THE REQUIREMENT OF
THE ARABIAN GULF COUNTRIES
FOR THE REMOTE EDUCATION & TRAINING

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Education Concept & Problem Basis:

Education with all of its types and forms, classic and modern, is originally a communication process. In the classical education form, this communication is represented by the teacher illustrating to his class, asking and student answering, direct the speech and students follows and sometimes, a student ask a question which will be answered by the teacher or he may instruct one of the student to answer the same.

This form is found somehow adhered to the education process since its starting about the third thousand year B.C. up to now in the various education systems. In spite of the fact that our recent era witnessed a radical unequaled modification in the education, philosophy, processes, means and technologies and in spite of that we have been assuring and repeating thousands of times that the education in its essence is a communication process, but the teaching systems in our universities as also in many other countries maintained only one of these communication process which is the "lecture", while the means and pattern of the communication had been developed in other countries who employed them to the benefit of the education process.

I am hereby, with regret as one of the educationalists, declare that the education which is an independent variable while running after modernization and updating had benefit other things but could not benefit itself.

There had been a great development in medicine, agriculture and industry to the extend that we can not make a fair comparison between these sciences ancient and today, e.g. industry was manual but today became machinery, it was of little production but became of a large production, it was expensive, but it became cheaper. The same examples may be said for agriculture, medicine and construction and others. All of the above mentioned activities shared one factor, that it had neglected the traditional patterns and adopted the modern patterns and technologies.

But Education in many of the developing countries fall in critical situation when adopted a modern aims derived from social requirements and responded to the severity of the social demand for the education and expand it to the whole public which is good, but they did not make the required modification in the education patterns and teaching methods at the same degree, which could not be done by many of such teaching patterns due to the fact that no modern objectives such as education for all and education for culture can be achieved using traditional means. The important of which are: classroom, student, teacher, blackboard and chalk, which are all limited producing means and of low both benefit and quality.
The increase demand for education in the different education levels even the training establishment in addition to the need for the continuous quickly follow up to the scientific and technological revolution necessitate to find out an advanced teaching pattern capable to accomplish things that could not be accomplished by the traditional education method. Therefore, and in the same regard appeared the idea to adopt the open education style which is characterized by the use of the multi-media to conduct the education whether these multi-media are audible, visual or written and by the effectiveness of the intellectual interaction between the student and the subject under study from different aspects. If one of the curriculums is prepared by a group of specialists, and technicians it will achieve the maximum degree of such effectiveness and will reach the maximum possible figure of students both nationally and regionally included in the open education style. When looking to the training requirements only in societies such as the Gulf societies, the open education style choice will be the ideal choice, specially for the fact that the industry, commerce and services employees require continuously the training to achieve the target from the society and its products. Difficulties that faces the students of special circumstances who have difficulties in learning or alike, which causes the loss of many of the education success chances; this difficulties make the open education style the ideal choice because it is an educational style based fundamentally on the limit of capabilities of those who wishes to learn and to the limit of their lives.

Therefore, the solution is by now quiet clear; the education should re-evaluated its means and tools and the existing teaching methods, and to adopt the modern means, tools and technologies in order to achieve all of its objectives and in this regard the remote education becomes a new educational technologies that accomplishes the educational processes and its objectives in a low expense and a quality not less than that of the traditional education and its is quiet enough that some of the remote education programs enables us for the first time in addition to the above mentioned characteristics to learn and to enjoy at the same time what we are learning. Then, what is the remote education.

Concept & Features Of The Remote Education:

The analysis of the term "Remote Education" includes that it is an education process occurs in presence of a geographic distance between the teacher and the student, but it is not a correspondence education, due to the fact that the remote education is more worth in its incomes, procedures and outcomes comprises the use of the printed subject and the modern communication means and the two-way communication. Therefore, the remote education is a technology comprises of different modern communication
means such as radio, television, computer ... etc. in addition to the academic publications and the personal communication to substitute the classic teacher and the institution.

The Important Features of The Remote Education:

1. The remote education programs in prepared a long period before being used, unlike the traditional styles where the teacher prepares his courses at the beginning of the session or in the best condition prepare each lecture few days before conducting it, which in the remote education the scientific subject is prepared by a team of teachers so that the subject will be ready at a quite enough period prior to the start of the year whether the used means is printed or it is one of the modern communication means.

2. Preparation of the education subject in order to be studied by the student himself without any assistance, i.e. without a teacher. Therefore, it should be a self-contained subject, and to refer to all of the required directions and references.

3. The remote education program is used to serve a large numbers of students and its cost will be decreased with the increase in the student number, unlike the traditional education.

4. The remote education accomplish the best of the traditional education which is the two-way communication between the teacher and student, through teachers and a supervisors, duties to be performed by the student and rectified by the teacher and through the telecommunication and the schedule meetings between teachers and students. Therefore, the remote education comprises the features of the traditional education and the capabilities to learn large numbers with a little cost.

5. The remote education customize the student to be self dependent, however in it the student will not be alone but he may make use of the program and its directions, the direct contact with the teacher, interactions with supervisors and the scheduled meetings with colleagues and teachers.
The Feasibility of The Remote Education:

The feasibility studies in any field usually takes an economical (quantitative) direction and another non-economic (qualitative) direction. Thereupon is the remote education, with its above-mentioned features, capable to accomplish the economical quantitative feasibility and the entire qualitative effectiveness. And what is the say of the researches and the international practices on the same?

1. The international practices confirm the feasibility of the remote education:

All of the large numbers of the international practices in the field of the remote education contributes in the fact that the cost of the same is too low than that of the traditional education and that the average share of the student in the running and head expenses in different means of the remote education represents the minimum cost in comparison with the traditional education, i.e.:

a) Wagner studies on the British Open University, a full remote education university, confirms that the recurrent cost of the student in it is less than the quarter of the same in the other British traditional universities, and the average share of the student from the fixed cost, capital cost, in the British Open University is also less than one sixth of the same in its similar traditional universities.

b) One of the Swedish Universities proposed a management program for the hospitals personnel according to the remote education system in fourteen units provided by the duties to be solved, followed by two study courses, to substitute the same program taught by the traditional methods. Then the experiment was conducted by the concerned staff, and it revealed that the student cost in the same program is S1150 less than the cost in the traditional program per individual, and due to that the target class was ten thousand student, this means that the remote education program had caused a save of S1,500,000.

c) Another Swedish university proposed a training program for the modern mathematics teachers according to the remote education style, held for 3,000 teachers. The program comprises study subjects provided with duties to be solved, checked automatically, in addition to radio and television and video cassette programs as also it comprises group discussions. The calculation of the economical cost of the program revealed that the average cost of the individual
students is $500 if conducted traditionally while the same cost became $15 when the program conducted according to the remote education style.

One may say that the low cost of the remote education system affect the entire effectiveness, education quality, and its outcome in general. In fact, according to economist, the feasibility study means the study of the cost with the effectiveness and the proportion between the incomes and outcomes. The common suggestion in the studies concern the cost-effectiveness comparison in two systems, that there is a constancy in the product quality of both systems and if so, the choice will be concentrated on the product cost, where of course the product of the less cost will be best, which fact reveals the following:

d) Wagner, who had studied the feasibility of the remote education in the British Open University, confirmed that there is a consistency in the quality of the British Open University and other traditional universities graduates and that the British Open University achieved the lowest cost and the effectiveness of the traditional universities. This result had been reached by the two studies of both Laidlaw and Layard separately in consecutive years. Also Eicher in his researches about the cost and effectiveness in the British Open University had reached the conclusion that the graduates of the same resembles other traditional universities graduate in their advantages and disadvantages.

c) The feasibility study of the outcomes of the hospitals personnel training program to manage the personnel, mentioned above, confirmed that the graduate of such program had proved, in their principals opinion, a high capabilities in the management field, that exceeds the outcome of the traditional program and also the mathematics teachers training program confirmed the same.

f) Wilber Schram, Educational T.V. Scholar, researches conformed that the T.V. education style had been subjected to many evaluation researches and studies, when its results were measured by the ordinary and designed tests used by teachers to evaluate the gain, it revealed that 65% of the studied sample who had studied their courses only through the Television gain the same rates of those studied by the traditional methods and 21% of them gain more than who studied by the traditional methods, while 14% of them gain less rates than those studied by the traditional methods. But the most significant conclusion of Scharam researches and studies is that the traditional education looses its advantages if the class room student exceeded 40 students.
g) The study of the analysis of the student of King Saud University in Riyadh conducted in the same regard, had confirmed that the results of student those had their courses through lecture are not better those female students who had their courses through the closed T.V. circuit, by the same teachers but sometimes the female students gained better results, and the scientific honesty requires us to declare that this result may not be due to the closed TV circles style, but in the meantime, the results of the female students through this means is not less than that gained by my male student who studied by the traditional methods.

h) Because of the feasibility and effectiveness of the remote education, we find that many universities had become mixing between the traditional and remote education styles, and some of them had become conducting their all programs by the remote education style, but some of the types of this style exceeded the local dimension and became offering this type to serve many countries, such as the National Technology University, which had been founded on 1984 and had adopted a scientific and other technological programs for universities, factories and the scientific institutions transmitted through the satellites which covers recently the U.S.A., Canada and Mexico, 105,000 students in the academic year 91/1992 have been covered by the scientific and technological services of the said university, and the European Satellite university which had been founded on the year 1986 to cover all Western Europe.

Background Indications & Solutions:

Education in the Arabian Gulf Countries faces many problems, the outstanding of which are:

1. The intensive social demand for the university education, and admission of increased numbers of students annually exceeding the designed number for these universities in the Fifth Plan (the average annual growth rate of the higher education students in Kingdom of Saudi Arabia reached up to 13% for the year 14/1415 H., which is a high percentage by all measures and King Saud University only admitted about 12,000 male and female student in its first class on the year 16/1417 H. which exceeded the whole number of a complete specialization university. As also the number of female students in the Arabian Gulf universities is increased year after another, and therefore, arised the critical need to provide a teaching staff for them within the concepts of our respectable religion and our cultural features. Table (2) state the registration in the higher education in Arabian Gulf Countries.
2. The need for additional number of teaching staff, specially the female teachers which are rare not only in the Gulf countries only but in all world countries, according to their nature.

3. The high cost of the higher education, where the average share of individual student from recurrent cost in the Saudi Arabian universities, for e.g. is SR. 48,600 annually, which is with no doubt a very high cost.

Table (2)
The Student Data In The General Education Levels
For The Academic Year 14/1415 H, Corresponding to 94/1995

<table>
<thead>
<tr>
<th>U.A.E</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bahrain</td>
<td>72072</td>
<td>76446</td>
<td>148518</td>
<td>35228</td>
<td>36462</td>
<td>71790</td>
<td>18006</td>
<td>22761</td>
<td>40767</td>
<td>130917</td>
<td>136679</td>
<td>26767</td>
</tr>
<tr>
<td>Kuwait State</td>
<td>44943</td>
<td>45642</td>
<td>90655</td>
<td>43868</td>
<td>42146</td>
<td>89914</td>
<td>29466</td>
<td>21645</td>
<td>61111</td>
<td>127126</td>
<td>119404</td>
<td>246570</td>
</tr>
<tr>
<td>E.S.E</td>
<td>1060414</td>
<td>937859</td>
<td>1997263</td>
<td>439622</td>
<td>326304</td>
<td>765926</td>
<td>18554</td>
<td>67463</td>
<td>330007</td>
<td>715990</td>
<td>430296</td>
<td>310938</td>
</tr>
<tr>
<td>Oman Sultanate</td>
<td>151973</td>
<td>141569</td>
<td>293542</td>
<td>63109</td>
<td>55393</td>
<td>116603</td>
<td>30513</td>
<td>31201</td>
<td>59714</td>
<td>353586</td>
<td>22823</td>
<td>468849</td>
</tr>
<tr>
<td>Qatar State</td>
<td>17048</td>
<td>17298</td>
<td>34346</td>
<td>8676</td>
<td>8359</td>
<td>16835</td>
<td>5983</td>
<td>0850</td>
<td>12333</td>
<td>31707</td>
<td>32507</td>
<td>64214</td>
</tr>
<tr>
<td>Total</td>
<td>1381462</td>
<td>13247638</td>
<td>2629101</td>
<td>602939</td>
<td>479143</td>
<td>1082082</td>
<td>306676</td>
<td>278583</td>
<td>57665</td>
<td>629577</td>
<td>1998155</td>
<td>2884049</td>
</tr>
</tbody>
</table>

Table No. (2) indicates that during the years from 14/1415 H. (1995) to 19/1420 H. (2000) the numbers of male and female students in the Gulf countries who desires to enter the higher education will be doubled, and if this increase could not be accompanied by the provisions of procedures, facilities and preparations required for their admission academically or professionally, the resulted damage will be very large.

How The Gulf Countries Faces This Student Flow:

The Gulf universities will suffer a hard circumstances if the current conditions with its all features to expand and form the future, which will complicate our recent problems more, therefore, I think the remote education is the best choice for these problems, specially that it achieve the feasibility and the educational effectiveness in addition to that it suits completely our respectable religion and our private cultural characteristic in the field of girls education.
Table No. (1)

Bachelor Degree Students
For The Academic Year 14/1415 H. Corresponding to 94/1995

<table>
<thead>
<tr>
<th>University Name</th>
<th>Registered Students</th>
<th>Graduate Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Emirates</td>
<td>2608</td>
<td>8968</td>
</tr>
<tr>
<td>Bahrain</td>
<td>606</td>
<td>1425</td>
</tr>
<tr>
<td>Kuwait</td>
<td>5372</td>
<td>11082</td>
</tr>
<tr>
<td>Saudi Universities</td>
<td>7350</td>
<td>40571</td>
</tr>
<tr>
<td>Teachers Colleges (*)</td>
<td>16547</td>
<td>16547</td>
</tr>
<tr>
<td>Girls Colleges (**)</td>
<td>28235</td>
<td>28235</td>
</tr>
<tr>
<td>Sultan Quabos</td>
<td>1689</td>
<td>1906</td>
</tr>
<tr>
<td>Qatar</td>
<td>2004</td>
<td>5040</td>
</tr>
<tr>
<td>Arabian Gulf</td>
<td>116</td>
<td>195</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>107292</td>
<td>97422</td>
</tr>
</tbody>
</table>

(*) Belongs to the Saudi Arabian Ministry of Education
(**) Belongs to the General Province of Girls Education, K.S.A.

(1) The academic year 12/1413 H corresponding to 92/1993

Table No. (1) indicates that about one fourth million male and female students had been admitted to the higher education or equivalent level in the Arabian Gulf countries which is exceeds with all considerations the capacity of these institutions many times, which may affect their academic performance levels badly. As also the tables indicates that the female students number is almost equals to the males number, i.e., the female students will represent the higher pressive factor on the higher education in the Gulf Countries. The choice of the remote education, under various social and cultural circumstances and considerations, remains the ideal and convenient choice for them in this area. It is an important thing to mention that these numbers increase highly year after another which strengthen the need for adoption of new choices for the higher education in the area, the best of which may be is the remote education choice (see table No. (2) which indicates the potential pressure on the higher education in the coming years).
Let us assume that one of the Gulf universities offered, at least, two curriculums from the university requirements according to the remote education style experimentally, what will happen? Assuring the same, I will set between your hands in figures the objectives assigned for, e.g. for King Saud University in the field of student admission during the sixth five year plan 15/1420 هـ, and our need to adopt the remote control style, and how this style will enables us to avoid many problems.

The assigned objective for King Saud University for the newly admitted students during the sixth five year plan each up to 40,595 male and female students (*)

In the event of the traditional education, the teaching of one curriculum of two hours period, requires the following:

1. 1000 department in each curriculum (40 student / department).
2. 2000 teaching hour in each curriculum of two hours period.
3. 166 teachers (12 hours per each) in the rate of 34 teachers annually for each two hours curriculum).

Because the curriculum is to be taught for one class, therefore, the two hours curriculum requires the provision of 17 teaching staff members during the whole year for the plan years which will become 34 teachers for both curriculum along the whole plan years.

While in the remote education, only four teachers may be required to perform the following duties:

1. Answering the student inquiries.
2. Held meetings with the students to explain for them what they need.
3. The class and annual student evaluation.

Therefore, we will be accomplished all of the traditional education advantages and saved in two curriculum each of two hours according to this style 30 teachers during the plan years.

The advantages will be more and more clear if the same is applied for one curriculum of the university requirements for the Gulf countries which will result in more and more save. As also he economical and educational characteristics of the remote education will be highly clear if we applied for a complete educational and training programs.
The results of some of the educational performance studies and researches confirmed that the teaching of 40 student department and another one of 1000 student is equals because the teaching outcome is the same, that is the process of teaching, education and gain is previously mentioned is a process based fundamentally on the communication or it is a communication process. In overcrowded classroom above the reasonable limit the communication ability will be vanished which means that the traditional education will never be better than the remote education but the chance for the self growth of the student and the ability to benefit from the technologies of the remote education in itself a basic promotive factors for the occurrence of the optimum education. Then the significance of the educational aspects arises in the training requirements of the Gulf Society. Because the need for the work market related training, the training of the human as a human, service of the society and the continuous education and the training of elder males and females in different fields is estimated to be doubles of the university education requirement, especially in that it represent the strong style and method to accomplish the pleasure life and the desired expectations. As also the traditional educational system itself had became incapable according to its features to adapt itself with the same speed and degree and capability with the different forms of progress and change and the need or the training and its systems and programs had become a continuous infinity need, which will make the human modern, capable to live and to success in his life.