2009), all BAF Shaheen Schools/Colleges shall be under the management of a special type of Managing Committee/Governing Body, constituted in accordance with then provisions of the regulations laid down in the following paragraphs.

Constitution of the Governing Body

12. The Governing Body (GB) shall consist of the following members:

- a. **Chairman.** Head of the organization or person nominated by him (AOC/Base Cdr of respective Base).
- b. **Member Secretary.** Head of the Institute (Ex-Officio).
- c. **Member.**
 - (1) Two members elected from teachers or nominated by head of the organization through mutual understanding (to be nominated by the Chairman).
 - (2) Three members from the guardians of the students nominated by the Chairman, at least one of them will be female.

Term of the Governing Body (GB)

13. The term of the GB shall be a period of 03 yrs commencing from the day of its first meeting after its constitution. But the members of teaching staff elected as members of GB shall hold office for a period of one year.

Power and Functions of the Governing Body

14. The GB shall have the power:

- a. To recommend for appointment of the principal, members of the teaching staff, Physical Instructors, librarians, Demonstrators and Lab Assistants for approval by the Controlling Committee subject to the conditions if any, imposed by the Controlling Committee.
- b. Subject to approval of the Controlling Committee to sanction posts and determine the terms and conditions of service of the clerical and other staff, the power of appointment to such posts, and the power to take disciplinary action against such employees being left with the principal.

c. Subject to the approval of the Controlling Committee, to recommend dismissal, removal or reduction in rank of a member of the teaching staff.

Note : Provided that no such action shall be given effect without such member being given chance of being heard in person by a Board of Inquiry/Investigation and without the prior approval of the Controlling Committee.

d. To grant leave and monetary advances.

e. To dispose of on recommendations of a Board of Officers, worn-out or obsolete equipment, tools, tents, furniture, apparatus, old and worn-out books etc valued up to Tk 1,000.00 by sale through Finance Committee. Disposal of such things valued more than Tk 1,000.00 is to be referred to the Controlling Committee. The sale proceeds thereof shall be credited to the General Fund of the school/college.

f. To write off the value of the things mentioned in clause-e up to a limit of Tk 500.00 is to be referred to the Controlling Committee).

g. To write off unrealisable fees and fines up to a limit of Tk 500.00.

h. To sanction expenditure on the purchase, acquisition, construction and repair of books, equipment, furniture, lands, buildings and structures etc for running the school/college efficiently up to a limit of Tk 50,000.00. For expenditure above Tk 50,000.00 the proposal is to be fwd to the Controlling Committee.

j. To levy on students compulsory fees for athletes and other corporate activities such as : common room, magazines and the like.

k. To prepare a list of holidays within the limits laid down by the Board/University.

l. To fix the number of full-free and half-free student ship and to determine the extent of other financial assistance to deserving students, the awards of such free studentship or financial assistance shall be made on the recommendation of Academic Council.

m. To decide cases of disciplinary matters.

n. To make recommendation in order to create and maintain such funds as may be considered necessary.

p. To ensure financial solvency of the school/college.

q. To approve annual budget of the school/college.

r. To consider, examine and initiate projects for approval of the Controlling Committee for the development of the school/college.

s. To arrange for the audit of the accounts of the College.

- t. To consider all communications from the Board/University and to take nec action on such communications.
- u. To perform such other duties as may be entrusted to it from time to time by the Board/University/Controlling Committee.
- v. The GB shall appoint the following Committees :
 - (1) Academic Committee.
 - (2) Examination Committee.
 - (3) Syllabus Committee.
 - (4) Selection Committee.
 - (5) Finance Committee.
 - (6) Appeal & Arbitration Committee.
- w. Subject to approval of the Controlling Committee, to levy all expenditure on students including compulsory fees for athletics and other corporate activities such as common room, magazines and the like.

Constitution of the Controlling Committee

15. All BAF Shaheen School/Colleges shall be under the control of the Controlling Committee constituted in accordance with the provisions of these regulations.

16. The Controlling Committee of BAF Shaheen School/Colleges shall consist of the following members :

- a. Chairman - Chief of Air Staff
- b. Members -
 - (1) ACAS (O&T)
 - (2) ACAS (M)
 - (3) ACAS (A)
 - (4) AOC/Base Cdr, BSR
 - (5) AOC/Base Cdr, KTL
 - (6) AOC/Base Cdr, MTR
 - (5) AOC/Base Cdr, PKP
 - (6) AOC/Base Cdr, ZHR
 - (7) D Fin
- c. Member-Secretary - D Edn

Powers and Functions of Controlling Committee

17. Powers and Functions of Controlling Committee shall be as under :

- a. To formulate and issue policies in order to ensure excellence in academic and administrative performances of BAF Shaheen School/Colleges.
- b. To approve the recommendations of MC/GBs for appointment of principal, members of the teaching staff, physical instructors, librarians, demonstrators and lab assistants.
- c. To approve the recommendations of MC/GBs for the sanction of posts and terms and conditions of service of the clerical and other staff of BAF Shaheen School/College.
- d. To consider the disposal of worn-out, obsolete, equipment, tools, tents, furniture apparatus, old and worn-out books etc of BAF Shaheen School/College recommended by MC/GBs.
- e. To consider the write-off actions for the items valued more than Tk 500.00 as recommended by MC/GBs of Shaheen School/Colleges.
- f. To consider the proposals forwarded by the MC/GBs for expenditure on the purchase, acquisition, construction, and repair of books etc.
- g. To consider the recommendation of MC/GBs in respect of dismissals removal, reduction in rank or any disciplinary action against a member of the teaching staff.
- h. To write-off the value of the worn-out/obsolete equipment, tools, tents, furniture, apparatus and old and worn-out books above Tk 500.00.
- j. To write-off unrealisable fees and fines above Tk 500.00 recommended by MC/GBs.
- k. To sanction expenditure on the purchase, acquisition, construction, and repair of books equipment, furniture, lands, buildings and structures for running the school/college efficiently above the limit of Tk 50,000.00.
- l. To consider the recommendations for creating and maintaining funds considered necessary for the school/college.
- m. To approve list of holidays and yearly term calendar recommended by MC/GBs.
- n. To approve term-wise yearly syllabi of the classes of Shaheen School/Colleges recommended by Academic Committee.
- p. To consider the recommendation on disciplinary matters in respect of principal and teaching staff.
- q. To consider the recommendations of MC/GBs in respect of creating and maintaining such funds as may be considered necessary.

Duties & Responsibilities of Adjutant Shaheen School & College

18. Adjutant, BAF Shaheen College, when appointed, is the confidential staff to the Principal. He is directly under the command of the Principal and is responsible to him for the following duties and responsibilities :

- a. He is to ensure discipline among students and control them during drill, physical training & games.
- b. He is to maintain necessary liaison with Air Scout, Girl Guide & BNCC and to co-ordinate their training and other activities.
- c. He is to make and implement all types of programmes related to Inter-House Sports & other competitions and programmes of the college.
- d. He is to maintain discipline of the institution and to remain vigilant against any indiscipline activity.
- e. He is to communicate with the parents of sick students and the students who face sudden accident. He is to ensure immediate medication and transportation for such student (if necessary).
- f. He is to receive inspectors/Visitors and, if necessary, he is to arrange meetings with the Principal. He is also to make necessary arrangements for conducting any meeting by the Principal.
- g. He is to take necessary preparation before audit & inspection.
- h. He is to help all concerned to take necessary preparation before the parents teachers day.
- j. His is to look into the irregularities caused by the transports of guardians inside the institution.
- k. He is to make the duty roster of guards and look into the overall security of the total area.
- l. He is to ensure & control all matters related to electric, water & gas supply and to take prompt action to solve any problem relating to these.
- m. He is to control all Attendance Registers of the staff.
- n. He is to intimate the daily report on duty teachers to the principal.
- p. He is to watch the behaviour & activities of all persons & students of the institution regularly and to take necessary action in consultation with the Principal.
- q. He is to ensure all necessary announcement regarding admin matters to inform the guardians regularly.
- r. He is to investigate the indiscipline activities of the students and take necessary action consulting the Principal.

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- s. He is to ensure the overall cleanliness of classes, toilets and college compound.
- t. He is to enlist all furniture items and all other property of the college in the register and ensure the safe custody of the same.
- u. He is to remain vigilant against any unauthorised entry of any outsiders/mastans.
- v. He is to ensure the safety of students during bad weather and adverse political situation inside the campus.
- w. He is to supervise the regular cleanliness of college playgrounds, gardens and lawns.
- x. He is to invite quotations regarding construction, repair of bldgs, other installations & furniture manufacture etc. he is to supervise the handing/taking over of new items & constructions.
- y. He is to take preparation for different inspections and take necessary action for annual face-lifting of the college.
- z. He is to record all correspondences regarding leave of teachers and employees.
- aa. He is to supervise closely the procurement and selling of different items of the college as per the college regulation & to ensure timely deposit of any fund in college Acct of Bank.
- ab. He is to sign all vouchers, check all account registers to control financial activities and supervise the job of accountant and he is to write the rough Cash Book.
- ac. He is to ensure the standard and rate of the books, khatas & other items sold by the Shaheen Book Stall & also items of Shaheen Centeen.
- ad. He is to ensure the regular collection of monthly rent from shops (if any) and ensure time deposit of the same to the college fund. He is to make necessary liaison with the shop owners on behalf of the authority.
- ae. He is to give necessary demand & ensure timely procurement of college prospectus, all types of forms & stationery, kathas, all types of registers, papers etc. He is to ensure proper BOC action of all the procured items. He will be responsible for storing & proper distribution of the same.
- af. He is to take nec action on any matters assigned to him by the Principal.

TOPIC - 6

PRINCIPAL METHODS OF INSTRUCTION

Introduction

1. For the instructor it is not enough to know his/her subject. He/she should be well versed in the art of transferring the knowledge as well. This involves the principles and methods of instruction that are the results of long teaching experience. Teaching is gradually becoming a science in the sense that it is being built on sound scientific principles and has evolved definite techniques to achieve its goals. The instructor is, therefore, advised to get this knowledge to make the process of learning interesting for the students. He/she must know that effective learning depends upon the eagerness of the learners. He/she should, for that matter ensure proper learning situation by arousing the learners' interest in the lesson. Learning situation means a typical classroom atmosphere, in which a learner feels the realism of the actual situation. It is to be created by organising the elements of teaching in an effective manner. However, a learning situation consists of the learners' motivation, contents to be conveyed. Thus, methods of teaching enter into the present discussion.

Tutorial Method

2. This is an old method of teaching. It was introduced to provide an opportunity to the instructor to meet the individual needs of his students. Socrates followed this method in imparting knowledge to his disciples. In this method the instructor has to keep a close watch on the progress of the student. The class is divided into training groups, each group not having more than four to six students. The students are given home task and their products are discussed thread bare. However, in this method the instructor does not talk. He/she only asks questions while talking is done by the students. But his/her questions are so arranged that they make the students conscious of their ignorance and lead them towards the goal. In order to conduct a tutorial lesson, the following steps are observed:

- a. The instructor goes over it thoroughly, criticising and discussing each point.
- b. The student prepares a body of work by himself/herself.
- c. The student explains his/her point of view, observes his/her mistakes and corrects himself/herself.

Advantages of Tutorial Method

3. Tutorial system has the following advantages:
 - a. This is one of the most informal methods of teaching. There are no lectures. All learning takes place through conversation.

- b. The truth is drawn out of the student's mind by the joint efforts of the instructor and the student.
- c. The student is made to reason out things and use his/her power of judgment in arriving at a solution.
- d. The instructor gets an opportunity to learn the student's weaknesses and corrects them.
- e. The student learns by:
 - (1) Doing his/her own work.
 - (2) Observing his/her own mistakes.
 - (3) Looking over the completed work and comparing it with the original assignment.
- f. It develops in the student a spirit of inquiry and builds up self-confidence.

Disadvantages of Tutorial System

- 4. Tutorial system has the following flaws:
 - a. It is the most difficult and the least common, as it is time-consuming and suitable only for a limited number of students.
 - b. It demands earnestness on the part of the student and needs constant alertness.

Lecture Method

5. This is another old method of teaching. It is also called a traditional system of teaching, widely used in schools, colleges and universities. For general talks on nationalism, democracy, current national and international affairs, and so on, this method is used. It is useful in presenting a great deal of the same information to a large number of students at a time. The students have to listen quietly to what the instructor speaks. This method assumes that a competent instructor is one who can maintain discipline in the class by suppressing the students and by that completing the transmission of information to them. This method is economical in terms of men and materials. One of its main advantages lies in the opportunity for a highly credible source to pass on his/her experiences and thoughts. This type of presentation may incorporate or consist of instructional motion picture. However, it is not an effective method of instruction as it has the following inherent disadvantages:

- a. It is always a one-way technique with little chance for feed back or participation.
- b. It is a more formal presentation of facts.

- c. It does not cater for ensuring the assimilation of the subject matter by the students, as the instructor remains too busy talking.
- d. There is no room for class co-operation in building up the lesson.
- e. It does not have definite steps.
- f. It has the instructor as the main focus of attention.
- g. It lacks thoroughness.
- h. It does not cater for the varied educational backgrounds of the students.

Group Discussion

6. Effective learning needs active participation of the learner in finding knowledge. One of the methods which aims at maximum participation of this nature is group discussion. Group discussion is an organised conversation of a group of people who wish to clarify some problems. It can be of the following forms:

- a. **The Lecture Form.** In this form, specially selected speakers present varied or opposing views. Under the guidance of the chair, the audience question the speakers and contribute their own opinions and thoughts.
- b. **The Symposium.** In a symposium three or more speakers present formal speeches on assigned topic. After their delivery of speech the audience participate in the discussion.
- c. **The Panels.** A selected number of speakers seated before an audience enters into discussion. This method confines the right of discussion to a few for a limited time in order to ensure concentration and efficiency.
- d. **Round Table.** A small group of people seated around a table contribute their views under the control of a Chairperson who directs, evaluates and summarises their remarks.

Steps

7. The Group discussion has the following essential steps:
- a. Recognising, defining and limiting the scope of a problem.
 - b. Finding out the basis of a satisfactory solution.
 - c. Discovering and examining possible solutions.

How to Conduct the Group Discussion

8. An instructor should consider the following points:
 - a. He/she should introduce the topic with a brief talk, which should not take more than 10 minutes.
 - b. The group should be comfortably seated around the instructor.
 - c. Only three or four specific questions should form the framework of discussion.
 - d. These questions should be written on the board.
 - e. Twenty-five to thirty minutes should be devoted to discussion.
 - f. Every participant should be encouraged to speak and no cross talk should be allowed to develop.
 - g. At the end of the discussion the instructor should sum up the main points. This consolidation should not take more than five minutes.

Cautions to be Observed

9. The following cautions are required to be observed for this method:
 - a. One must not forget during discussion that it is a collective effort towards the solution.
 - b. It must not be allowed to turn into a debate on the basis of personality differences.
 - c. None of the participants should be allowed to have more than a reasonable share of time.
 - d. Every one should express his/her views freely.
 - e. All those taking part in the discussion should be tactful and courteous.
 - f. Every one should be fully prepared for the discussion.
 - g. The chairperson, besides possessing the qualities of leadership should be skilled in:
 - (1) Asking questions.
 - (2) Summarising clearly.
 - (3) Directing the discussion.
 - (4) Recognising vital points of the discussion for emphasis.
 - (5) Avoiding unpleasant situation.
 - (6) Keeping all speakers and listeners awake, alert and interested.

10. Although discussion is time consuming and suitable for a small class, it offers the maximum opportunity to the individual to participate in acquiring knowledge. It develops self-confidence in the individuals and tolerance for the views of others. It is the most suitable method for adult education.

Demonstration

11. Upon clear demonstration of an instructor depends the ability of the students to do the jobs. It is an essential aid to teaching. Usually before the actual mechanism or procedure is demonstrated, the students are shown simple diagrams and models to prepare them for their study. An instructor needs preparation for his/her demonstration. If a component has to be dismantled in front of the class, proper rehearsal should be done beforehand to make the job easy for the instructor.

12. **Categories of Demonstration.** There are two main categories of demonstrations as stated below:

- a. Display and explanation of a piece of apparatus or equipment, e.g. engine and airframe components.
- b. Practical demonstration and explanation, e.g. riveting.

13. **Exhibition.** The effect of demonstration can be increased by the apparatus or equipment, if the demonstration associated with the apparatus is properly exhibited. From this point of view the objects can be divided into two categories:

- a. **Large Objects.** They should be arranged on a suitable support, just above the eye level of the class.
- b. **Simple Objects.** They should be passed around in the class, so that each student can handle them. Their specific features must be pointed out, before they are passed around. These should be collected before proceeding to the next part of the lesson.

14. **Pointing.** If the instructor has to point out a particular object, his/her pointing must be definite and deliberate and it should be done with the help of a pointer.

15. **Recapitulation.** After demonstration, the whole lesson is summed up either verbally or by means of a complete demonstration without explanation. This is done to give the students a chance to see the whole operation in correct sequence and as one complete whole.

16. **Supervision.** The lesson does not end with the demonstration. It is the last stage in preparing the students to do the job. At the consolidation stage, they get an opportunity to do it for themselves. Here very close supervision is required, to see that they do it correctly and develop proper work habits. In this stage they need guidance, help and sometimes-even reinstruction.

Conclusion

17. The types of Methods of Teaching covered in this chapter are only a few of many methods. No single method has been proved to be the most suitable one for all teaching-learning situations. Even in some cases, a mixture of two or more methods produces satisfactory result. Even the suitability of a method starts decreasing in the wake of some changed scenario. As such, there goes a saying that an instructor trained in Teaching Methodology is the key factor who decides the suitability and usability of a method in a given situation. If necessary, he/she modifies a portion of a prescribed method to yield the maximum result.

TOPIC-7

ADMINISTRATION OF BAF LIBRARIES

The Reference/Technical Library

1. Each education centre should contain a reference/technical library for the use of all service personnel of the base. The officer-in-charge of education squadron/flight is responsible for its organization and administration. If there is no education officer, the commanding officer would delegate this duty to an officer of another branch. The library should contain books of educational nature including books on technical, scientific, humanities and cultural subjects as well as those dealing with more general subjects such as international affairs, travels, economics and history. Works of fiction should not normally be included.

2. The officer-in-charge education squadron/flight should see that his library is put to the best use. When supervision is possible, it is advisable to allow the library to be used as a reading room. It should, therefore, be an attractive room where airmen can relax and read at their leisure. The library should function on as many evenings as possible in addition to being opened during the day. The library should be well advertised. From time to time a list of new books should be published in the notices of base routine orders. Books should be kept in good condition. The more simple kind of book binding can often be done economically and effectively on the base but it may necessary to send books away to be bound. When this is to be done details of books concerned would be notified to Air Headquarters (Director of Education) who will arrange or give permission for the work to be done locally.

Annual Library Grant

3. The amount of Annual Library Grant for each base/school/unit is determined by the Director of Education. This allocation is decided according to the size and special needs of each base/school/unit. Periodicals and magazines for educational purposes may be provided from this grant. As the grant cannot be carried forward from one financial year to the next, every effort is made to use the allocation before the end of each financial year. The grant is centrally controlled and hence Air Headquarters requires the following information at half-yearly intervals:

- a. The list of books which should be demanded through official channels.
- b. The total amount spent on local purchase if authorized by Director of Education.

Demand of Books

4. Following points must be kept in view before placing demands for books to Air Headquarters:

- a. Demands are to be typed in double spacing with books in alphabetical order of the publishers. Books from the same publisher should be listed in alphabetical order of the author.
- b. The demands are to be numbered serially the first demand commencing on or after first January each year.
- c. Air publications are not covered by the library grants.

Local Purchase of Books

5. The procedure for local purchase of books is given as under:

a. Officer-in-charge education flight/senior education officer of Training Schools will purchase locally books require for bases/schools. Books should be brought locally only when they are needed urgently. Prior permission of Air Headquarters is necessary. Books and pamphlets may accordingly be purchased as:

(1) In place of book and pamphlets for which non-availability notes have been received from Air Headquarters.

(2) When books are needed urgently for training purposes.

(3) For the use of information room.

b. When making local purchases, it should be ascertained clearly that prices charged by the publishers/ firms are fair and reasonable and cheapest in the market.

c. The register for local purchases should be kept and totalled quarterly.

d. Bills in respect of educational books, equipment etc is to be certified to the effect that the books and equipments have been taken on charge.

e. Bill for local purchases will be paid by Air Headquarters.

Library Suggestions

6. An up-to-date catalogue should be available in the reference/technical library. The library should maintain a suggestion book containing the following headings:

Date	Author	Publisher	Particulars	Recommended by

7. It is not always advisable to order books merely on the recommendations of one person. Individual suggestions should be considered by the officer-in-charge education squadron/flight and judged on their merit. Specialist officers at the units are also to consult so that a standard list is prepared on the pattern to be given under each subject about minimum requirements for immediate fulfilment and an ultimate target in view of long range developments.

Supply of Books

8. Educational books for unit libraries will be obtained as follows:

- a. From Air Headquarters.
- b. By direct purchase made by the unit with the authority of Air Headquarters.

9. **BAF Form-439S**. The Library Book Indent Form and Receipt a specimen of which is given as Annex 'A' to AFO 54-7 is to be used in accordance with the following instructions for all books whether supplied by Air Headquarters or those purchased locally with the authority of Air Headquarters:

- a. Progressive serial number of books for column-1 of this form will actually give the total number of volumes, as for example, four copies of the same book added to progressive serial number 200 will have the serial number 201 to 204.
- b. While compiling the form the units are to give Air Headquarters Accession Numbers in column-10 (Remarks of the Form). These Forms are to be submitted to Air Headquarters in triplicate.

Library Administration

10. The following instructions are to be observed with regard to administration of reference/technical library:

- a. Books sent to a Base are accompanied by a transit slip as shown in Annex 'B' which should be signed, dated and returned as an acknowledgement of receipt after the delivery has been completed.
- b. Each book is to be stamped and numbered.
- c. Particulars of each book should be entered on Form-503. A separate card should be used for each book/title in the library. When there is more than one copy of the book, particulars of each copy should be entered on separate lines on the card.
- d. The books are now ready to be issued on Form-10008.
- e. A card index will be maintained on Form-1016 for each book in the reference/technical libraries, showing reference number, title, date of issue, name of borrower and date returned. Form-1016 of each book should be kept inside the book pocket if it has not been issued. It should be kept separately arranged in accordance with the reference number, if the book is out on loan.
- f. Before an officer or airman leaves the unit on posting his clearance certificate must be signed by the officer-in-charge education squadron/flight.

g. Loss of books is dealt with on Form-664B. Form-664B is to be raised in quadruplicate and each copy signed by the officer-in-charge education squadron/flight and the commanding officer. The officer-in-charge education flight will also certify that the amount charged is fair and reasonable. The value of the book or material lost will be assessed by the officer-in-charge library with due regard to price, age and physical condition of the book. Ten percent of the assessed value is to be added towards department charges. The signature of the officer or airman concerned is to be entered on the original copy of Form-664B. The form should be sent to the accountant officer for realizing money from the defaulter. The accountant officer, after realizing the money, shall send the duplicate copy to the library and triplicate copy to Air HQ (Dte of Edn). The copy is the authority for write-off action to be recorded on Form-503.

Library Records

11. Library records consist of the following:

- a. A library should have register containing a complete list of all books held on charge and arranged subject-wise. This is known as the accession register. Author catalogue and subject catalogue cards shall also be prepared for all books of the library.
- b. An inventory of books on Form-503 (as Annex 'C').
- c. Loan cards named as Form-10008 (as Annex 'D').
- d. A book record card i.e. Form-1016 for each book in the library (as Annex 'E').
- e. Unit copies of receipt vouchers to support all items taken on charge.
- f. Vouchers to support all items struck-off charge. These vouchers are to include the following:
 - (1) Form-664B.
 - (2) Form-34 supporting all items written-off.
 - (3) Receipt from other units or from Air Headquarters covering the transfer of book.

Educational Material

12. The procedure regarding the maintenance of educational material is as under:

- a. **Non-Consumable Articles.** All non-consumable articles not on laboratory charge will be taken on charge of the library on Form-503 and will be subject to audit along with the books.
- b. **Consumable Articles.** A register will be maintained showing the receipt and disposal of all consumable articles which will be subject to audit.

Checks

13. The following checks of educational material are to be carried out:
- a. A physical check of the library is to be carried out by officer in-charge library on the following occasions:
 - (1) In the first week of January every year.
 - (2) As and when directed by the Commanding Officer and a certificate is to be signed by the officer-in-charge library.
 - b. A check will also be carried out when a change in the command of a unit occurs. A handing over certificate will be completed on this occasion and deficiencies reported through the usual channels.

Issue of Books

14. It is important that officer-in-charge education flight should check the library records regularly, particularly if he has frequent changes of his library staff. In general, it is undesirable that library books be held on loan indefinitely by individuals and the following principles governing loans are to be borne in mind:
- a. New books of general interest may be loaned for a short period only, so that quick circulation can be ensured. It is advisable to keep these books on a separate shelf.
 - b. Dictionaries, encyclopaedia and other special works should normally be retained in the library for reference only.
 - c. Text books will often be required for longer periods but there is a little administrative difficulty involved in recalling even these in each month. Most of the borrowers will be airmen taking correspondence courses or attending classes. Owing to their convenience a monthly day for checking can be arranged.
 - d. Books are to be issued on loan on Form-10008 to all entitled personnel for a maximum period of 4 weeks. At no time the number of books issued to officer and airman is to exceed 4 and 2 respectively. All loan cards kept in safe custody are to be checked periodically by the officer-in-charge of the library.

Loan Cards (Form-10008)

15. The following points should be remembered when using loan cards (Form-10008):
- a. The details entered on each Form-10008 as Annex 'D' should include the following particulars written in block capitals:
 - (1) Number, rank, name, section and initials of the borrowers.
 - (2) Reference number and title of the book.

- b. Signature of the borrower against each book and date of issue.
- c. Entries should be made by the librarian, not the borrower.
- d. The librarian should always clear the borrowers by signing the Library Audit Form-10008 when books are returned.

16. An audit is to be held on the following occasions:

- a. Annually up to and including 30 June.
- b. When handing over or taking over the library, it should be noted that the annual audit does not relieve the officer-in-charge education flight of the responsibility for periodic checking of his library records.

17. **The Audit Board.** An Audit Board is convened by the Commanding Officer and announced in base routine orders. The board consists of at least two officers one of whom may be the officer-in-charge education flight or an education officer in a training school. The proceedings are to be carried out in accordance with AFO 54-7 which have been amended as:

- a. The proceedings of the previous audit will be called for and it will be ascertained that recommendations of the previous Audit Board have been carried out and appropriate entries have been made on Form-503.
- b. Form-503 to see that all reference numbers are in sequence and those gaps covered by authorities for write off or Form-664B action.
- c. Reference numbers on Form 503 are in sequence and gaps are covered by write-off actions.
- d. **Form-439S.** File copies of all forms (text and reference library books indent forms and receipts) submitted since the last audit will be examined and following points recorded:
 - (1) Progressive serial number.
 - (2) Last serial number of the indent.
 - (3) Total number of the books added to the library after the previous audit.
- e. The Board will see that all the books received after previous audit have been properly recorded on Form-503 and 1016.
- f. The Board will also check the record showing disposal of all consumable articles and see that article received after the previous audit have been put to the right use.

18. **Form-2 Actions.** The Board is to record its findings on Form-2 giving the following details:

- a. The number of books shown on Form-503.
- b. The number of books on the shelf.
- c. The number of books on loan.
- d. The number of books deficient.
- e. Any irregularities of the library procedure.
- f. The details on the following proforma will then be given in the proceedings:

Section	Last Ref No	Total No of Books Received	No of Books				Books on Loan	Books in Almirah
			Written off	F-664B Auctioned	Transferred	Balance		
1	2	3	4	5	6	7	8	9

Loss of Books

19. In order to avoid wastage and losses of books and educational materials, it is essential that suitable security measures are taken to ensure that a book/publication/material is not issued to borrower without a legible signature on Form-10008. In no case will a borrower allowed to take the books with him on posting to a new unit/base. Officer-in-charge library is to personally sign all the clearance certificates. Following actions are to be taken as soon as any loss/ deficiency come to light:

- a. If an individual responsible for the loss or mutilation of a book, he will be liable to replace the same title or a suitable book on the same subject with same price otherwise he will be charged on Form-664B and the recovery will be affected in cash at the unit. The amount to be recovered will be credited to public funds of BAF. A copy of Form-664B will be forwarded to Air Headquarters and the other copy retained in library record for presentation to the next audit board. The value of the book or material lost will be assessed by the officer-in-charge library with due regard to price, the period of the book and material has been in use and its physical condition. Ten percent of the assessed value is to be added towards departmental expenses.
- b. In case of serious deficiencies due to negligence on the part of officer-in-charge library, he may be held responsible for replacing a book or paying for it on Form-664B.
- c. A board of inquiry will be held in case books and publications are lost due to unforeseen circumstances. When the publication is of classified and graded nature, the inquiry will be held in accordance with instructions laid down in the pamphlet entitled, 'Treatment of classified and graded documents' issued by the Govt of People's Republic of Bangladesh.
- d. The board of inquiry can recommend write-off up to 1% of total number of books held on charge of the library. The proceedings of the Board of Inquiry will be forwarded to Air Headquarters for final approval.

20. The following precautions should be taken to avoid wastage and loss of educational books and materials:

- a. Suitable security measures are to be introduced to ensure that books/materials are not borrowed without legible signature in Form-10008.
- b. Normally a borrower is not to retain book for more than four weeks unless a fresh signature is obtained.
- c. Steps are to be taken to ensure that the signature of the officer responsible for the library is recorded on the clearance certificate of all the personnel who leave the unit.
- d. In the case of serious deficiencies due to negligence on his part, the officer-in-charge library, may be held liable for replacing books or for a deduction of pay in lieu of books.
- e. An inquiry will normally be held if books or materials have been lost due to unforeseen circumstances or loss cannot be attributable to an individual. Proceedings of the Board of Inquiry along with the recommendations will be forwarded to Air Headquarters.

Transfer of Books

21. From time to time the officer-in-charge education flight will ascertain that certain books, maps etc are of no further use and they may be disposed of or transferred from one unit to another on the authority of Air Headquarters. In this case, an advice note should be sent to the consignee, accompanied by two lists of the items.

Worn out and Unserviceable Books and Equipments

22. These should also be examined by the Audit Board convened by the Commanding Officer for the purpose of auditing the library. If the board finds that the books and equipments are unfit for further use due to fair, wear and tear, the Board may recommend their disposal to Air Headquarters.

Library Classification

23. The reference number on a book should always be given in sequence with the previous number under a particular subject as classified in Annex 'G'. It indicates the subject, section, serial number and number of copies of the same title held in the library i.e. Ha-3/3. An analysis of this example of reference number brings forth the following information:

- a. "H" denotes the subject of book i.e. History.
- b. "Ha" denotes the section under the subject "History" which is meant for books on "World History".
- c. "Ha-3" indicates that the book bearing this number is the third title on "World History."
- d. "Ha-3/3" means that the book is the third copy of the same title.

Air Headquarters' Central Library

24. A special allocation is made in the grants for educational uses for procuring books for the library. The library is directly supervised by the Director of Education and is divided into two sections:

a. **Air Headquarters Central Library.** It is housed in the main building of Air Headquarters. Books on the following subjects are available:

- (1) War (Army, Navy and Air).
- (2) History, Geography and Biography.
- (3) Current and International Affairs.
- (4) Islamic, Sports, Reference Books, Meteorology and Aeronautics.
- (5) Travel and Adventure.
- (6) English Literature.
- (7) Bengali Literature.
- (8) History.
- (9) Psychology.
- (10) Economics.
- (11) Islamic Studies.

b. Only staff officers of Air Headquarters are authorized to borrow books from this library. This library also maintains news papers, journals and periodicals dealing with current and international affairs, geography, history, science and aeronautics. The books are mainly of advanced nature required by senior staff officers of the Air Force. A small section of this library contains Individual Staff Studies examination and Staff College qualify examination publications required for the staff officers preparing for their promotion and 'Q' examinations.

c. **Air Headquarters Welfare Library.** This library is now a part of Air Headquarters Central Library and contains English/Bengali fiction books. These books are purchased out of Welfare Amenities Grant under AFI 59/49.

Reference Libraries in Training Establishments

25. Books in the reference/technical libraries of BAF Academy and training schools are intended for use as class books or reference for trainees in connection with their service educational instruction and as reference books for the education staff. Books required under the General Education Scheme or for recreation should keep distinctly separate from these libraries. In training establishments, the senior education officer will be responsible to commanding officer for the management of the reference library. If there is no education officer, the commanding officer will delegate the duty to an officer of another branch. The inventory and audit arrangements will be the same as those for Base reference library.

The Recreational Libraries

26. Each base should have a welfare library which should be kept at from the reference/technical library. Books for the two libraries are centrally purchased by Air Headquarters under AFI (P) 59/49 (Welfare Amenities Grant) and consists of English and Bengali fictions. These libraries are organized and administered in accordance with AFO 54-7 and follow the classification as given in Annex 'H'.

Local Libraries

27. Officer-in-charge education flight is to advice, initiate and friendly contact with the libraries serving in his area to encourage individuals to become members so that they make their own selection of books from these libraries in addition to the books from the base reference and recreation library. In general, the education officer will perform a valuable social service if he can help to foster the library habit.

Paper Back Section of Reference Libraries

28. As good reading materials in hard bound books in the field of travel and adventure, current and international affairs, war subjects etc are not available at reasonable cost; it has been decided that a section of paper back books be opened in all Bases/Units' reference and technical libraries. Since the paper-back books are not very durable and they can be easily opened up by rough and careless handling, the borrowers are to be properly briefed regarding the careful use of these books. These books are to be brought on charge separately in accordance with the existing procedure and Form-439S giving serial No PB/1, PB/2 and so on. These books are to be classified under the following main sections:

- a. C - Current and International Affairs.
- b. F - Fiction.
- c. T - Travel and Adventure.
- d. W - War and Allied subjects.

29. The paper back section of a reference and technical library is to be annually audited as usual. The audit board, while recommending the write-off of these books, is to keep in view the following points:

- a. Period for which the book has remained in the library.
- b. Number of time the book has been issued.
- c. Negligence, if any, in the handling of the book.

30. The audit board is to prepare a separate list of paper back books which have been rendered unserviceable through fair, wear and tear, indicating the information require in Para-0332 and above. If the findings of the board are justified, Air Headquarters may allow write-off up to 10% of the total number of books held on charge of paper back section of the library.

31. The library should be managed carefully so that books and other educational materials should not be torn out or lost. For these reasons, carefully prepared different forms shown in the subsequent pages should be used in right time as documentation. The lists of various forms are:

- a. Library Book Indent Form and Receipt shown as Annex 'A'.
- b. Transit Slip of Library Books shown as Annex 'B'.
- c. Inventory Card of BAF Libraries shown as Annex 'C'.
- d. Loan Card of Library Books shown as Annex 'D'.
- e. Record Card for Library Books shown as Annex 'E'.
- f. Certificate for Physical Check of Library Books shown as Annex 'F'.
- g. Standard Classification of Ref and Tech Library shown as Annex 'G'.
- h. Standard Classification of Welfare Library shown as Annex 'H'.

LIBRARY BOOK INDENT FORM AND RECEIPT

UnitBooks Supplied by.....Certified that the Books
detailed in column received
and taken on charge.

Indent No..... Letter No.....

DateDate.....Sd.....
(Officer-in-charge, Library)
Date.....

Prog Ser No	Author	Title	Pub	Price per Copy	No Req	No Received	Total Cost	Lib Ref No	Remark
1	2	3	4	5	6	7	8	9	10

A-1

TRANSIT SLIP - LIBRARY BOOKS

From No of books.....
 To..... No of Article.....
 Ref..... Weight of package.....
 Date..... Signature

Signature of Officer dispatching
 Consignment

.....
 Certified that the package/ packages was/ were received by me intact
 through..... . And that the books were opened in my presence and checked
 against the list. The following deficiencies and surpluses were:

Deficiencies

Surpluses

.....

Signature of officer receiving
 Consignment

Unit.....

Date.....

INVENTORY CARD : BAF LIBRARIESSection.....
Subject.....

Title

Author.....

Publisher.....

Price.....

Number of Copies	Source of supply letter/bill No	Reference Number	Accession Number	Authority for written off

C-1

LOAN CARD LIBRARY BOOKS

Number.....Rank.....Name Serial No.....

Date issued	Ref No	Title	Signature borrowed	Date returned	Signature of person receiving into library

RECORD CARD FOR LIBRARY BOOKS

Reference NoPrice

Title

Author.....

Publisher.....

Date issued	Issued to	Date returned

CERTIFICATE - PHYSICAL CHECK OF LIBRARY

This is to certify that a physical check of all the books/ publications held on charge oflibrary at.....was carried by me on.....against Form-439-S and approved by Air Headquarters and that all gaps are covered by the following:

- a. Loan cards of borrowers.
- b. Form-664B for recovery action.
- c. Authority for write-off/ transfer/ handing of books.
- d. List of books found deficient.

Date.....

Signature.....
Officer-in-charge Library

REMARKS BY COMMANDING OFFICER

A Board of Inquiry is recommended/ not recommended in the case of books found deficient as per attached list.

Date

Signature.....

STANDARD CLASSIFICATION REFERENCE AND TECHNICAL LIBRARY

- A. Air non-technical (History and General)
 - Aa. Aerospace
- B. Air Technical
 - Ba. Theory of Flight
 - Bb. Aero-engines
 - Bc. Airframe and Structure
 - Bd. Instruments and machine shop practice
 - Be. Ground Engineering (engines and airframe combined)
- C. Economics and Commercial Subjects
 - Ca. Economics
 - Cb. Commerce and Banking
 - Cc. Book-keeping and Accountancy
 - Cd. Typewriting and Short-hand
 - Ce. Industry
 - Cf. Office Management
- D. Agriculture
- E. Engineering
 - Ea. Engineering Drawing
 - Eb. General Engineering (Carpentry, sheet metal work, welding) etc
 - Ec. Automobile and Electrical Engineering
 - Ed. Electricity and Electrical Engineering
 - Ee. Wireless, radio and radar
 - Ef. Engines (Except aero-engines)
- F. Foreign Languages
 - Fa. Persian and Arabic
 - Fb. Other foreign Languages
- G. Geography and Travels
 - Ga. Regional geography
 - Gb. Political topography
 - Gc. Travels topography

H. History

Ha. World History

Hb. History of Europe and other countries

Hc. History of India

I. Islamic Thought and History

Ia. Islamic thought

Ib. Islamic history

J. Sociology

Ja. Customs and traditions

Jb. Anthropology

Jc. Juvenile

K. Education

L. English Language

La. Grammar and compositions

Lb1. Poetry

Lb2. Drama

Lc. Prose and belles letters

Ld. Classics

Le. History and criticism

Lf. Anthology

M. Mathematics

Ma. Arithmetic

Mb. Algebra

Mc. Geometry

Md. Trigonometry

Me. Calculus

Mf. Statistics and dynamics

Mg. Engineering mathematics

Mh. General Mathematics

N. Biography

O. Law

P. Politics and Current Affairs

- Pa. Politics
- Pb. Civics
- Pc. Current affairs

Q. India and Pakistan

- Qa. India (General and Political)
- Qb. Pakistan (General and Political)

R. Religion and Philosophy

- Ra. Religion
- Rb. Philosophy
- Rc. Psychology
- Rd. Ethics

S. Science

- Sa. Physics
- Sb. Chemistry
- Sc. Mechanics and hydrostatics

G-2

- Sd. Hygiene, health and medical
- Se. General Science
- Sf. Biology
- Sg. Astronomy
- Sh. Atomic and nuclear science

T. Photography

U. Hobbies and Handicrafts

V. Art and Architecture

- Va. Painting and music
- Vb. Architecture and building

W. War (General)

Wa. Air warfare

Wb. Naval warfare

X. Indo-Bangladesh Languages and Literatures

XA. Bengali

XAa. Classics and drama

XAb. Poetry

XAc. Prose and belles letters

XAd. History and criticism

XAe. Biography

XBa. Hindi

XBb. Urdu

XBc. Miscellaneous

Y. Navigation and meteorology

Ya. Navigation

Yb. Meteorology

Z. Reference Books

Za. Dictionaries

Zb. Encyclopaedias

Zc. General reference books

Zd. Miscellaneous (sports etc)

Ze. University examination books

STANDARD CLASSIFICATION - WELFARE LIBRARY

	<u>English</u>	<u>Bengali</u>
Fiction	F	F(b)
Poetry	P	P(b)
Drama	D	D(b)
Biography	B	B(b)
Essays and letters	E	E(b)
Popular history	H	H(b)
Travel and topography	T	T(b)
Sociology	S	S(b)
Popular Science	PS	PS(b)
Anthology	A	A(b)
Adventure	Ad	Ad(b)
Islamic	Is	Is(b)
Miscellaneous	M	M(b)

Conclusion

32. The education instructor working as the Officer-in-Charge, Library should have clear knowledge about the management of the libraries. The more personnel enter in the library for seeking knowledge and information, the more the library functions well for the community. As a result, we achieve the success through the development of the human resources.

TOPIC - 8
LEARNING AIDS

Introduction

1. All learning takes place through sensory organs. Appeal to the sense is one of the necessities of learning. Learning aids appeal to the sensory organs of the trainees and can therefore provide them with varied experiences about those things they can see, feel, hear, taste, or smell. Seeing is responsible for a large portion of our knowledge. Effective learning aids usually have a great deal of sight appeal. Appeals are also made to hearing as in movies touch or feel or in the control of machinery, smell, as in detecting chemicals or fuels and even taste, as in cooking. It is therefore, essential for the BAF instructors to make the best of the learning aids so that they can impart knowledge and skill to their trainees effectively. In order to avoid the wastage of teaching resources, the BAF Instructors should exercise greater care in the judicious use of the different learning aids.

Definition

2. Learning aids are sensory devices used by an instructor for supplying a concrete basis for conceptual thinking of his trainees and hence reducing their meaningless world responses.

Purposes

03. Learning aids are used to serve the following purposes:

- a. **Substitute for Real Experience.** Some pieces of equipment may be too big or too small or too dangerous or too expensive for the trainees to work with. Similarly, some complex ideas need visual presentation for the trainees to comprehend the relationships that exist among those ideas. Again some mechanical actions are too rapid to be seen and understood as they actually happen. They must be slowed down in the class room. However, in all such cases a good instructor should use effective training films, charts, or diagrams to simplify the ideas for the trainees.
- b. **Simplify Procedures and Ideas.** With the help of learning aids an instructor can lead his trainees step by step through a difficult procedure or idea, awakening their new interests in the process.
- c. **Stimulate Interest and Self Activity.** Learning aids increase the interest of the trainees especially if they see the buttons to be pushed, the control devices to be mastered and the equipment to be operated.
- d. **Show Relationships.** With the help of learning aids an instructor can show his trainees the relationships between the broad areas of the subject matter and its breakdown that constitute the whole.
- e. **Show Sequence of Procedures.** Anything that has an orderly arrangement can be presented through the use of learning aids in such a way that trainees can better grasp and remember the procedures.

- f. **Build Vocabulary.** Building a vocabulary in any specialized field of study is very important. In the process of learning the words must be linked as nearly as possible to the real things. Such an understanding will reduce verbalism.
- g. **Add Efficiency.** With the help of appropriate learning aids an instructor can efficiently impart knowledge and skill to his trainees, and in turn the trainees can show efficient learning results.
- h. **Add Variety to Learning and Break Monotony.** The judicious use of learning aids can enable an instructor to add the factor of variety to learning and thereby break the monotony as sometimes felt by the trainees in the course of learning a skill.
- j. **Save Time and Labour.** An instructor is required to impart maximum knowledge and skill to his trainees with minimum of time and effort. He can achieve this objective only if he knows the art of using learning aids.
- k. **Sustain Trainees' Attention.** The proper use of learning aids will enable an instructor to sustain and help the trainees' attention to the subject matter he intends to teach.
- l. **Establish a Common Background.** When trainees report on the first day of a new course, it seems that they differ among themselves in respect of their past experiences. Some of them may have a good base on which to build learning and some with a limited experience. However, in the course of time the same trainees will become more similar in their thinking and attitudes if they are taught through instructional aids.

Types

4. The usefulness of any learning aid will depend upon the nature of the subject an instructor plans to teach. Some of the factors, such as size of the class, available time, and the background experiences of the trainees need to be considered before using any kind of learning aids. Learning aids are of many types. These are as follows:

- a. **Chalk Board or Black Board.** Blackboard is the most versatile and easiest learning aid. Rapid visual presentation is instantly available with a chalk board in the classroom. With an effective use the blackboard can motivate the trainees so as to receive the instruction effectively. It makes no time demand as some other learning aids do. It is one of the learning aids best suited to the trainees' participation in the development of a lesson.
- b. **Training Film.** It is one of the best learning aids capable of getting and holding the trainees' attention to the lessons taught in the class. The best use of properly selected training films can transfer understanding almost as rapidly as in a room; an instructor should follow five steps:

- (1) He should know the objective of the film.
- (2) He should review the film. This step requires him to prepare the projecting room and the projection equipment.

(3) He should adequately brief his trainees before he goes to show the film.

(4) He should now present the film. This is the easiest part of the instructor's job.

(5) This is the final step where he should summarize and evaluate the film. The use of film strips and slides is quite similar to the preparation and presentation of trainees' films. The film strips usually contain 20 to 100 individual frames of 35 mm size. They are run through a 35 mm projector and shown one at a time. They may also contain written materials with pictures or they may be charts.

c. **Graphics.** Graphics include charts, graphs, diagrams, sketches, pictures, cartoons posters etc. These are called visual representations. However, graphics are very effective training aids. Moreover, schematic diagrams can serve as excellent training aids, particularly at gaining and holding the attention of trainees.

d. **Written Material.** Trainees are constantly being exposed to texts, technical orders, regulations, work sheets, study guides, manuals or examinations. These written materials are directly responsible for a large portion of our learning. The best assurance the instructor has for the effective use of written materials is proper planning.

e. **Trainers.** A trainers is training equipment specifically designed to help accomplish training tasks in operating, maintaining and repairing procedures, some of the trainers are as follows:

(1) **The Exploded Trainer.** It is a display of the components of a unit arranged in their relative order to teach the trainees proper sequence of steps into assembly and disassembly.

(2) **Equipment Demonstrator Trainer.** It is a part of an aero plane of other unit of operational equipment in which specific assemblies or pieces of equipment are installed. These assemblies or pieces are located in the basic unit in such a way that the trainees can use their installation, removal, inspection and maintenance process.

(3) **Model Trainer.** It is either a miniature of an enlarged replica to be used as an aid when classroom instruction must cover large units, such as bridges, aircraft and building or small items like delicate instruments containing almost microscopic parts.

(4) **Operational Trainer.** It is a unit of equipment of a complete arranged to operate in a normal manner. It helps the trainees to know the operational characteristics of the equipment and train them up in servicing, operating and trouble shooting in such equipment.

f. **Real Objects.** The use of real objects in training the BAF technicians cannot be ignored. A man who is to maintain or operate radar equipment cannot learn from charts, T.Os or written materials without seeing and using the real thing. The trainees of BAF are exposed to as much practical experience on real objects as one can find in any learning situation.

g. **Television.** It is one of the most effective attention arresting developments which science has yet given us. Classes through this medium have been well presented and well attended in many of the advanced countries.

Considerations Before Use

5. It is an established truth that effective use of learning aids can maximize learning results and can render instruction effective. Improper use of learning aids may cause wastage of teaching resources. Hence, an instructor must consider the following points before using the learning aids:

- a. Suitability.
- b. Judicious use.
- c. Definite purpose.
- d. Part of teaching method.
- e. Means (not an end) to effective learning.

Techniques of Using Learning Aids

6. In order to make the best use of learning aids an instructor should remember the following techniques:

- a. Proper Planning.
- b. Prepare the trainees to receive the aids.
- c. Make proper selection of the aids so as to suit the purpose.
- d. Use the aids in such a way that they are visible to the entire class.
- e. Watch the trainees reactions.
- f. Use varied types if possible.

Conclusion

7. Since effective use of learning aids adds to the efficiency of instruction as well as the vividness of learning experiences, the BAF Instructors should know the different types of learning aids and the techniques of using them judiciously.

TOPIC-9

EVALUATION

Introduction

1. Evaluation is an element constantly used to determine student achievement of the goals. It is a process for judging student achievement. Written and performance tests are two ways to evaluate student achievement. Evaluation occurs throughout the lesson. It is not just at one point in the lesson, nor is it limited to formal tests. You should constantly observe students for signs of doubt or lack of comprehension. Encourage students to ask questions. Create discussion, when necessary, to detect misconceptions or shortcomings. During performance activities, observe the students carefully to detect whether they are applying sound techniques. Question them to determine if they understand correct procedures. Their aim is job proficiency, but they will not gain the required proficiency unless you evaluate their attempts and help them correct their errors.

Student Measurement

2. All student measurement is based on training objectives, which are either knowledge or performance-based. Use written tests or knowledge progress checks to measure knowledge-based objectives. Use performance tests or performance progress checks to measure performance-based objectives.

Purpose of Student Measurement

3. The student measurement program serves two purposes. First, it assesses the student's knowledge, performance, and rate of progress in each unit or module of instruction. Second, it simultaneously measures the effectiveness of the instructional system.

Different Types of Test

4. The different types of tests to measure the performance of the students have been discussed below:

a. **Written test.** A written test is the instrument used to sample each knowledge objective and when necessary, the knowledge components of performance objectives. These tests can be unit, module, block, or end-of-course tests. Tests are administered during time allotted in a formal testing mode.

b. **Performance test.** A performance test is a measurement instrument administered during the time allocated for measurement to verify a student's attainment of performance objectives. This test requires the student to accomplish a job-like task, under controlled conditions, in a formal testing mode. The performance test, unlike the progress check, is administered after the teaching/learning activity has been completed.

c. **Progress checks.** These are administered during the time allocated for the teaching/learning activity and can be used to check knowledge or performance objectives. Using a checklist, the instructor determines if the student is performing satisfactorily and records the student's achievement. The progress check is based directly on the behavioural statement of the objective. It provides immediate feedback.

d. **Appraisal.** An appraisal is a group of questions and/or projects used to check the day-to-day learning process. The appraisal is one method used to determine how well the students are progressing, before exposing them to a written or performance test. The appraisal is an informal measurement tool and does not need to be formally recorded.