2. The telephone transmits and receives ..................................

3. The end of a magnet are called ........................................

4. A universal motor uses .....................................................

5. The liquid in a refrigerator is called .................................

(C) Decide whether the following statements are true or false. Correct the false ones.

1. The only means for transforming thermal energy is water.

2. Chemical plants are completely equipped to handle flammable substances.

3. Check values are used for limiting flow automatically to more than one direction.

4. In machinery the flow phenomenon is frequently of a pulsating or intermittent character.

5. The strength of a lamp is measured in light.

(D) Choose the correct answer:

1. A battery has one or more ..................................................
   (a) watches         (b) cells         (c) torches

2. In the condenser, the refrigerant ......................................
   (a) evaporates     (b) changes       (c) condenses

3. Electronic devices can convert light into ..........................
   (a) electricity    (b) current       (c) sound

4. Steel towers are also called ...........................................
   (a) overhead transmission lines (b) pylons (c) substations

5. Rectification means ......................................................
   (a) converting A.C. into D.C.
   (b) converting D.C. into A.C.
   (c) raising the strength of a weak signal.


APPENDIX

A PRE-POST TEST

(A) Define the following:

1. Electronics.
2. A valve.
4. The electrical circuit.
5. An element.

(B) Complete the following sentences:

1. Data is put into the computer by ____________________________.
**Table (3): T. value on pre-post test per group.**

<table>
<thead>
<tr>
<th>Group</th>
<th>Pre-test T. value</th>
<th>Post-test T. value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>3.27</td>
<td>7.96</td>
</tr>
<tr>
<td>Control</td>
<td>3.90</td>
<td>4.073</td>
</tr>
</tbody>
</table>

It appears from Table (3) that the experimental group shows statistically significant levels of improvement on the post test results. These results indicate that the communicative approach to language teaching had led to substantial improvement in subjects' linguistic proficiency. This would appear to lend support to the hypothesis of the research.

**CONCLUSION**

The problem discussed in this research was an attempt to investigate the effectiveness of using the communicative approach in teaching technical English. It was hypothesized that teaching technical English by using the communicative approach will improve students' linguistic proficiency.

Results were in favour of using the communicative approach in teaching technical English. These results indicate the following:

**First:** it is high time now to reconsider our traditional way of teaching English so as to able to upgrade the level of our students in English.

**Second:** teachers should be trained in modern methods of teaching English as a foreign language. In-service training programmes should encourage teachers of English to use the communicative approach to language teaching and to adjust their students to it.

**Third:** the very marked improvement of the experimental group on the post-test indicates that the communicative approach through subjects were taught would appear to have been transferred to subjects' active target language repertoire.

**REFERENCES**

information. Only by bridging the gap, through the use of English, can the task be accomplished.

4. After 10 weeks (the period of the experiment), the two groups were given the posttest.

Statistical Analysis:

The analysis of data included both descriptive and inferential statistics. Descriptive statistics were measures of central tendency an standard deviation. T-test was used to test the differences in the means between the experimental and the control groups at the 0.05 level of significance.

RESULTS AND DISCUSSION

Table (1): Mean and Standard Deviation on pre-test per group.

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>24.6</td>
<td>5.23</td>
</tr>
<tr>
<td>Control</td>
<td>26.12</td>
<td>5.35</td>
</tr>
</tbody>
</table>

As shown in Table (1), the difference between the groups was not significant. The level of English in the two groups seemed to be similar.

Table (2): Mean and Standard Deviation on post-test per group.

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>48.43</td>
<td>12.68</td>
</tr>
<tr>
<td>Control</td>
<td>31.70</td>
<td>3.60</td>
</tr>
</tbody>
</table>

Table (2) shows that the experimental had gained more scores in the post-test. The mean of the experimental group was 48.43 whereas the mean of the control group was 31.70. This difference was not random.

It emerges clearly from the results provided in Table (1), and Table (2) that the scores of the experimental group have increased substantially between pre- and post-testing in comparison with those of the control group. On pre-testing the experimental group obtained lower scores than the control group. On the post-test, however, the situation is reversed where the experimental group obtained higher scores than the control group.
The test consists of the following parts:

1. Definition Questions.

2. Completion Items.

3. True or False statements.

4. Multiple Choice Exercise (each component has 5 items).

The test was administered to a pilot group of the second year students. After analyzing the test results, some items were modified and some other items were omitted.

Test validity was obtained by submitting it to a jury of 3 specialists in the field of TEFL. They suggested some items to be added to the test and modified some other items. Their remarks were put into consideration before administering the test.

Instruction:

1. The two groups were given the pretest before starting the experiment.

2. The control group had a traditional classroom teaching by one of my colleagues. Their teacher taught them the same six units referred to above following the translation method; he first read the passage and translated it word by word. He asked the students to answer the questions and corrected their errors.

3. The researcher taught the experimental group himself using the communicative approach to language teaching.

The following communicative activities were practised with the subjects:

(a) Group-work: the researcher initiated an activity and the group had to discuss and between them work out the answer to a number of questions about the text they had read or tape they had listened to.

(b) Pair-work: the researcher made use of pictures and diagrams found in the texts to increase the amount of student's talk.

(c) The information gap: the researcher used this activity to enhance the element of unpredictability on the part of the students. One student knows something about values or electricity as an example and this partner does not know these
(c) The teacher does not talk at all: the students do all the talking.

(d) And finally, the teacher does not control the subject matter apart from setting up the beginning of the activity.

To sum up, in this approach, less attention is given to systematic mastery of sound and structures. Nor is the focus merely on the skills of reading and writing. Real uses of language are the new priority.

The Experimental Design of the Research:

Subjects:

The subjects were all Buraydal Junior College of Technology, Saudi Arabia. They were all enrolled in the academic year 1992/93. They were specialized in Industrial electronics. Two groups were chosen randomly. The control group consisted of 30 students, whereas the experimental group consisted of 32 students.

Teaching Material:

The prescribed textbook, "Learn Technical English, Book 3, was used. Six units were taught for 10 weeks. Titles of the chosen units are:

- Value of electronics.
- Measurement.
- Satellite Communications.
- Values.
- Computer engineering.
- Electricity (a description of this course was given earlier).

The pre-post test:

For the evaluation of this research study a pre-post test was designed by the researcher and administered to both the experimental and the control groups at the beginning and end of the experiment.

Description of the Pre-post Test:
The classroom is a place to use the foreign language, and not essentially a place to learn right answers, recite book learning, or specify pages to be covered on some future exam. It is, in fact, a small world of social relations in which needs are found or contrived and the second language is put to use and shown to make things happen.

2. The role of the student:

When facing the communicative approach in a language classroom, students need a new orientation. They must see that, like their first language, the foreign language is a means for communicating meaning. The teacher strategies for reorienting students regarding their role may begin with one or more of the following:

1. Regular use of the language to conduct the class activities.

2. Frequent use of short quizzes of communicative characters, both oral and written.

3. Gradual inclusion of original communicative tasks on major examination.

4. Careful avoidance of test items for which fixed answers might be anticipated and memorized.

On the other hand Ezzat (1988) states that the teacher should pay as much attention to the formal properties of language as a system as to the operation of language as a means of communication. This has far-reaching implications:

First: the language teacher has to be equally concerned with linguistic forms and with their proper use in real situation.

Second: Language forms have to be related to real situations.

Third: Teaching materials should help the learner to become aware of the conditions attendant on different communicative acts; that is, how different linguistic forms relate to communicative conditions (P. 2).

Habbard et al. (1986) analyze the teacher’s role in a communicative classroom as follows:

(a) The teacher may initiate the activity, but will not intervene or manage until it breaks down altogether.

(b) The teacher does not correct errors: students have to cope by themselves.
**Reading Comprehension:**

- True or false?
- Answering questions.
- Definitions: What is it?
- Labelling a diagram.

True or false and definitions are for oral practice, whereas answering questions should be written.

**Making questions and answers:**

- From pictures.
- From tables.

*These exercises give useful oral practice.*

All the above exercises can be done in pair work after one or two examples have been given as a model. Checking should be done orally and followed by writing down the answers.

Having discussed the present textbooks, it is now possible to deal shortly with the communicative approach to language teaching.

**The Communicative Approach to Language Teaching:**

Two assumptions underlie the communicative approach to language teaching. According to Finochio and Brumfit (1983), "the first assumption is that we are concerned in the classroom with language use, not language knowledge; the second is the view that we learn language most effectively by using it in realistic situations" (P. 90). In practice, as Littlewood (1981) asserts, the approach features students bridging a contrived or natural information gap or putting their information toward solving various problems.

Deckert (1987) discusses the communicative approach to language teaching. The following points are dealt with:

1. The function of the classroom:
Although the emphasis throughout the course is on presenting a general technical vocabulary common to all technologies, some highly specialist technical vocabulary are introduced. The vocabulary serves the different specializations in college such as computer science, automotive engineering, electrical installations, refrigeration, electronics etc.,

3. The Exercises:

These are designed to "exercise" and to test the students' knowledge. All the exercises requires the students to use these words and structures that they have encountered in the reading passages. An important feature is that they continually revise the vocabulary introduced in earlier passages.

Some Exercise Types:

Matching:

- Words in pictures.
- Words to words of similar or opposite meaning.
- Words to definitions.
- Beginnings to ends of sentences.
- Instructions to actions.
- Making sentences.

All the matching may be done orally, though some types like making sentences, should be written.

Completing:

- Choosing words from a box or a diagram to complete a sentence.
- Choosing the correct form of a verb to complete a sentence.
- Completing a table.

Choosing:

- Multiple choice
- Choosing the correct grammatical structure or pattern.
with. Each unit of the course is based on an aspect of the world which the scientist or technologist describes, together with language items associated with it.

Course Components:

(A) Objectives: In terms of specific objectives, it is hoped that by the end of a three-part course, the student should have the following abilities:

1. To listen with understanding to lectures given in English.

2. To speak English fluently and accurately.

3. To have the ability to a conversation about a scientific topic in his specialization.

4. To read English accurately and with a reasonable speed in the field of specialization.

5. To be able to write on topics related to his specialization.

6. To be able to give a summary of a written or spoken text.

7. To be able to take notes during lectures.

8. To have the ability to give oral presentation of a written text.

9. To be able to interpret tables, diagrams, and symbols.

10. To be able to give instructions in English, and to correct false instructions.

(B) Content:

The content of the course contains the following features:

1. The Reading Passage:

Each passage is complete in itself. The length of the passage varies from 250 words to 800 words. The topics are of general interest to all technical students and require little specialist technical knowledge on the part of either the student or the teacher. All technical terms can be understood from the context or from accompanying illustrations. The course can, however, be used with confidence by general English teachers who have little technical knowledge.

2. The Vocabulary:
The significance of this research is to determine whether or not the use of the communicative approach would increase EFL Arab learner's standard. It also aims at introducing communicative activities that may help technical students to use effectively English in their specializations.

Hypothesis of the Research:

The hypothesis of the research stated that: Using the communicative approach in teaching technical English will improve students' linguistic proficiency.

Plan of the Research:

To answer the research question the following steps were taken:

First: the researcher gave a brief description of the textbooks currently used.

Second: the researcher tackled briefly the communicative approach to language teaching.

Third: he discussed the design of the research regarding subjects, teaching materials and instruments.

Finally, results and conclusions were given.

Description of the Present Textbooks:

Learn Technical English: is an integrated series for students who need English language skills for specialist purposes. It provides a sound basis for the study of scientific and technological subjects in English. It presents aspects of language use common to all departments. It has been specially prepared to meet the needs of students in Buraydah Junior College of Technology. It is intended for students with some knowledge of general English who need to reactivate this knowledge and apply it to the comprehension of written and spoken discourse. The course covers 3 semesters. It is divided into three parts: Part 1, Part 2, and Part 3, each to be studied in one semester. The course can be used flexibly and selectively: the units (lessons) need not to be covered in the order they appear in the contents. It can be also adapted to meet the different needs of students of different specializations. In Learn Technical English the emphasis is on motivating the student and engaging him actively in the use of English. The course demonstrates ways in which the scientist and technologist describe the phenomena and processes which they are concerned
communicative competence among leaners. In an informal interview with four English language teachers they informed the researcher that their students had many difficulties in learning English and their scores in different exams held for them at the mid or end of the semester are very low.

At the meeting of the ELT Forum held at Junior College of Technology Dammam, *Saudi Arabia in April (1993)*, Patton, R. summarizes the existing situation in these colleges. In his report he gives us a picture of perceived standards of the students as follows:- Most students can:

(a) Understand only parts of a spoken context and guess the more difficult parts.

(b) Express themselves but very restrictively and often with broken structures.

(c) Read but usually with some pronunciation mistakes and lack of fluency and rhythm.

(d) Write fairly enough in spite of frequent spelling errors and lack of proper sentences ordering and structuring.

In the same report Patton gives a brief account on perceived difficulties concerning ELT in these colleges as follows:-

(a) ELT in secondary schools.

(b) The student's personal irresponsibility.

(c) Lack of innovation and communicative aspects in teaching.

(d) The student's dormant competence of the language.

The researcher though that lack of communicative aspects in teaching might account for the low standard of the students. The purpose of this study is to see how far use of the communicative approach in teaching technical English is effective.

The Problem of the Research:

Based on the previous discussion the problem of the research can be stated in the following question:-

What is the effect of using the communicative approach in teaching technical English?

Significance of the Study:
THE EFFECTIVENESS OF USING THE COMMUNICATIVE APPROACH IN TEACHING TECHNICAL ENGLISH

By

Dr. Ahmad Mohammad Abdelsamad
Faculty of Education, Zagazig University

ABSTRACT

This research is an attempt to see how far the use of the communicative approach in teaching technical English is effective.

Two groups were chosen randomly, one served as the experimental group and the other as the control group. The experimental group was taught according to the communicative approach whereas the control group was taught by the translation method.

Results were in favour of using the communicative approach to language teaching.

It is recommended that teachers of English should reconsider their traditional way of teaching by adopting the communicative approach and helping their students to adjust to it. This is the way to upgrade the standard of our students in English.

INTRODUCTION

In recent years there has been a shift in emphasis from teaching language forms to teaching language functions. Many writers feel that this is not enough, but the whole methodology should be made communicative, which will in turn, change the shape of the classroom lesson. According to Brumfit (1980), "The question for the teacher is: How close can my teaching take pupils to their anticipated language needs in the outside world? ... How much opportunity am I giving members of my class to talk as individuals to each other, using as much English as they can, to say things which they have decided to say and which are as far as possible in response to what has been said before-practice for fluency rather than accuracy?" (p. 125).

Although the textbooks currently in use at Buraydah Junior College of Technology (BJCT), Saudi Arabia, are communicative-based courses, English teachers resort to the translation method in teaching the English courses which are designed to upgrade the

(undated) Regulations of Acceptance, Attendance, Absence and Evaluation at the Educational Training Centre (stencil) (in Arabic).


UNESCO Regional Office for Education, Beirut, Lebanon (1975) A letter from the In-Service Training Expert to the Coordinator of the In-Service Project, Bahrain, No. Ex 8/BA od 28.11.1975.


REFERENCES:


Nashif, A (1973) Multi Media Approach to In-Service Teacher Education. Institute of Education. UNRWA/UNESCO, Beirut, Lebanon.

6.2.3. The need had also been felt for research to be specifically directed to the problems of in-service teacher training and the needs of teachers and children, in order to evaluate impact on school practices and to identify the actual needs of pupils and teachers.

6.2.4. The staff at ETTC, particularly the educational tutors, needed periodical follow-up training in order to remain acquainted with up-to-date developments in the use of the MMA.
6.1.3. Usefull experience had been gained in the implementation and supervision of different types of in-service teacher-training courses based on the MMA (see pires, 1975, p 2).

6.1.4. A large amount of learning-teaching materials in both sections of the programme (education and specialisation) has been developed for use by teacher-trainees and educational tutors. Some of these materials had been sent abroad to other centres and institutes in Arab countries using the same approach: Jordan, Sudan, Syria, Iraq, Oman, United Arab Emirates, Yemen and the Institute of Education/UNEWA/UNESCO, Beirut, Lebanon.

6.1.5. Effectively, ETIC participated, through the educational tutors, in the development of curricula in most teaching subjects in Bahrain schools by formulating the aims and objectives of the respective subjects, and by participating in writing the textbooks for the primary, intermediate and secondary cycles. Furthermore, the teachers, for the first time in Bahrain, participated in preparing the textbooks for different stages of schooling. Most of the participant teachers were graduates of the ETTC. Before, the textbooks were mainly prepared by expatriate experts and inspectors only.

6.2. Negative Aspects:

6.2.1. The need had been strongly felt for more balanced, coordinated and integrated development at different levels: in-service teacher training, pre-service teacher-training and inspection section in the Directorate of General Education.

6.2.2. The lack of effective machinery for follow-up in schools particularly after graduation from ETTC, was also strongly felt (see Pires, 1975, p. 5).
short courses achieve specific objectives in both cycles, refreshment
courses for those teachers who were already qualified and short
courses for secondary school teachers in different subjects especially
in Arabic language, English language, mathematics and science.

Particularly, the positive aspects about the MMA as used in the
Bahrain INSET programme are as follows:

6.1.1 The approach helped ETTC to gain a wealth of experience in
the planning and preparing of programmes for different types of
in-service training courses. A pattern of such programmes which
had been developed, had been subject to continuous revision and
improvement. The most up-to-date pattern included the following
components:

- The aims of the course stated in terms of behavioural objectives
  from the viewpoint of teacher-trainee’s needs;

- The content of a course divided into units of related topics;

- The activities designed in order to help teacher-trainees attain
designated outcomes by means of the various media or
channels of training;

- Means of evaluation were various and the evaluation process
was continuously conducted.

6.1.2. The role and function of each medium of training had been
clearly defined within the wider context of the entire INSET
programme. Detailed criteria, suggestions and guide notes had been
developed through practical experience for the effective use of each
medium of training.
5.5 Action Research:

As seen by Good (1973, P.494), it is 'a firing-line or on-the-job type of problem solving or research used by teachers, supervisors and administers to improve the quality of their decisions and action' (see also: Miles, 1973, pp.20 & 272). In the INSET programme, each teacher-trainee in the second year had to do an action research on a real problem facing him in one of his classes. This was done with the assistance of the group educational tutor. Carrying out an action research was one of the main requirements of passing the INSET programme.

5.6 School Visits:

The teacher-trainee joining the INSET programme was regularly visited by his educational tutor to help him to improve his teacher practices in the light of the experiences gained from attending the INSET programme seminars. The number of school visits for each teacher-trainee was not limited. It depended upon the needs of the teacher-trainee. As reported by the Ministry of Education (undated, pp. 3&4), school visits for the teacher-trainee in the INSET programme should not be less than three in each scholastic year.

6. Positive and Negative Aspects for the Multi-Media Approach as Applied in the In-service Teacher-Training programme in Bahrain:

6.1 Positive Aspects:

The ETTC in Bahrain had acquired a wealth of experience in the planning, organisation and evaluation of different types of in-service teacher training courses based on the MMA: basic courses for both teachers and headmasters in the primary and intermediate cycles,
encouraged to play two roles during self study: a teacher's role and a student's role. Thus, self study required the teacher-trainee to play an effective role to analyse, infer, respond and apply. It involved the performance of assignments, work sheets, and selecting books, references and journals.

5.2 Assignments:

It was the core teaching-learning material prepared for the INSET programme. It was prepared in a way that its elements and ideas were well articulated, according to certain specifications to help the teacher-trainees to make use of their self study (See: pires, 1974, pp.2-5; and Nashif, 1973, pp. 1&2).

5.3 Work Sheet:

It is a teaching-learning material which contains a general plan to organise a seminar. It included the educational objectives of the seminar, suggested activities (pre. during and post seminar), means of evaluation and any other instructions to both the work sheet was prepared according to prescriptions similar to the assignment. It was usually supplemented to the assignment, and was the main teaching-learning material during the summer courses.

5.4 Seminar:

As used in the INSET programme, it is a group of teacher-trainees who met regularly with their educational tutor to discuss a predecided subject (see: Page and Thomas, 1979, P. 307). The discussion was based upon an assignment or any other relevant teaching-learning material with which the teacher-trainees were provided. The seminar emphasised the effective participation of the teacher-trainees based upon their self study experiences and field activities.
thirty-six hours which was the duration of the whole programme (See Appendix-1).

In the academic year 1981/82, the ETTC was joined to the University College of Arts, Science and Education (Ministry of Education, 1981).

5. The Components of the Multi-Media Approach As Applied in the Bahrain INSET programme:

As mentioned earlier in the definition, the MMA embraces indirect and direct forms of teaching. Figure 1 shows its components as applied in the Bahrain INSET programme:

**MULTI-MEDIA APPROACH**

**INDIRECT FORM**
- Self Study
- Assignments
- Work Sheets
- Audio Visual Aids

**DIRECT FORM**
- Seminars
- Basic Courses
- Summer Courses
- Teaching pract
  * School Visits
  * Demonstration Lessons
  * Workshops
  * Action Research
  * Micro Teaching

**Figure 1:** The components of the Multi-Media Approach As Applied in the Bahrain INSET Programme.

The following is a brief idea about some of these forms.

5.1 Self Study:

It was the backbone of the INSET programme. In each learning material used in self study, educational objectives known to the teacher-trainee were highly emphasised. The teacher-trainee was
dealt with educational and psychological subjects, whereas the second section dealt with the particular subject of specialisation. Each subject in both sections had its own assignment of which an indication had been given to each teacher-trainee approximately a week before attending a seminar. Most of the assignments were supplemented by other helpful materials, such as work sheets and supplements (See: Almosawi, 1988, P.57).

The INSET programme started with four specialisations: educational administration; Arabic language and social subjects; mathematics and science; and a study of classroom teacher. Later on, other specialisations were added, namely; physical education, art education, English language and home economics (for females only) (See: Ministry of Education, 1974, P.1; and Almosawi, 1979, P.7). It can be noted that some specialisations embraced two teaching subjects. This was done to construct a balance between the range of subjects taught by a teacher-trainee in the field. The training in the ETC was co-educational.

Regarding the duration of the INSET programme, a teacher-trainee had to spend two academic years to cover its requirements (See Appendix 1), and he was assessed by various means of evaluation before being considered as a qualified teacher. If he passed all the requirements of the programme, a teachers-trainee was awarded the 'In-Service Teacher Training Certificate'. In addition, he was paid twenty Bahraini dinars* every months in his salary.

Teacher-trainees attended seminars in the afternoon twice a week each of two hours time duration between 4.00-6.15 pm with fifteen minutes break. Transportation was available for those at a distance from the ETTC. The teacher-trainee had to ensure he attended the three hundred and

* A Bahraini dinar is about two and half U.S. dollars.
4- A Brief Description about the Bahrain INSET programme:

The INSET programme in Bahrain, which was started in September 1973, was carried out with the cooperation of the UNCF. As mentioned by Almosawi (1979, P.11), the INSET programme aimed at qualifying all teachers and headmasters in primary and joint primary and intermediate stages of education.

According to the Ministry of Education (1973), a steering committee formed from the Directors of the Directorates of the Ministry was responsible for following up the progress of the programme. The strength of the steering committee indicates great attention paid to the programme by the Ministry.

As reported by the Ministry of Education (1981a), and the UNCF (1980), the INSET programme received material and technical aids from the UNCF. Material aids embraced, for example, a supply of vehicles, books and references, audio visual aids, typewriters and printing machines, in addition to financial subsidies for the payment of seminar organisers (lecturers) who were not from the INSET programme itself. Members of the staff of the INSET programme were paid by the Ministry of Education on the basis of part-time work as such seminars were held outside office hours. (See also: Almosawi, 1988, P.57).

Technical aids included the sending of evaluation missions made up of UNESCO members to assess the programme. In addition, most of the assignments in the INSET programme at the beginning were prepared by the institute of Education/UNRWA/UNESCO, Beirut, Lebanon with which the ETTC cooperated (See: Ministry of Education, 1978; and UNESCO, 1975).

The INSET programme consisted of a number of assignments related to its main aims. It was divided into two sections. The first section
simply because they might not be professionally enthusiastic teachers. Their contract will appear to them as a business-like deal.

3.4 The MMA is economically feasible. The unit cost is much lower than many other approaches in the teacher training programmes.

The average cost per trainee per annum in 1967 was much cheaper, compared to the per-service training. A study of the Institute of Education/UNRWA(1)/UNESCO/Beirut revealed the following:

<table>
<thead>
<tr>
<th>In-service teacher education</th>
<th>Pre-service teacher education</th>
</tr>
</thead>
<tbody>
<tr>
<td>based on Multi-Media Approach</td>
<td>provided by UNRWA/UNESCO</td>
</tr>
<tr>
<td>adopted by UNRWA/INSTITUTE</td>
<td>CENTRE</td>
</tr>
<tr>
<td>OF EDUCATION</td>
<td></td>
</tr>
<tr>
<td>$341</td>
<td>$820</td>
</tr>
</tbody>
</table>

Attention should be drawn to the fact that the INSET programme in Bahrain was planned with the assistance of the Institute of Education/UNRWA/UNESCO, Beirut team.

3.5 Adopting the MMA helped the teacher-trainees more effectively use the teaching methods in which they had already been trained because there was a degree of link between theory and practice. In other words, teacher-trainees alternated in their training and in their practice simultaneously.

(1) UNRWA stands for United Nations Refugees Work Agency. (for Palestinians).
it is the integrated use of a variety of educational media within a teaching situation in order to take advantage of the special contributions each can make to the student's learning.

The two foregoing definitions indicate that the MMA utilizes a variety methods that can be used in teacher training programmes. Such utilization of various methods gives the MMA a peculiarity among other approaches applied in the field of teacher training programmes in general and in the field of INSET programmes in particular.

3- The Main Reasons Behind Adopting the Multi-Media Approach in the In-Service Teacher Training programme in Bahrain:

Bahrain had adopted the MMA in the INSET programme between 1973 and 1982 in order to make use of the good adopting the MMA can be summarised as follows:

3.1 There was a shortage of qualified teachers in both the primary and intermediate cycles. If the Ministry of Education in Bahrain started upgrading programmes on a full-time basis for all its unqualified teachers in these two cycles, it would be in a dilemma because there will not be relief teachers.

3.2 Suppose the Ministry of Education can avail relief teachers during the period of training existing teachers, the relief teachers are unqualified too. So, the problem will still be existing.

3.3 Even if the Ministry of Education could provide qualified teachers from the neighbouring countries, this choice would not be a wholesome solution. These teachers would be recruited on a short term basis, which might involve bad repercussions;
schooling in response to the large public demand for education. Thus, it was decided that an urgent action should be taken to face this problem. An in-service teacher training (INSET)(1) programme based upon the Multi-Media Approach (MMA)(2) was seen as an appropriate means to deal with the problem (See also: Hubail, 982, PP. 150-153). Reason behind adopting the MMA will be discussed later in this paper.

The paper investigates the MMA as applied in the Bahrain INSET programme; and will mainly seek answers to the following questions:

- What is the Multi-Media Approach?

- Why had the Multi-Media Approach been adopted by the Bahrain INSET programme?

- What are the components of the Multi-Media Approach as applied in the Bahrain INSET programme?

- What are the main positive and negative aspects for the Multi-Media Approach as applied in the Bahrain INSET programme?

A brief description of Bahrain INSET programme will also be given.

2. What Does Multi-Media Approach Mean?

The MMA was defined by Nashif (1973), P.4) as an approach that combines indirect and direct forms of training in one integrated whole. The former includes those methods where instruction takes place not through direct contact between teacher and learner, but through a medium or channel. The latter includes methods where instruction takes place through direct contact between teacher and learner. According to Rowntree (1981,

(1) The acronym INSET, in this paper, stands for IN_SERVICE TEACHER TRAINING.

(2) MMA stands for the MULTI_MEDIA APPROACH.
Teacher training programmes in Bahrain have been receiving special attention since the modernisation of education in the country in the first quarter of the twentieth century. The first teacher training programme was organised in the late forties for secondary school students who wished to become teachers in the primary stage of schooling. The programme was called the "Special Teacher Section". It was followed by another programme in the early fifties. The latter was organised for "emergency teachers" who were already in service but had not in their school-days obtained a school leaving certificate, according to Al-Hammer (1969, P.17). The programme was called the "Complementary Evening-Studies". In the mid fifties, an independent stream for teacher training in the Manama Boys' Secondary School was established replacing the "Special Teacher Section". It was called "Teacher Section". In 1961, a similar section for girls was opened in the Manama Girls' Secondary School (See: Hubail, 1982, P. 119).

By the second half of the sixties, two teacher training colleges one for men and the other for women were inaugurated in 1966 and 1967 respectively. The two colleges aimed mainly at preparing qualified teachers for primary and intermediate stages of education (Ministry of Education, 1975, P.2).

In the early seventies, a new era in the history of the country in general and in the history of education in particular had started by obtaining independence from Britain in 1971. Main fields of Bahrain society were reorganised. Education was given special attention, and teacher training programmes, along with other aspects of education, received similar attention. As mentioned by Almosawi (1988, PP. 56+57), it was clearly noticed that a large number of teachers in both primary and joint primary and intermediate stages of schooling were not professionally qualified despite efforts paid by the two teacher training colleges. This situation resulted from employing unqualified teachers in the two stages of
AN ANALYTICAL AND EVALUATIVE STUDY OF THE MULTI-MEDIA APPROACH APPLIED IN THE IN-SERVICE TEACHER TRAINING PROGRAMME IN BAHRAIN

By

Dr. Nasser Hussain Almosawi* MA Ph.D.
Assistant Professor College of Education
University of Bahrain

ABSTRACT

A number of teacher training programmes have been used in Bahrain since the year 1948, among those the one applied in the Educational Teacher Training Centre in the Ministry of Education. This was a two-year diploma course where Multi-Media Approach (MMA) was adopted for certain needs.

This study aims at analyzing and evaluating various aspects of the MMA that was applied in the in-service teacher training (INSET) programme in Bahrain between 1973-1982. The falling aspects will be the main consideration of the study: the definition of the Multi-Media Approach; reasons behind adopting the approach in the Bahrain INSET programme; the components of the approach as applied in the Bahrain INSET programme; a brief description of the Bahrain INSET programme; and the main positive and negative aspects of the MMA applied.

1. INTRODUCTION:

*The Writer was supervisor and educational tutor at the educational Teacher Training Center (ETTC) in the Ministry of Education, Bahrain between 1973-1981. The Centre was responsible for the In-Service Teacher Training (INSET) programme where Multi-Media Approach was adopted.
الملخص العربي
دراسة تحليلية تقريبية للمنحي التكاملى متعدد الوسائط في برنامج التأهيل التربوى في أثناء الخدمة بدولة البحرين

إعداد
دكتور/ ناصر حسين الهوسو
أستاذ المناهج وطرق التدريس
كلية التربية – جامعة البحرين

تعددت برامج اعداد المعلمين في البحرين منذ بداية افتتاحها في أواخر الأربعينيات من القرن الحالي. وكان ضمن هذه البرامج التأهيلية برنامج التأهيل التربوى في أثناء الخدمة التي قام بتنفيذها المركز التربوى للتأهيل والتدريب متنبأ المنحى التكاملى متعدد الوسائط.

وتتناول الدراسة الحالية المنحي التكاملى متعدد الوسائط في برامج اعداد المعلمين. وتهدف أساساً إلى تحليل وتقؤيم جوانب متعددة من هذا المنحى كما تم تطبيقه في برنامج التأهيل التربوى في أثناء الخدمة بالبحرين بين 1972-1982.

والجوانب التي تتناولها الدراسة في هذا الخصوص هي:

- المتضوع بالمنحي التكاملى متعدد الوسائط في برامج اعداد المعلمين.
- أهم أسباب تبني المنحي التكاملى متعدد الوسائط في برنامج التأهيل التربوى في أثناء الخدمة بالبحرين.
- مكونات المنحي التكاملى متعدد الوسائط كما تم تطبيقه في برنامج التأهيل التربوى في أثناء الخدمة بالبحرين.
- فكرة موجزة عن برنامج التأهيل التربوى في أثناء الخدمة بالبحرين.
- أهم الجوانب الإيجابية والجوانب السلبية للمنحي التكاملى متعدد الوسائط كما تم تطبيقه في برنامج التأهيل التربوى في أثناء الخدمة بالبحرين.