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ABSTRACT

Largely as a result of inadequate research and periods of rapid reform and social development, many educational innovations in Iran have been introduced through political motives. They rarely brought about significant changes in the conceptual framework, methodology, or basic principles of education, but rather modified its operation. The author believes, however, that these "operational innovations" may, in due course, lead to fundamental changes. This study should be read in the light of these considerations. (Author)

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Experiments and innovations in education No. 10

Asian series

Educational innovation in Iran

by Iraj Ayman

**President, National Institute
of Psychology, Teheran**

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Preface

Educational innovation in Iran, by Mr. Iraj Ayman (President of the National Institute of Psychology in Tehran) is the second of the 'Asian series' to be published in this collection. The purpose of these national inventories was explained in the preface to the first study (*Educational innovation in Singapore*, by Dr. Ruth Wong).

Mr. Ayman's monograph shows that, largely as a result of inadequate research and periods of rapid reform and social development, many educational innovations in Iran have been introduced through political motives. They rarely brought about significant changes in the conceptual framework, methodology or basic principles of education, but rather modified its operation. The author believes, however, that these 'operational innovations' may, in due course, lead to such fundamental changes. This study should therefore be read in the light of these considerations.

The Secretariat, while noting that the views expressed by Mr. Iraj Ayman are not necessarily those of Unesco, records its debt of gratitude to him for this valuable contribution to the series.

Table of contents

- I. Introduction p. 1**
- II. Innovations in organization and management p. 5**
- III. Improvement of educational facilities p. 11**
- IV. Expansion of educational provision p. 20**
- V. Special measures and supporting efforts p. 27**
- VI. Conclusion p. 31**
- Bibliography p. 33**

I. Introduction

The setting

Iran, situated in Western Asia, is surrounded by Pakistan and Afghanistan on the east, the U.S.S.R. on the north, Turkey and Iraq on the west and the Persian Gulf and the Sea of Oman on the south. Although generally dry and containing high mountain ranges and vast deserts, it includes tropical lowlands and verdant areas with a moderate climate.

Socially and culturally the country reflects a similar diversity. However, a major concern has always been the creation and maintenance of a national identity, which has been successfully preserved for over 25 centuries and has overcome more than 35 major invasions. The unique blend of peoples, cultures, languages and religions, either evolved within the country or imported from abroad has created a rich and colourful background to current events. At present, over 30 million people live in this country of over 1.5 million square kilometres. They all use one official language and have a uniform education system.

Until very recently Iran's economy, except for oil revenue, was based on traditional agricultural activities. The country's industrial development and agricultural modernization were begun by Reza Shah-e-Kabir after the First World War and accelerated considerably during the last twenty years by Shahanshah Aryamehr.¹ In 1962 these changes took the form of twelve socio-economic revolutionary measures which have had both rapid and extensive effects on Iranian society.² Among these measures, 'The Army of

1. The Pahlavi dynasty was started by Reza Shah almost half a century ago. The Crown Prince Mohammad Reza Pahlavi succeeded to the throne in the middle of the Second World War. Shahanshah Aryamehr is the official title given to the present monarch by Parliament.
2. Pahlavi (1961 and 1968).

Knowledge' (also called 'Education Corps') and the 'Educational Revolution' are directly related to educational innovations in Iran.

Iran is a constitutional monarchy, composed of legislative, executive and judicial branches, headed by the Shah. The executive branch comprises several ministries and independent agencies, including the cluster of organizations with various educational concerns. They are the three ministries of Education; Science and Higher Education; and Culture and Arts, as well as agencies such as the Youth Organization; the agency of Physical Education and Recreation; Scouts, and the Youth Organizations of the Red Lion and Sun.³ Iran also contains a number of provinces, each of which has a Governor appointed by the Monarch, and which themselves contain counties, townships and districts. These smaller entities are mostly governed by administrations separated from the central government, but whose local structure is patterned after the central government organization. There are over 1,200 cities and townships and 50,000 villages in Iran.

It is estimated that about 60 per cent of the population live in rural areas, but there is a significant pattern of movement towards urban centres and a dense concentration in the metropolitan area of the capital city. One tenth of the population is in Teheran and another tenth in about 10 major provincial centres. The over-all rate of urban expansion is estimated at 7 per cent per year. In spite of a rather high growth rate in population (now estimated at 3 per cent per year), the average density of population is less than 50 people per square mile.⁴

Educational provision

Iran is well-known as one of the ancient seats of learning. Colleges, seminaries and old-fashioned schools with their picturesque architecture are scattered all over the country, with some of the major ones being situated in rural areas. However, it was not until 1911 that there was enacted the first constitutional law of education, article five of which called for compulsory education for every Iranian child, starting at the age of seven. However, thirty years later, due to the lack of facilities, less than 20 per cent of seven-year-old children were attending schools.

3. The Iranian organization equivalent to the Red Cross.

4. Wilber (1948), Population Council (1972), Lerner (1958).

This led to the 1942 Compulsory Education Act, but after a further 20 years still half of the children aged seven were deprived of schooling.⁵ The situation was, moreover, unbalanced in so far as girls and rural children were concerned. While Iran's rural population is approximately triple the number of its city dwellers, only 17 per cent of the village children were attending school as opposed to the 80 per cent school attendance of city children. This contrast was even more acute in the case of tribal children, only 10 per cent of whom could hope for schooling at the age of seven.

This resulted in a very high illiteracy level, which was estimated at almost 80 per cent of the total population in 1962, with urban males and rural females the most and least literate groups respectively.⁶

Furthermore, the rate of drop-outs was such that less than 10 per cent of those beginning school completed secondary education and only a very small percentage received some university training. In many subjects, the only opportunity for specialized training was to receive it abroad either by self-financing or government scholarships.⁷

Educational reforms

The major educational reforms during the last twenty years occurred in two different stages. The first stage was sponsored and introduced by the United States Technical Cooperation Mission, which later assumed different names such as Point IV and U.S.A.I.D. The education division of this mission was responsible for many educational innovations in Iran.⁸

The second stage started with the recent movement popularly called the 'White Revolution' or the 'Revolution of the Shah and People of Iran'.⁹ While the former period was mostly devoted to enriching the quality of education and experimenting with new ideas, methods and aids, the latter one has, so far, concentrated on the rapid expansion of educational opportunities, a more even distribution of basic education, and the multiplication of educa-

5. Sadigh (1963), Mashayekh (1970).

6. Birjandi (1964).

7. Plan Organization (1962).

8. Clarke (1964), Espy (1962).

9. Pahlavi (1968).

tional institutions. The two complementary movements have not only released the Iranian education system from isolation and obsolescence, but they have also brought it to millions of people who had been deprived of formal education for generations.

As a result, education in Iran has become an experimental and dynamic force in society, and what previously concerned only the schools has become useful to different agencies and at different stages of life. It is especially notable that, contrary to the previously prevalent concept that education was an exercise for children and young adults, now almost everybody, at any age and position, welcomes a return to some kind of training programme and learning situation. This change of attitude alone has been responsible for the onset of a new dimension in a traditionally tranquil society.

A further significant source of educational change during the last two decades has been the constant flow of young graduates returning from abroad. Certain conditions in Iran, as well as in some European and North American countries, enabled children and young adults from all social strata to study abroad and support themselves at the same time. Many young people, frequently including rural children, took this opportunity, and their return has expedited the climate and readiness for change.

It should also be noted that all this happened at a time of relative political stability and economic prosperity, following agreements for the uninterrupted sale of oil at increasing prices, and the acquisition of international loans, foreign capital and knowledge. Thus, there was a composite effect of heightened expectations, a favourable environment and the supply of means to realize the expected achievements.

It is under these conditions that educational innovations in Iran have been introduced, nurtured and met with some degree of success. These reforms, reorganizations and innovations are too numerous and diverse to be easily summarized, and therefore the present paper aims at introducing only those with wide application, recognition and acceptance within the education system. In other words, the measures that have proved to be relatively successful in achieving their intended educational improvements.

II. Innovations in organization and management

The decision-making process in the Ministry of Education has mainly been divided between the Minister and his Under-Secretaries or Director-Generals on the one hand, and the High Council of Education on the other. All routine decisions are dealt with by the former, while those which are legislative and could create innovations are subject to the council's deliberations and resolutions. Thus, since 1911 this High Council, whose members (nominated by the Minister of Education and appointed by a royal decree) represented various educational concerns, has been acting as an autonomous legislative body. In 1968, however, a new council was created which, although more limited in scope and authority, still maintains its special role in endorsing new ventures in education.

Organisational change

In recent years, major organizational and administrative changes have fundamentally diffused and decentralized the formerly unitary and highly centralized education system, which for over fifty years was closely supervised by a single administration called, during the earlier years, the Ministry of Knowledge, Public Endowments and Fine Arts.¹⁰ Just before the Second World War, without any change in its structure and functions, it was renamed the Ministry of Culture.¹¹ The Ministry had provincial and local field offices which were later divided into the Directorate General for Provincial Administration and branch

10. *Verarat-e-Ma'aref va Oqaf va Sanaye'e Mostasrafah.*

11. *Vezaret-e-Farhang:* the word *farhang* is used in modern Persian as an equivalent for culture. However, when it was first used as the new title for the ministry it was meant to refer to knowledge (*ma'aref*) and education.

offices for county and city administration. According to the 1911 Act of Education, all educational institutions and activities, including private and public schools, universities and independent institutions of higher learning, were under this ministry's supervision and, more specifically, under the supervision of the Minister of Education.¹²

This supervisory power was maximally extended, especially as regards the format and structure of the education system. All the country's schools had to follow the same curriculum, textbook, weekly schedule, and academic calendar prescribed by the ministry. Even the schools' internal affairs were directed by the ministry, so that, for example, stoves used for room heating started and stopped on set dates regardless of climatic or geographical variations. Many important and famous schools were closed down merely because they did not follow the academic calendar formulated by the ministry. Some major denominational schools and colleges were disbanded in 1935 and 1942 only because they wanted to observe certain religious holidays.

Such a highly centralized and rigid administrative system not only widened the gap between orthodox practices in Iran and educational developments in the rest of the world, but placed an increasingly heavy strain on the management of the ministry. In order to relax the restrictions and divide the job, the old Ministry of Education was disintegrated in 1968, by a series of legislations, and the following ministries and agencies gradually emerged to take over its various functions.

The Ministry of Education inherited the main infra-structure of the old ministry and is in charge of general education (pre-school, elementary and secondary levels), vocational education, literacy promotion, the education of exceptional children, curriculum and textbook development, extra-curricular activities, physical education and hygiene in the schools, as well as adult education and trade schools.

The Ministry of Culture and Fine Arts is charged with the promotion of cultural activities, including public libraries, music schools and colleges, and dancing and fine arts in primary, secondary and tertiary education. This ministry also sponsors various academies of language and arts, and is responsible for archaeological excavations and studies, museums and national treasures.

12. Sadigh (1963), Mashayekhi (1970).

The Ministry of Science and Higher Education is responsible for college and university training, scientific research and development, as well as over-all educational planning and co-ordination, through continuous evaluation and studies. All colleges, universities and institutions of higher learning, even if they are part of or sponsored by other public or private agencies, are formally controlled by this ministry. Their degrees, curricula, faculties and rules and regulations need its approval and endorsement, as do all students applying for education abroad, even if they go abroad without the Government's financial support.

The Public Endowments Organization directly controls all the Moslem theological seminaries, adult religious education centres, and other educational activities financed by endowments. The Physical Education and Recreational Activities Organization is in charge of all extra-mural sports and recreational activities, and has special training centres and a national network throughout the country. Stadiums, sports clubs, and contests are also planned, supervised and administered by this organization, which in 1972 established its own Sports College in Teheran, offering degrees in various sporting and recreational activities. The Youth Organization is in charge of youth centres, hostels, and many social and educational activities for young adults, including non-degree courses organized in youth centres. These aforementioned organizations are all attached to the Prime Minister's Office and headed by Assistants to the Prime Minister, with the rank of Under-Secretary of State.

The Ministry of Cooperatives and Rural Affairs is a relatively new ministry which, among other things, participates in rural education and supervises agricultural vocational education. In addition to offering direct social education to adult and child villagers, this ministry is establishing 'Village Houses of Culture'¹³, with libraries, day-care centres for children, social services, and cultural and recreational facilities such as television clubs and sports grounds.

The Ministry of Labour and Social Work offers non-certificate and non-academic training in various trades, and is becoming increasingly interested in manpower development for industry. It has recently established the University of Labour in Isfahan, which is intended to offer degree and non-degree programmes for

13. *Khaneh Farhang-e-Rousta'i.*

the development of technical manpower. The Ministries of Public Health, Roads, P.T.T., Agriculture, Economy, Home Affairs and Foreign Affairs, as well as the armed forces (Ministry of War) also have educational institutions at various levels—including tertiary—for training their requisite manpower and specialists. Of course, the two main ministries of education have some technical supervision over all these activities.

In addition to these strictly government agencies, there are a host of independent agencies which, although assisted by government grants, are administered more or less as social welfare agencies under the auspices of their Imperial Majesties and other distinguished members of their household. Some of them, which directly share the original functions of the old Ministry of Education, are briefly described below.

The National Committee for International Literacy Programme has gradually developed from an agency set up to run Iran's literacy campaign into a national network, offering literacy and other adult education programmes, as well as a centre for research into and development of literacy methods and materials. For example, this agency is now deeply engaged in a Persian 'Word Count Project' which will hopefully produce a graded vocabulary in the near future.

The Imperial Organization for Social Welfare is a huge country-wide operation involved, among other things, in secondary level vocational training for both industrial and public health trades. Because of its major and successful undertaking in this regard, it is considered an important educational agency. The Red Lion and Sun Society is another agency which runs a number of vocational training institutes at secondary and tertiary levels. Its subsidiary, called the Red Lion and Sun Youth Organization, and the collaborating Scouts' organization¹⁴ have their members in primary and secondary schools. These organizations thus perform a number of educational functions.

The Children's Protection Society supplements the functions of the Directorate-General of the Ministry of Education in charge of exceptional children, by running guidance clinics and special schools for handicapped and retarded children. The Centre for Mental Development of Children and Adolescents organizes

14. In Iran it is called *Pishahangi* (Scouts) and is for both boys and girls. Thus it combines both Boy Scouts and Girl Guides organizations.

children's libraries, produces children's films and literature, and conducts vocational classes in conjunction with its library and children's centres. Queen Farah's Charity Organization operates a country-wide social welfare network, especially for the protection and education of orphans. At present, it has housed over 80,000 orphans and other destitute children in its various institutions, of which there are more than eighty. The children are protected by the organization up to the age of fifteen.

Although by no means comprehensive, the above list provides some idea of the numerous separate organizations concerned with particular services within the total education system. Such a decentralized approach to national educational administration has proved to be effective, although what seems to be missing is a governing authority to unite the departments, prevent duplication and maintain concentrated efforts aimed at over-all educational improvement. According to the 1968 Education Act, an independent Institute for Research and Planning in Science and Education was created, under the auspices of the Ministry of Science and Higher Education, in order to serve all the educational organizations and provide them with the necessary co-ordination, direction and guidance. However, this institute is now primarily attached to the Plan and Budget Organization (in charge of national socio-economic development) and has concentrated on the problems of higher education and the establishment of various universities, which is an entirely different function from that envisaged in its original charter.¹⁵

Therefore, the desired co-ordination among educational organizations has not yet been fully realized. On the other hand, the atomistic approach has caused more attention to be paid to various educational aspects, facilitated the rapidly improved provision of education in recent years, and led to some of the innovations being either planned or implemented. How much the education system should be centralized and how much its functions should be diffused remains, therefore, unresolved. While the trend towards decentralization follows, to some extent, the western pattern, developing nations need to promote equality of opportunity and national unity, both of which are fostered by a uniform educational process and administration.

15. Ministry of Education (1968).

Administrative reform

After the organizational change in the Ministry of Education, a series of administrative reforms was initiated. The most fundamental of these measures, the 1968 'Regionalization of Education Act', provided for local educational administration, by having an educational council popularly elected in each region. In 1972 the first Congress of the Members of Educational Councils was held in Teheran, and in 1973 these councils numbered almost two hundred in various parts of the country. They are responsible for their regions' financial and administrative affairs related to education, such as pay increases, staff promotions, building schools and providing them with equipment and audio-visual aids.

Under this arrangement, the Ministry of Education preserves functions such as educational planning, curriculum development and teacher education; the regional superintendent of education, while being a ministry employee, acts like a mayor in the system of local urban government, and the councils act as boards of trustees for each region. They receive an allocated portion of the budget, which they can increase by generating and attracting other sources of income. This approach has helped to lighten the central administration's heavy burden and reduce bureaucratic red tape.

However, it is hard at such an early stage to evaluate the results of projects such as this, which need to be streamlined and fully established before one can see how effective they really are. At present, the lack of a proper infra-structure, the unfamiliarity of council members with their duties, and an enthusiastic desire for immediate appeal seem to be the greatest problems faced by the educational councils. Also, to become the trustee of public funds requires a special degree of maturity, far-sightedness and personal as well as group integrity, and at present both educational councils and parent-teacher associations (which preceded the councils by ten years) are finding it hard to control the funds properly.

III. Improvement of educational facilities

In Iran, some attempts to improve the quality of educational facilities have so far been rather sporadic; some, however, have been singularly effective, while others have suffered severely from the shortcomings of the educational structure. The following is a brief review of the major activities.

Textbook Institute

The first recent attempt at improving textbooks was made immediately before the Second World War, when the Ministry of Education invited some university professors and schoolteachers to form committees according to different disciplines. Each committee developed a series of textbooks for various levels, but due to many post-war socio-economic changes these textbooks were gradually abandoned. Teachers then started to produce their own textbooks with the help of certain publishers, aimed, in some cases, at profit-making rather than educational benefits. The quality of textbooks consequently declined while their cost rose tremendously.

In 1959, Franklin Publications, supported by a special Ford Foundation grant, started the Textbook Institute in Iran which was incorporated in the Ministry of Education in 1963. The institute draws on scholars, artists and educators; constantly reviews the textbooks; develops teacher manuals and student guides for use together with the texts; and organizes meetings to brief teachers on new textbooks and get their views and recommendations regarding future improvements. Some of the institute's staff are full-time civil servants, but most of them work part-time or on a contract basis. This provides more flexibility for soliciting the services of different experts and introducing fresh elements. All contributors to each textbook edition receive payment and a share of the royalties.

In the Iranian education system each subject in each grade

has its own textbook, which means that some two hundred books are in use or being written or revised. The possibility of having more than one text for a given subject and grade has been envisaged, and the present system has in fact been criticized for limiting competition, restricting incentive and preventing wider use of the initiatives of more writers. Although this criticism would be valid in a wealthy, more developed country, in countries like Iran there is not sufficient demand for all competitors to produce useful items. Free competition would mean that either the quality of work or the quantity of production would suffer, but without limited competition it is also difficult to maintain maximum standards. Thus, while everybody agrees that Iranian textbooks have improved in the last decade, it is undeniable that their standards do not compare with those of textbooks in more advanced countries. Perhaps a happy compromise will produce a more sophisticated textbook institute, which could generate greater interest among more potential writers and act as an arbiter rather than the sole producer of textbooks.

Textbook Company

In order to acquire some of the rights and income of textbook publishers, the Ministry of Education created the Textbook Company and offered some of its shares to the publishers, in proportion to their investment in textbook publication. This company, which is thus jointly owned by the Ministry and the publishers, controls the printing and sales of textbooks. The Government oversees the quality and pricing of the books, which are given to various printers for production, and sold by the booksellers to students at the lowest possible cost, which is actually a fraction of what they used to pay. Everyone concerned is allowed to make a just and modest profit on his investment, and since most of the publishers in Iran are also booksellers, they have both opportunities to continue their business.

As part of the provisions of the National Development Plans regarding compulsory education, the Government annually distributes one set of free primary school textbooks to all students in the primary grades, regardless of their socio-economic status or the type of school they are attending. Replacements and additional copies are, however, sold at the cost price. Teachers receive their teaching manuals free of charge.

This project, which at first seemed most unusual, has proved to be highly successful, with the only criticism being the standard of workmanship, especially in book binding. Although everyone agrees that the workmanship is better than under the old system, improvements could still be made with more government expenditure or higher prices for the textbooks which are not free. However, this is not a major shortcoming, and the programme's seemingly sound basic plan compensates for minor deficiencies, and is a plan which could easily and advantageously be adopted by all developing countries. In Asia, for example, the rapidly rising student numbers and greater demand for books create problems while paper production and printing facilities do not grow as fast, and are not easily available in some countries. In such cases, some long range regional plans, such as the Iranian approach to the problem of textbook preparation, might be formulated.

Educational publications

A special agency was created in the Ministry of Education to make suitable reading material available to urban and newly-literate village school children, and also to encourage private production of suitable materials. At present, this agency publishes three magazines for students at various levels of primary and secondary schools, and special teachers' guides to help them use the magazines as a supplement to their lessons. The agency also publishes a journal of education, which is the official organ of the Ministry of Education, and a series of small and inexpensive booklets on various subjects.

This organization has been most successful in creating a genuine interest in reading and writing amongst students throughout the country. It maintains close, personal contact with its young readers, and the quality of its publications has always been very high, despite their very low cost. Consequently, their materials can be purchased by almost every child, their circulation is rising continuously, and already other publishers are following their lead by producing similar materials.

Children's literature

The enrichment of suitable children's books, which some twenty years ago were extremely scarce, started when several public and private agencies started to produce translations of foreign

texts. Gradually Iranian writers joined in and many original works were produced. At present there are more than a thousand books for children.

The non-profit private and voluntary Children's Book Council, composed of educators, teachers, writers, publishers and all those interested in children's literature, has been especially instrumental in controlling the quality of children's books. Their annual programme of activities includes producing book catalogues graded for children of various ages; selecting for special recognition the best books in each catalogue, and awarding prizes to writers, artists and publishers; printing a children's calendar, which also features the year's best books; buying books for school libraries at discount prices, and training school librarians. Their last catalogue lists over six hundred titles, all carefully chosen and classified for each age and group of children.¹⁶ Other major supporters of the production of children's books are the Book Translation and Publication Institute of the Pahlavi Foundation, and the later Centre for the Mental Development of Children and Adolescents, which has already published a small collection of children's books. On the whole, the efforts made by many agencies to enrich and expand children's literature have been highly successful and commendable. Many schools now have their own small libraries, 'library hours' and facilities to enable students to read more books outside their classroom work.

Children's libraries

The Centre for the Mental Development of Children and Adolescents began founding children's libraries in public parks, followed by mobile libraries for villages and schools. These libraries, of which there are now over thirty in various cities and townships, offer children various facilities, such as little cinemas, book-reading and story-telling sessions, short courses in painting, film-making, photography and the like. The combined efforts of various governmental and non-governmental agencies, and the special attention paid to school libraries by the Ministry of Education, have helped to make the book and textbook programmes generally more successful than most of the other programmes. It is notable how a little guidance and support has rallied so many

16. Children's Book Council of Iran. *Bulletins* (1972).

private contributions to educational activities and to ensuring the success of educational programmes.

School buildings

In 1971, as a commemoration of the 2,500 years of the Iranian monarchy, the most spectacular innovation in school building was made. Such occasions are usually celebrated by spending money on festivities and decorations; this time, however, it was decided to build 2,500 schools (symbolizing the monarchy's 2,500 years), at an estimated cost of \$25,000 per school. Through the enthusiastic participation and generosity of individuals and organizations, however, this target was soon surpassed, and as a result 3,200 schools were built by 1972.¹⁷ It is notable that this measure was not only fully successful, but was also wholeheartedly welcomed by the mass of the people as an acceptable and very useful innovation. Its effect has been such that similar projects could easily and successfully be launched.

Another successful measure has been to establish conditions for sending young high school graduates known as 'education corpsmen' to villages where the villagers are ready to provide school facilities and, in co-operation with the education corpsmen, voluntarily to build schools and school furniture. During the first few years of the 'Army of Knowledge (Education Corps)' programme (1962-65) the number of village schools doubled with very little government financing. With regard to the cities, the Government has introduced some direct municipal tax which is used solely for building schools. Many urban, publicly-owned schools are the result of this local taxation.

These measures, although impressive and rapid, have not sufficed to provide as many suitable building units as are presently needed. However, they indicate the kind of programmes which are feasible and effective in strengthening national development, pride and ambition, without burdening the national budget. It is, nevertheless, unfortunate that such a large scale school building programme has lacked proper research and experimentation, such as that provided by Unesco's Asian Institute for School

17. A full account of this project, including the names of all donors and the names, addresses, and photographs of the schools, was published in all the major dailies during 1971-72.

Building Research in Colombo. Properly planned scholarly research could have answered many fundamental questions regarding school architecture, a field which badly needs studies into the validity of its presently confused and multiple theories and propositions. Regarding school equipment also, there has been no special effort to research and develop innovations and new solutions. The Iranian schools have all been equipped with minimum standard equipment and the methods most successfully emphasized and exploited have been public involvement and self-help movements.

Educational television and radio

Aside from certain isolated experiments and demonstrations, official educational television started about ten years ago in Teheran, and has been continuously operating since then. Because of television's rapid recent expansion, it is planned to incorporate the present educational television station, which is part of the Ministry of Education, into the National Radio and Television Organization, and to extend its services to other cities. The programmes have so far concentrated on mathematics and science courses for the last two or three years of grammar schools. Their impact has been affected by the fact that students in Teheran have relatively good schools and teachers, while students elsewhere, who have greater need for such audio-visual assistance, have no access to it. Therefore, although educational television has had an effective, if limited, attraction, for such a system to become an integral part of the education system in the near future, considerable funds would have to be spent in orienting teachers and expanding facilities.

Some other experimental efforts in the area of educational television and radio are worth mentioning here, such as the project in Qazvin, a city over a hundred kilometres northwest of Teheran, organized by the National Committee for Literacy Campaign in the early sixties. A special radio broadcasting unit was set up in Qazvin, entirely devoted to training teachers in literacy and adult education programmes, as well as helping new literates study whenever they happened to be in the Qazvin area. Despite dedicated, concentrated and enthusiastic efforts, the project did not, however, achieve its aims, largely owing to the fact that radio programmes cannot be effective unless the listeners are already prepared, which is a very difficult and costly procedure

to arrange. Therefore, with less money and effort better results could be achieved by conventional methods.

Another effort in Qazvin was a Unesco-supported project to use television for teaching science to the general public. It duplicated a similar but unsuccessful attempt in South America, and was implemented in Iran by the National Television Organization. Insofar as it could be evaluated, the project was a successful experiment, and the Television Organization decided to modify and adopt it as a national programme.

Plans are underway for using Telstar and introducing a nationwide television programme to supplement all levels of education. The reason that such projects are contemplated is that the government cannot provide enough education to people scattered throughout 50,000 villages by using conventional methods. Whether educational television and radio is an answer remains, however, to be seen.

Book Services Centre

This project, financed by the Ford Foundation, was first formulated and tried by the National Teachers College in 1960. It was started again by the newly-established Ministry of Science and Higher Education in 1968, as part of its scientific documentation centre, which was later incorporated into the Institute for Scientific and Educational Research and Planning.

The Book Services Centre offers various library services to educational and other institutions. Among them are a card cataloguing service; publication of various bibliographies and periodicals useful for library development; consulting services in short, the technical services needed by libraries and which would otherwise be unavailable. The Centre succeeded under both establishments, and thus proved the worth of such central services, especially when trained staff and technical facilities are either scarce or expensive. Some of the libraries benefiting from this service are as small as private collections and some are ordinary college or school libraries.

Teacher education and recruitment

An area of constant innovation has been the preparation of teachers for various levels and types of education. After the traditional use of teacher colleges and normal schools produced insufficient

numbers of teachers, other experimental programmes were introduced, aimed at shortening the training periods, reducing the curricula and differentiating them for various levels and types of education, so that trainees could concentrate on the minimum requirements. Such objectives are almost contrary to the current thinking of educationalists and curriculum specialists, who advocate a unified and broad system of professional teacher training.¹⁸ However, according to official reports, all of these innovative measures in Iran have been sufficiently successful to warrant their continuation.

Some of these programmes are dealt with in other parts of this study. In addition to the 'Army of Knowledge' programme, which recruits as teachers high school graduates with under three months of professional training, the Government has introduced an even more revolutionary measure by using university students as part-time teachers in secondary schools. This both supplements the teaching staff of schools with severe shortages of trained manpower and provides some income for university students who cannot finance their education. It thus reduces their tendency to become restless and agitated, and fosters their integration into established adult society, to which they might otherwise be 'dedicatedly' opposed. As such, this measure has received applause and support. Whether it will stand the test of time without creating more complicated problems remains to be seen. At present, the eventual consequences are hypothetical, while its immediate impact is obvious.

There is no doubt that if this approach were to be carefully and objectively researched, many revealing facts could be discovered. Questions could be raised as to the demoralizing effect of this programme on professionally-trained career teachers; on the difference in students' achievements under the two types of teachers; on how brief a teachers' training programme could become; what subjects, grades, or types of education could best be served by these recruits; and what specific facilities and aids should be developed to make the programme fully operative. Questions could also be asked regarding the effects of this programme on the college education of the student teachers, and on the teaching behaviour and educational environment of the schools they serve.

18. Unesco/AITE (1969).

One positive aspect of this approach is that it may well initiate some variations of the team-teaching method to overcome teacher shortage problems. In other words, these student-teachers working in small teams, guided and supervised by professional teachers, could cover a large number of students. Another possible benefit is to interest more students in a teaching career, thus offsetting the rapidly-diminishing tendency to become or remain a career teacher, which is allied to industrial and economic growth and which recent studies in Iran have all indicated. A third possibility of this programme is fostering a closer inter-relationship between school and universities, which has long been sought but not realized. In addition, the programme offers educational psychologists the opportunity to assess the psychological effect on the education process of the closer inter-relationship between teachers and students, who are normally separated by a generation gap. In conclusion, therefore, the present teacher training programmes in Iran have opened up many possibilities for future educational investigations, including a much-needed study of the relative effects and outcomes of providing teachers with pre-service training as against letting them gain competence and training on the job.

IV. Expansion of educational provision

There have been many plans and efforts for rapid educational expansion to provide as much equality of educational opportunity as possible. These efforts include eradicating illiteracy, increasing school and college enrolments, encouraging the private sector to establish privately-owned educational institutions, as well as channelling existing resources into public education. Some of these measures are innovative and unique as well as successful and popular. The following are the major undertakings in this category of educational innovations.

The Army of Knowledge

The Army of Knowledge or Education Corps was established in 1962 to use the energy and education of young high school graduates in teaching rural people, during the period when they would normally be doing compulsory military service. This plan was effected through the co-operation of the army and different government ministries, especially the Ministry of Education. The young men and women recruits undergo an intensive four month training programme, after which they are individually or in small teams appointed to a village or a group of closely located hamlets, which have requested their services and whose people have agreed to provide school facilities. Here they work under the supervision of technical, educational and other staff for 14 to 20 months. Later, if they prove to be efficient and willing, they may be employed by the Ministry of Education as regular teachers or civil servants.

This programme is based on the principles of the 'White Revolution of the Shah and People of Iran', which was ratified in a national referendum as well as by two Acts of Parliament; including the Women Social Services Act. Under the law, both men and women at the age of 19 are eligible for two years of compulsory but paid service, either in the military or in a

social service, which can be education, health or agriculture, provided that they are at least high school graduates.

Members of the Education Corps practise an integrated approach towards helping rural people attack educational, social and political problems. They do not only teach children and adults, but they actually try to change attitudes, improve conditions and create a new environment. Besides promoting literacy, building village schools, libraries and other centres, establishing sports and recreational facilities and setting up youth groups, they undertake sanitary activities, like digging wells, constructing washing facilities, separating livestock from living quarters, using first-aid kits, and similar activities. They further help in distributing land, introducing farm machinery, setting up co-operatives and helping the villages to obtain support from various government agencies. They also assist in forming village justice units, electing village councils, and encouraging group activities and self-help undertakings that will enable the villagers to develop a self-confidence and independent approach to their problems. This involves a process of personal growth and the development of initiative.

The programme provides for interdisciplinary co-operation among the ministries and agencies involved, and for motivation, improvement and promotion among the corps members. In addition to their initial and intermediate training and their preferential acceptance in various higher education programmes, there is a special National Teachers' College offering undergraduate and masters degrees for carefully selected corps members, who are then recruited either as supervisors, educators and specialist staff of the Army of Knowledge or as regular secondary school teachers. The idea is to provide corps members with the opportunity for progress and academic achievement if they decide to remain in the same field of service as a life-time career.

During the first decade of the 'White Revolution' a total of 91,667 recruits joined the Army of Knowledge, representing a contribution of about 18,000 man-years. At the end of 1972 the corps included 18,591 active members (3,931 girls and 14,660 boys) which is equivalent to a fifth of Iran's total staff officially employed in elementary education.

This programme has almost doubled the teaching staff serving rural schools, and consequently has increased the number of rural children attending school from 650,000 to 1,300,000. It is notable that the number of girl attendants has been constantly

increasing at twice the rate of the boys. Therefore, it is hoped that very soon the gap will be closed not only between school attendance in urban and rural areas, but also between the number of girls and boys attending the rural schools. Also, as far as adult literacy is concerned, this programme has almost multiplied by ten the annual number of newly literate adults, and has been equally successful in the non-educational areas of community development, public health and sanitation, and agriculture, as can be seen from the following table:

Achievements of the Army of Knowledge (1962-72)

Schools (built)	15,208
Schools (repaired)	25,432
Mosques (built)	3,043
Mosques (repaired)	17,743
Mortuaries (built)	1,557
Mortuaries (repaired)	3,332
Feeder roads made (in kilometres)	143,806
Bridges	52,193
Water systems	24,673
Demonstration farms	40,760
Trees planted	3,851,503
Public bath houses	7,495
Sanitation wells	78,098
School desks and chairs	34,116
Post-boxes installed	7,322
Parent teacher associations	24,505
Boy Scout and Girl Guides	173,384

This programme's success is partly due to its conjunction with a well co-ordinated and fairly comprehensive plan of socio-political reform and national economic progress, led and supported by the Shah. In spite of its basic success, however, there have been a number of criticisms levelled against this project. It proved to be too theoretical in its assumptions, and there was not enough systematic feedback to provide the necessary corrections and renovations. Thus the programme, which was supposed to be revolutionary, soon assumed an administrative routine and failed to attain its most important objectives of eradicating illiteracy and giving all children of school age at least two years of schooling. The high rate of population growth, and insuf-

efficient field controls and logistic services are some of the main reasons for the programme's reduced dynamism, which could, however, be regained by new and sustained attempts in training high-calibre experts and administrators to direct the project and maintain the necessary research and development activities. This is definitely a worthwhile project, which enjoys full public support and which could gradually be transformed from a one-time revolutionary measure into a permanent feature of the education system.¹⁹

Literacy Campaign

Parallel to the formation of the Army of Knowledge, the Literacy Campaign was greatly intensified. The National Committee for International Literacy Programme developed a country-wide network of local committees and recruited many voluntary and contractual services throughout Iran. Very soon over half a million adults were attending literacy classes. The innovative measures devised during this campaign included new methods, new types of material, new administrative and incentive systems such as paying teachers on the basis of the number of people they turned literate, instead of regular monthly or hourly pay. The committee started to experiment with using words and expressions common to the national language and to local languages and dialects for the training of local first readers. They combined literacy teaching with opportunities for the students to increase their general and technical knowledge through special lessons and reading materials.

What has hampered the desired progress of the programme is the age-old dilemma between the drawbacks of it becoming an established part of the Ministry of Education, and the problems of remaining outside the Ministry, with the Monarch as its supreme head but without the whole-hearted co-operation of the Ministry. Until and unless a happy solution can be found to this dilemma, the programme will continue to suffer drawbacks and occasional failures.²⁰

19. Ayman (1972).

20. National Committee for Literacy Campaign (1972).

Shift and evening schools

In order to accommodate more students within the existing facilities, the shift school and evening school programmes have been devised and implemented. In the former, a number of schools offer more than one daily course, by catering to different groups either in the mornings and afternoons, or on the basis of alternate days. Thus, with some extra pay to the teachers (in many cases more than double their regular salary) the number of students can be doubled. This plan has been implemented at elementary and secondary levels. A variation of the shift school is the evening school, which is actually a regular school following the prescribed curriculum and weekly programme, but operating a second or third shift in the evenings. Evening schools should not be confused with the numerous ordinary coaching schools, technical training centres and other institutes offering academic and non-academic courses. The students at evening schools are usually those who have difficulty financing their education and who therefore work during the day and study in the evening. They can slightly spread their studies beyond the ordinary academic year, in order to have sufficient time for all lectures and lessons. These programmes are usually offered on the school premises, at primary, secondary and tertiary levels.

Correspondence schools

A beginning was made in 1970 to introduce correspondence courses into the regular school curriculum as well as into specialized and college education. The National Teachers College for the Army of Knowledge also offers correspondence courses in teacher education, mostly for the benefit of corpsmen scattered in remote villages. A special organization in the Ministry of Education is now fully engaged in promoting this type of education, and it is hoped that correspondence courses could particularly help in the ministry's teacher training needs. The programme is being favourably received and may prove to be another successful attempt to extend educational opportunities.

Open university

In November 1973, preparations were nearly completed for the first open university to begin. The project, developed and implemented

by the Institute for Scientific and Educational Research and Planning, calls for lessons to be taken through radio, television and correspondence by students officially screened, selected and enrolled throughout the academic year. They may come, during the summer vacation or other opportune times, to a university for practical training, laboratory work, examinations and proper guidance and advice. This plan, coupled with the multiplication of junior or specialized colleges, should increase the number of college students to a new maximum. It is hoped that by the end of 1973 a total of 100,000 students will be enrolled in colleges and universities aside from the open university.

Technical and technological training

Special efforts are being exerted to increase interest in and opportunities for technical and technological training, which begins after primary education and of which there are four levels. First there are vocational schools, equivalent to the first cycle of secondary schools. They are followed by technical schools, which are parallel to the second cycle of secondary schools, and lead in turn to the Institute of Technology, which is at college level. Finally, at the university level, there are colleges of engineering leading to university degrees.

The Government is trying to encourage parents and students to join this new stream of schooling and to thereby service the fast developing industries. However, although technical vocational training on a large national scale is over twenty years old, it has not yet received a corresponding welcome by the public. White collar jobs are still more attractive and in demand. A beginning is being made to create comprehensive schools and school complexes to solve this problem. A school complex is a conglomeration of educational institutions from pre-school to the end of secondary school. Being under one umbrella, in one big campus, and using one central administration and technical source, the school complex may become a helpful device to absorb students from general programmes into the technical training ones. Few of these complexes are, however, already operating, while present plans call for about 35 to be ready by the end of 1974.

Exceptional children

Special schools for certain physically handicapped children, such as the deaf and blind, have long been in existence. However, exceptional children have only recently been the concern of a special division in the Ministry of Education, and measures dealing with the full range of abnormal children are also relatively new. They have included centres, schools or classes for highly intelligent as well as for mentally retarded and psychologically disturbed ones. Special teacher training centres have also been established for this purpose.

Although much of the special treatment given to certain categories of handicapped children by the Ministry, the Children's Protection Society and rehabilitation centres is more or less the same in Iran as in other countries, there is a different approach in one significant aspect. While the general trend is to integrate these children with normal students, to try to minimize special treatment as much as possible and to let them learn to live with others, in Iran preference is given to separating them from the main stream and educating each group in its own separate environment. This traditional approach represents a new method for Iran, the consequences of which it is perhaps too soon to evaluate. It does, however, have the signal advantage of attracting more attention to cases which were previously left unattended, and it thus may stimulate handicapped children's success in later life. Many beginnings are being made to offer special opportunities to such children, and to train specialists for dealing with them.

V. Special measures and supporting efforts

School cycles

In 1964 and 1965 the Ministry of Education called a number of meetings of professors and specialists to investigate the possibility of major educational reform in Iran. Their first sessions, held in the presence of the Shah, defined educational goals and objectives. Then the meetings separated into groups of specialists, who finally proposed a plan that, after about five years of debate, preparation and hesitation, was finally adopted and put into effect in 1970.

This plan, named the 'New System of Education', divides schooling into cycles of five, three and four years. The first five years are devoted to primary education, which would be compulsory if the available facilities allowed the Government to enrol every child at age 7. This cycle may be preceded by pre-school or kindergarten training, which is gaining increasing support and attention, and which it is hoped to put into operation in 1974.

The three-year 'middle' or 'guidance cycle' from the age of 11 or 12 to 14 or 15, is devoted to exploring the students' capabilities and opportunities, through exposure to various experiences, especially technical and vocational training, and through psychological tests, interviews and analyses of school reports, conducted by special councillors or educational psychologists.

The third cycle of four years is devoted to the completion of secondary education in either the theoretical or vocational stream. The theoretical stream is divided into two years of general grammar school education, followed by two years of specialized education in one of the following fields, as a preparation for college education: natural sciences; physics and mathematics; social sciences and economics; arts and literature. The vocational stream is also divided into a two-year course which prepares skilled workers in various trades, and a four-

year course which trains technicians. It is hoped that a total of 36 different branches of study will be offered in 1974.

The special advantages envisaged for this 'New System' are that all the different streams are to some extent interchangeable and theoretically flexible; that it will provide many educational opportunities for students of various ages who would otherwise discontinue their education and thus be less usefully engaged in society; and, finally, that it will direct more students to vocational and technical training, and help them continue their education in a course appropriate to their talents.

However, due to many drawbacks, including insufficient preparation for such a drastic change and a consequent lack of facilities and trained staff, it is hard to predict what the outcome of this programme will be. At present, although it has been launched as a country-wide, uniform measure, the programme is only in its third year and not yet fully implemented. It is planned to go into effect year by year and to develop with the first group of 300,000, i.e. those who started in this programme three years ago; the number of students has, however, already grown to one million. However, many curricula and textbook developments, teacher training courses, and other activities have accompanied reform, and large sums of money are being devoted to make it a success.

Reorientation of higher education

In the summer of 1968 a meeting of leading university presidents, ministers and planners was called, again in the presence of the Shah, to prevent the fast approaching unrest and rebelliousness among college students, already manifest in the western world, and to bring the university system more in line with national goals. This summer meeting has since become an important annual occasion for evaluating past achievements and planning co-ordinated activities, changes, or projects in the socio-politically significant sector of higher education.²¹

As a result of the 1968 meeting, the Government anticipated nearly everything that students and younger faculty members might eventually request, and began providing them with student participation; changes in the curricula and management systems; scholarships and other supports; faculty and student exchanges and

21. Ministry of Education (1968, 1972).

colloquies; and an increasing number of public and private colleges and universities. All these provisions largely protected higher education from falling into the chaotic states experienced in some other countries. Having leading Government and university officials deliberately giving students in advance what they might eventually demand is a unique and so far rather effective innovation.

Private institutions of higher education

When measures were taken to encourage private groups to establish colleges and institutions of higher learning, new regulations were also adopted which would make practically all these enterprises non-profit making. At the very most they allow organizers to make a 12 per cent profit on their original investment. However, all the material assets of these institutions became public property and could not be disposed of as privately owned possessions. Thus, only those who are genuinely interested in serving higher education are given the opportunity to do so.

Over the past few years, more than fifty such colleges have sprung up around the country and have attracted many talented local faculty and students. This is definitely a new way of bringing private donations into public service, by a process of gradual public ownership which may take more than one generation.

University entrance examination

Another unique and nation-wide experiment is the State Entrance Examination for higher education. Every summer, under the auspices of the Ministry of Science and Higher Education, a national State Entrance Examination is held for all those wishing to continue their education, of whom there were nearly 90,000 applicants in 1972. Of course, private colleges run their own entrance examinations, but all the state institutions subscribe to the state contests, which are spectacular events accompanied by wide publicity and eye-catching preparations. They have the advantages of equalizing opportunities for higher education, by improving the distribution of vacancies and reducing the cost of applying to various institutions. They have a' entailed improvements in the control and procedure of the selection process, for which a special agency has been created in the Ministry of Science and

Higher Education. Selection through the state contests has thus become a separate process, in addition to the state examination for school leaving certificates, which is run by the Ministry of Education, and whose operation has almost the same magnitude. This means that every high school graduate has to take two successive state assessments, whose combination is now being considered in order to relieve the students of several months of intense and pressurized effort.

Educational festivals and social activities

A number of annual events promote certain educational projects and efforts, such as the Children's Film Festival, Children's Book Week, Scouts' Week, Mehregan Celebrations (ending the school year), and similar activities. All such measures are relatively new and are helping to promote the various aims of the total education system. Some have gained international fame, like the Teheran International Festival for Children's Films.

Both the Ministry of Education and the Ministry of Science and Higher Education have special departments devoted to students' social programmes, particularly during the long summer vacation. They own special seaside resorts and organize summer camps. These programmes are both recreational and educational, since students may attend many short courses in various hobbies and handicrafts. Youth centres and clubs throughout the country also try to offer social and educational recreation all year round. The combination of all these efforts, including those provided by the Government either free or at a very reasonable cost, is quite unusual and certainly adds a new dimension to the total educational process.

VI. Conclusion

It is difficult to decide what exactly constitutes educational innovation, and even more difficult to give a clear summary of how each case is innovative. Moreover, education concerns so many events that one can hardly delimit it to particular endeavors. Thus a paper presenting national educational innovations must inevitably leave many gaps and much to be desired by many readers. This paper has mainly attempted only to list Iran's major innovative measures in their developmental and more recent stages. Each of these measures deserves a separate full case study in order to do it justice.

The over-all picture reveals an enthusiastic attempt to tackle many problems rapidly and simultaneously, through measures which, although supported by long-range planning, are still in an emerging state. Most of these measures have fortunately been sufficiently successful to warrant further attention and continuation. Some are definitely unique products of scholarly investigation, while others are adventures in educational short-cuts or daring attempts to shape the nation's wide destiny in the shortest possible time. All of them are tried with the best intentions and with a fairly open mind.

It is hoped that this brief introduction to these innovations will stimulate further, more careful examination of them by educationalists and can serve as a guide for interested educators in different countries.

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