

IBE-UNESCO

**THE GULF ARAB STATES
EDUCATIONAL RESEARCH
CENTRE - GASERC**

**THE ARAB BUREAU
OF EDUCATION FOR
THE GULF STATES-
ABEGS**

SCHOOL SUBJECT TIME RATIO-WEIGHTS

Manama/BAHRAIN, 10-14 May 2003

SEMINAR REPORT

**IBE-UNESCO
November, 2003**

by

Dakmara Georgescu

Based on inputs from:

GASERC and ABEGS

Massimo Amadio

Cecilia Braslavsky

Halima Dekhissi

Hugo Labate

Tony Macelli

Ali Merzouk

SUMMARY

	Page
EXECUTIVE SUMMARY	4
<i>Background information to the seminar</i>	
<i>Participants</i>	
<i>Seminar objectives</i>	
<i>Seminar agenda</i>	
<i>Outcomes, recommendations and follow-up</i>	
CONTEXT AND BACKGROUND INFORMATION	7
SEMINAR PROCEEDINGS	9
<i>Participants' expectations</i>	
<i>Presentations followed by discussions of international trends in curriculum development and their links with time allocation and ratio-weights</i>	
Identities in a globalised world: trends in curriculum development (Cecilia Braslavsky)	
Instructional time and lesson timetables: concepts and issues (Massimo Amadio)	
New solutions in designing and structuring the curriculum: models, prerequisites and consequences (Hugo Labate)	
Competencies-based approaches in curriculum development (Dakmara Georgescu)	
Plenary presentations of the Structural Design Tool and Classic Ratio- Weight Tool (Tony Macelli)	
<i>Hands-on sessions</i>	
PARTICIPANTS' EVALUATION OF SEMINAR PROCEEDINGS AND OUTCOMES	20
LESSONS LEARNED AND SUGGESTIONS FOR FOLLOW-UP	22
Annexes	25
<i>Seminar agenda</i>	
<i>List of participants</i>	
<i>Reports on seminar evaluation outcomes</i>	
<i>Compilation of participants' opinions (Tony Macelli)</i>	
<i>Presentations</i>	

EXECUTIVE SUMMARY

Background information to the seminar

One and a half year ago, in response to requirements of the Joint Plan¹ regarding the domain of curricula and course design and in co-operation with GASERC and ABEGS², IBE-UNESCO engaged in a challenging project on exploring time allocation and ratio-weights in the pre-tertiary curriculum (the so-called GASERC-ABEGS I project). In the framework of this project, a final seminar on ‘*School Subject Time Ratio-Weights*’ took place in Manama/Bahrain in May 2003.

In compliance with the projects’ objectives (exploring international time allocation, ratio-weights and creative solutions for better time allocation in the Gulf countries through progressive curriculum change), four *Dossiers* have been prepared:

- *Dossier A* (comprising of several papers analysing international trends and good practices in time allocation and ratio-weights);
- *Dossier B* (comprising of papers analysing time allocation and ratio-weights in the Gulf countries);
- *Dossier C* (comprising of papers addressing on-going international debates on reshaping the curriculum based on students’ competencies);
- *Dossier D* (comprising of two electronic ‘Tools’: *The Structural Design Tool* and the *Classic Ratio-Weights Tool*, which have been conceived as application of new technologies for exploring solutions regarding better time allocation in school, based on arguments, criteria and constructive group debates).

The seminar aimed at disseminating the project results among curriculum directors, curriculum researcher and developers from the Gulf countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, Yemen), and at the same time, it provided a good opportunity for participants to engage in a fruitful exploration of the state-of-the-arts in curriculum development in the region and to engage in interactive sessions based on using the electronic tools for improving curriculum decision-making processes.

Participants

From each of the Gulf countries groups of 2 to 4 (or more) curriculum specialists, led by the Curriculum Director of the respective country, have attended the seminar (see Annex 2 – *List of participants*). IBE-UNESCO was represented by its Director, Dr. Cecilia Braslavsky, and by a team of six other education specialists, staff members and consultants. ABEGS and GASERC have as well been represented by

¹ The Joint Plan for Developing Curricula in the GCC countries, ABEGS, adopted in 1999.

² ABEGS= The Arab Bureau of Education for the Gulf States; GASERC= The Gulf Arab States Educational Research Centre

important leaders and members, such as Dr. Rasheyed Al Hamad, Director of GASERC, and Dr. Ali Bubshait and Dr. Humoud Al-Sadoun, education advisors.

Seminar objectives

As a final event in the framework of the GASERC-ABEGS I project, the seminar was envisaged as an opportunity to provide an overview of the projects' outcomes and of possibilities of dissemination at national level. It also facilitated a careful exploration of further needs of the region with regards to capacity building and experience sharing in the process of reshaping the curriculum in compliance with internationally recognized good practices in education. Among such international trends and good practices, integrated learning and curricula, as well as curriculum revisions based on students' competencies have been tackled as new directions leading to a better use of instructional time.

The participants were invited to reflect on international and regional findings concerning time allocation and ratio-weights and to use these findings for suggesting solutions for improving the curriculum provisions in the region. For instance, one of the main findings in the project is that in the Gulf countries, the yearly time allocation of compulsory education (first nine years of schooling) is less than the international average, whilst significant differences in time allocation for specific curriculum areas/subjects between different GULF countries sometimes also have to be considered.

With the help of the two electronic tools (*The Structural Design Tool* and the *Classic Ratio-Weights Tool*), participants have explored different solutions for changing time allocations in schools, based on curriculum integration, and a new and more flexible arrangements for using the weekly and yearly instructional time. They have also explored different alternatives for addressing appropriate time allocation in schools, based on arguments, criteria and reasonable debates among curriculum specialists.

The seminar has, moreover, contributed to a fruitful exchange regarding existing projects for change and interesting experiences in integrating the curriculum in some of the Gulf countries.

Seminar agenda

In compliance with the seminar objectives, the agenda included plenary (interactive) presentations, panel discussions and group activities. Dr. Cecilia Braslavsky challenged the participants with a key-presentation on curriculum development in a globalised world, stressing on the need of finding a good balance between international trends and preservation of regional and local cultures and traditions.

During the first day, an interactive session on participants' expectation was organised, followed by a discussion in the afternoon on 'Time Allocation: Reflections & Models to Re-design Curriculum Time Structures' (Massimo Amadio and Hugo Labate). In the second day, two interactive presentations were focusing on competencies-based approaches in curriculum development (Dakmara Georgescu) and on new ways to structure the curriculum and address meaningful learning experiences in school (Hugo Labate).

The next two days were devoted to the use of the electronic tools in exploring possibilities for changing the curriculum through reflective team work (Dr. Tony Macelli and Ali Merzouk). In the final day, a panel discussion on good practices in curriculum change took place addressing both the international and the regional/local perspective. Participants also engaged in a lively discussion on needs and possibilities for follow-up and made suggestions for improving further experiences of a similar kind.

Outcomes, recommendations and follow-up

As many participants stressed in their comments, the seminar provided a good opportunity for a much better knowledge of the region and of the needs for capacity building in the ABEGS countries, including a better understanding of the existing situation regarding the curriculum in the different countries and of future possible developments.

The seminar also provided good basis for networking and co-operation in the Gulf region and between the ABEGS countries and IBE-UNESCO. Several participants have mentioned in their follow-up suggestions that IBE-UNESCO will be 'their windows to the world' of educational innovation and curriculum change, and invited IBE-UNESCO to engage in upcoming bi-lateral activities.

Good foundations for a wider dissemination of the project outcomes were also set. Each participant has received a folder with the Arabic translation of the project documents and tools produced under ABEGS I, together with a CD with all documents and tools in electronic format.

The participants all agreed that the subject of meaningful time allocation in schools needs more discussion, and that this first meeting should be followed by future events organised in the region and by a better networking between the ABEGS countries, as well as between the ABEGS countries and IBE-UNESCO. Whereas time is not the only factor in influencing students' achievements, it is an important resource and has to be tackled accordingly.

After the seminar, Mr. Tony Macelli worked on improving the Classic Ratio-Weight Tool based on participants' inputs. He is also incorporating the main project outcomes into a functional Kit on time-related factors in curriculum development (papers and tools).

At present, the IBE-UNESCO team, in co-operation with GASERC and ABEGS, is finalising preparations for running the GASERC-ABEGS II project, focusing on curriculum integration, which will be one of the most important ‘follow-ups’ of the time-related project.

CONTEXT AND BACKGROUND INFORMATION

Based on a ‘*Proposal for IBE Contribution to the Ratio-Weights Project*’ submitted to ABEGS in February 2002, an *Agreement of Collaboration* between the Arab Bureau of Education for the Gulf States (ABEGS) and the International Bureau of Education of UNESCO (IBE-UNESCO) was signed in summer 2002. The parties agreed to jointly carry out a project on time allocation and ratio-weights addressing curriculum developers and managers (decision-makers) from the GCC countries³.

The project – funded by the Arab Bureau of Education for the Gulf States, ABEGS, and carried out in collaboration with the Gulf Arab States Education Research Centre, GASERC – started its’ operations on 15 July 2002 and the detailed plan of action was prepared and approved in August 2002.

The projects’ general objectives was to increase the professional capacity of curriculum developers and managers in the GCC countries in order to address issues of time allocation and ratio-weights based on updated information regarding contemporary trends and good practices and the use of modern electronic tools.

Several specific objectives were envisaged:

- To explore international time allocation and ratio-weights in the pre-tertiary curriculum;
- To explore creative solutions for better time allocation in the ABEGS countries, through progressive curriculum change;
- To develop capacities to use electronic tools and systematic procedures for decision making in the framework of time allocation-related curriculum development processes;
- To increase awareness of recent education/curriculum-related developments in the ABEGS countries and facilitate better co-operation and networking among curriculum bodies and professionals of the GCC states.

In compliance with the projects’ objectives, the following papers, case studies and tools organized under four different dossiers have been prepared and delivered to GASERC and ABEGS:

- **Dossier A**, including case studies and working papers analysing international trends: (i) D. Baker & collaborators, *Instructional time and national achievement: Cross-national evidence*; (ii) F. Waldow, *Teaching subjects, allocation of time and instructional time in the Swedish school system*; (iii) B. Schulte, *Teaching subjects and time allocation in the German school system (Berlin)*; (iv) A. V. Fries et. al., *Allocation of instruction periods and teaching subjects in Switzerland. Curriculum change in the Canton of Zürich between 1990-2002*; (v) K. Shimizu, *Why and how the Japanese curriculum has changed: the case of*

³ Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates/U.A.E. (GCC). At the May seminar Yemen was also invited.

science: (vi) E. Broillet, *The International Baccalaureate Organization*; (vii) IBE, *A review of time allocated to school subjects: selected cases and issues*; and (viii) IBE, *Home education*.

- **Dossier B**, containing systematized information on lesson timetables and instructional time in the Gulf countries: (i) IBE, *Average amount of time allocated to school subjects during the first nine years of formal education in ABEGS countries*; and (ii) IBE, *Average number of hours allocated to each subject/subject area over the first nine years of formal education in ABEGS countries. Additional tables and graphics*.
 - **Dossier C**, comprising two papers addressing present international debates on reshaping the curriculum based on students' competencies: (i) A. Tiana, *Developing key competencies in education systems: some lessons learned from international studies and national experiences*; and (ii) D. S. Rychen, *Key competencies for All: An overarching conceptual frame of reference*.
 - **Dossier D**, including two electronic tools – *Structural Re-design Tool* and *Classic Ratio-Weights Tool* – that have been conceived as an application of new technologies for exploring different solutions regarding time allocation in school, based on arguments, criteria and constructive group debates.
- **A pre-workshop meeting** was organised in Geneva on 18-19 February 2003 in order to discuss several issues concerning: the translations (summaries) of working papers from English into Arabic; the preparation of the capacity-building workshop in the Gulf-region, including the agenda of the meeting; the competencies-based approach in curriculum development processes; the presentation of the tools prepared within the framework of the project (*Classical Ratio-Weight Tool* and *Structural Design Tool*); and the content of a second project which would mainly focus on curriculum integration and competencies. The meeting was attended by IBE staff involved in the project, representatives from ABEGS-GASERC, and the Chair of the International Association for the Evaluation of Educational Achievement (IEA), who is also author of one of the working papers on key competencies in education systems.
- **A simulation activity was organised at the beginning of April 2003**, in which the two electronic tools (Dossier D) have been tried out in order to prepare their appropriate use in concrete training seminar activities and settings;

The final workshop/seminar took place in Manama, Bahrain, on 10-14 May 2003. Directors of curriculum departments, curriculum researchers and developers from Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates and Yemen attended the meeting. The workshop was both an opportunity to provide an overview on the projects' outcomes and a chance for exploring further needs of the region. Among such needs, most important are the ones related to capacity building and experience sharing in the process of reshaping the curriculum based on international trends and good practices, such as integrated learning and students' competencies. Activities were organised around plenary (interactive) presentations, panel discussions and group activities.

Participants' expectations

At the beginning of the seminar, participants were asked to share their expectations regarding possible outcomes and gains in the perspective of curriculum reforms in the Gulf countries. Following were important comments, questions and suggestions participants expressed during this first interactive session:

- It is important for all the countries in the Gulf region to reach a conceptual consensus on frameworks for new educational planning. While it is not suitable to copy or simply transfer plans of study from other countries, one can however learn from other experiences dealing with the need for balancing traditional and 'modern' approaches, such as 'alternative' ways for time allocation.
- Changes in time allocation for different learning areas and subjects have to be linked with the promotion of new teaching strategies and new teaching and learning philosophies. For instance, an overload in the curriculum should be reduced and useful learning resources should be taken into consideration.
- In dealing with time allocation and ratio-weights it is moreover important that national coherence should be assured. Modern media, such as the Internet, should be used proactively in order to facilitate constructive professional debates among teachers and other education stakeholders at national and regional level.
- The seminar should constitute an opportunity to explore new ideas and suggestions for networking and co-operation at the national, regional and international level.
- Regarding time allocation, the real challenge is to develop a comprehensive plan for improving ratio-weights and addressing curriculum integration, based on practical needs and international good practices. Changing time allocation and ratio-weights also needs to be more connected with active learning and learner-centred approaches. Improving time allocation will not work if syllabi and teaching resources are still teacher and subject-centred. Thus, the issue of time allocation and ratio-weights has to be envisaged as a social approach, in which many education aspects have to come together. New plans of study have to be developed through the work of specialised working groups established by the Ministries of Education and in consultation with education stakeholders.
- In order to develop good plans of study, one should identify real challenges and respond to them creatively through breaking barriers between school and real life. There are many answers to the question of improving time allocation, however true answers should be practical, clear, feasible and authentic.
- In some of the ABEGS countries a new structure of the education system should be envisaged along with changes in time allocation and ratio-weights. Improvements in ratio-weights have to be addressed in line with discussions on the total time allocation in schools (weekly, monthly, yearly). Using electronic tools for curriculum decision-making on time allocation and ratio-weights seems to be an interesting idea, as well as networking via Internet.

- In many ABEGS countries, one main concern is the integration of new education concepts and dimensions, such as human rights education, environmental awareness, education for democratic citizenship, health education, computer education, sustainable development and economic growth. It is expected that the seminar will facilitate a better understanding of the state-of-the-arts in the Gulf region regarding directions for curriculum change and will provide a basis for better communication and networking among curriculum specialists from the Gulf countries.
- Reshaping the curriculum in compliance with technological changes together with local and global developments represents one main preoccupation of Ministries of Education in the ABEGS countries. At the same time, more attention is given to the need of training teachers in order to enhance their pedagogical skills. Some of the focal points in actual projects of curriculum change are environment and health education, traffic education and integration of special needs learners into mainstream schooling.
- Participants suggested that, in line with recent developments in ABEGS countries, links between, on one hand, time allocation, curriculum and educational goals; and, on the other hand, climate, cultural traditions and school management and learning environment should be tackled.

In her response to participants' expectations, Mrs. Braslavsky pointed out the need to link curriculum development with new perspectives in a globalised world and seek for a better distribution of learning areas and subjects through the benefit of the experiences of other countries, either developed or not. She also insisted on envisaging continuous processes in curriculum development, which implies periodic assessment, revision and improvement of curriculum provisions.

PRESENTATIONS OF INTERNATIONAL TRENDS IN CURRICULUM DEVELOPMENT AND THEIR LINKS WITH TIME ALLOCATION AND RATIO-WEIGHTS FOLLOWED BY DISCUSSIONS

IDENTITIES IN A GLOBALISED WORLD: TRENDS IN CURRICULUM

DEVELOPMENT (Mrs. Cecilia BRASLAVSKY) In her presentation on links between globalisation and challenges for curriculum development, Mrs. Braslavsky focused on following questions:

- What demands and what answers are to be expected when facing globalisation as curriculum developers?
- What paradoxes do curriculum developers face? (i.e. the need to be well installed in the new society while striving for preserving one's identity, culture, and traditions; how to cope with tensions between homogeneity and differentiation?)
- How to address these paradoxes? What to transfer and what to reinvent? (Example: the Nordic 'comprehensive schools')
- How to make things happen?
- Can we adopt similar solutions under different circumstances? (Example: language policies)

Mrs. Braslavsky evoked several so-called paradoxies of globalisation, such as:

- Very rapid development of scientific knowledge, technologies and behaviors and very slow progress of some of their applications. This is also linked with oppositions between wealth and exclusion;
- Decentralisation versus the reinforcement of some regional and global structures;
- Widening possibilities for communication between cultures and increasing gaps in communication and risks to some cultures;
- Modern nomadism and a return of origins: new forms of migrations and mobility yield ambiguity concerning inclusion in new societies and/or societies of origin ('topopolygamic' appartenance).

The changing faces of (modern) identities could be deemed as one major challenge for curriculum development. Globalisation could be seen as both an advantage or opportunity and a threat or risk, consequently education systems have to 'reinvent' themselves in order to benefit from new opportunities and overcome risks, obstacles and difficulties successfully.

Each education system has to explore its own reasons for change. Mrs. Braslavsky talked about heterogeneous reasons for change, such as outcomes of international surveys and comparisons. One has yet to acknowledge that sometimes-different curriculum organizations lead to isomorphic results. Thus, the complexity of the context of curriculum change should be tackled more carefully, and drive for a better curriculum, which is comparable to 'international trends', should never ignore specific cultural, economic and social contexts.

It is yet worthy to explore some tendencies in curriculum development in countries performing well economically and being considered models of good

practice in education internationally. If analyzing such trends, several common features might be considered:

- *Global and local comprehensiveness* - curriculum provisions enable students to cope successfully with both local challenges and global vision.
- *Global and local openness*, allowing students to be connected to the world and to the closer community ('doors' to the world and to the community).
- *Novel approaches in individual subjects*, which address the need for learning to learn and for combining 'to do' and 'to be' dimensions in education constantly. Examples were given from Guatemala (*Promoting multicultural and interethnic education through social sciences*) and Austria (*Promoting multicultural and interethnic education through religious education*).
- *Cross-cutting issues and methodologies*, focusing on interconnections in the natural, social and man-made environment and new education dimensions emerging from challenges of today's world. Examples for cross cutting issues and dimensions could be integration of intercultural education into the curriculum, environmental education, peaceful conflict management and peace education, citizenship and human rights education.
- *Ownership*, meaning that curriculum development and revision imply participation and cooperative work of education stakeholders. Inclusive processes of consultation and other forms of active participation have to be provided in order to allow everybody interested to contribute.

As showed by many analyses of contemporary curriculum trends, one internationally widespread option is to create so-called '*glocal*' identities through new curricula that deal with global challenges in the local context.

INSTRUCTIONAL TIME AND LESSON TIMETABLES: CONCEPTS AND ISSUES (MR. MASSIMO AMADIO).

As education research shows, association between time and learning is consistent, that is to say that learning takes time. There is yet to be considered that time alone does not ensure that learning takes place. Other factors should also be taken into consideration, such as content and methods of teaching and learning, student self-concept and motivation, stage of development, learning resources, prior achievements, psychosocial environment, (peer relationships, use of leisure time), etc. Thus, time is only one factor influencing learning, but it cannot be deemed as a strong predictor of learning achievement.

In dealing with instructional time, one should pay attention to distinctions between intended instructional time (curricular subject or lesson timetables) and effective or real instructional time, which is usually lower than the theoretical or intended one. Very often, subjects seen as 'very important', such as mathematics and sciences, could get more attention in practice and more time than intended, which could diminish effective instructional time for other subjects, considered 'less' important.

International comparative analyses of theoretical or intended instructional time tables show that there is a tendency that countries follow a quite similar pattern in

designing time allocation in their respective systems. For instance, since the '70s, mathematics, social sciences and natural sciences are taught as integrated subjects in lower grades and as separate subjects in upper grades. Yet, comparisons between different countries and regions of the world also highlight some interesting differences.

Mr. Amadio presented several slides illustrating comparisons between different regions of the world and the Gulf countries, based on considering minimal instructional time and, also, extra-curricular activities (specifying that not all subjects that appear in timetables are used for the analysis). He also stressed that international comparison has to pay attention to the fact that, in many countries subjects are more and more concentrated into broad learning areas. In Switzerland, for instance, in the Zürich Canton, previous timetables that were divided into 16 subjects, are now structured based on five broad learning areas. In addition, new educational content, such as environment education, human rights and peace education, life skills, etc., is sometimes treated in separate subjects, but also as cross-curricula approaches. Consequently, certain topics and time allocated for teaching and learning of these topics are infused into other subjects or subject areas.

If comparing time allocation in the Gulf countries with the situation in other regions of the world, several observations can be made:

- Timetables in the Gulf countries contain no optional subjects or school designated time (school-based or local instructional content). In many countries of the world, teachers and schools are now granted more time for teaching and learning based on personal or local decisions related to curriculum/instructional content.
- In comparison to other regions of the world, Gulf countries have a shorter school year and the total amount of hours per week, month and year is generally lower than in other parts of the world. If comparing, for instance, instructional time in compulsory education (first nine years of schooling), one can observe that, in total, students in the Gulf countries spend maybe one year less for (intended) instructional time than their fellow colleagues in other parts of the world. In other words, the total amount of time over nine years of compulsory education in the Gulf countries is equivalent to theoretical instructional time over only eight years in other regions.
- There are also some important differences among the Gulf countries themselves. For instance, Saudi Arabia allocates considerably more time to Religious education than the other states in the Region. Although timetables are usually divided into separate subjects, several countries try nowadays to introduce more integrated approaches, especially in primary and lower secondary education.

Following Mr. Amadio's presentation, Mr. Hugo Labate introduced a group activity, asking participants to perform a cross-country analysis of issues in time allocation and ratio-weights, through exchanging on findings, concerns, questions and criteria to later be addressed in a decision-making process regarding instructional time. Based on group discussions and presentations, several common issues were highlighted, such as:

- The need for avoiding (excessive) curriculum fragmentation,
- The need to give more room for teachers and school to decided on instructional content and time allocation and
- The need to take into consideration demands of parents and other education stakeholders for better time allocation in compliance with new challenges and opportunities in today's world.

NEW SOLUTIONS IN DESIGNING AND STRUCTURING THE CURRICULUM: MODELS, PREREQUISITES AND CONSEQUENCES (MR. HUGO LABATE).

Mr. Labate invited participants to reflect on models to re-design curriculum time structures based on selecting meaningful learning experiences for students. Selection of learning experiences should be performed in compliance with learners' needs and other important factors, such as important issues for a given society, the state-of-the-art in psychological and pedagogical research, the body of available knowledge and models of 'good practices' in teaching and learning.

Based on a global map from 1996 of 'Shape of knowledge' in today's world, Mr. Labate focused on some important features and trends in contemporary science and cultural and social domains, which are important to be addressed for reshaping the curriculum:

- *Knowledge is not anymore homogeneous and strictly divided into well-configured areas.* Today we deal with hybrid areas and heterogeneity; what were considered previously as 'separate parts' (specific and separate domains) go now together and trigger important changes in the way human knowledge is shaped. For instance, developments in biology and genetics (especially models of genetic information replication) influence developments in computer sciences regarding duplicating information.
- *In knowledge one deals with scientific disciplines, social practices and technologies. In terms of curriculum construction, one has to define learning areas, which should reflect changes in the world of knowledge.* Thus, a first important step in decision-making is to discuss which part of the available knowledge will be actually present in schools. As research shows, a significant part of today's scientific publications is comprised of bio-medical papers. Consequently, one should ask our selves whether there should be more orientation in the curriculum towards health education.

An exercise on defining learning areas gave participants the opportunity to reflect on possible contents seen as groups of practices or learning experiences (such as life skills, citizenship education, cultural studies, etc.). As participants commented following the group discussion, in defining such new learning areas, parts came from different 'traditional' disciplines.

But defining a new learning area is not enough. Consequences of defining new learning areas have to be addressed carefully based on questions such as:

- What are important issues to be learned, how should learning be organised, what are priorities, what is 'basic'? If some part of nowadays' knowledge is considered to be basic, does it mean that schools have to address it? What will happen to the parts in the curriculum, which are not (anymore) considered to be basic?
- How much time should be allocated and how should the time be structured? More and more countries in the world look at a maximum of 7-8 broad learning areas, and in order to avoid fragmentation, they seek for new and flexible solutions, such as periods of one hour and a half instead of 50 or 45 minutes, block periods of teaching (several weeks, or one semester), etc. Finally, a country's education authorities should take decisions responsively in consultation with education stakeholders.
- Will teachers be able to teach? What kind of training do they need in order to address the new concept of a restructured curriculum?
- If integrated learning is promoted, are learning experiences really connected to learners' lives and in which way?

Mr. Labate warned participants about rushing into adding new subjects to the existing ones, as a response to changes and new challenges in knowledge, society and environment. Adding new disciplines will not solve the problems, but will generate curriculum overload. Thus, it is more important to pay attention to develop basic knowledge and 'instrumental' competencies through also addressing changes in the way knowledge is produced. Production of knowledge is nowadays problem-defined, and is subject of validation in a context of application. Thus, the 'how' about knowledge development should also be addressed as a major dimensions of 'how' students should learn and 'what' competencies/skills should they develop.

Changes in society require new skills and new personal decisions. Consequently, schools have to address 'new' learning areas, coping with individuals as produces, users and consumers of technology. The ministries of education should work with other education stakeholders, including media, civic society bodies, professional organizations, etc., for identifying needs for curriculum change and best solutions to address them efficiently.

How can fragmentation be avoided when designing a new curriculum? Taking into account that time is a limited resources, one has to balance content and time carefully. It is thus important to reshape the curriculum based on good solutions in term of time allocation. One trend today is to use learning outcomes/students competencies as focal point for restructuring the curriculum. Competencies-based approaches are very much linked with inter-disciplinary approaches and integrated learning.

Although curriculum integration is rather common in primary education, it is yet applicable in secondary education too. Curriculum integration requires substantial re-training of teachers and inspiring learning resources, thus it can be applied if certain prerequisites are assured. For instance, integrated learning based on teachers' teamwork is considered a very interesting practice and has started to be used in many

countries. Yet teamwork is not easy to be applied successfully, and it needs serious capacity building, including reading, planning learning experiences, sharing, communicating, evaluating, etc.

In rethinking and restructuring time allocation in schools, there are different levels or degrees of flexibility to be considered:

- One solution is *to not use 'centralised' timetables at all*. Schools and teachers have to organize their learning activities based on guidelines and national or regional quality standards and curriculum provisions (curriculum frameworks, syllabi, teacher guides, etc.).
- In other cases, a *low level of details* could be thought up: defining broad learning areas, free options for a part of the school time, indicating a minimum and maximum of time allocation for a certain area or subject.
- In the case of a *high level of details*, there are strict provisions in terms of time allocation for every subject and/or subject area.

As stated by findings of educational research, a combination of comprehensive guidelines and national or regional quality standards and flexible time allocation, allowing teachers and schools some reasonable degrees of autonomy for curriculum decision making represents a wide-used solution for structuring at present the curriculum and students' learning experiences in many parts of the world.

COMPETENCIES-BASED APPROACHES IN CURRICULUM

DEVELOPMENT (MRS. DAKMARA GEORGESCU). Based on project papers elaborated by Dominique Richen and Alessandro Tjana Ferrer, Mrs. Georgescu analysed one recent trend in reshaping the curriculum starting from addressing students' competencies. Although the term 'competencies' was used for long, especial in vocational education and vocational fields, today competencies-based approaches are seen more and more as valuable solutions for reshaping the education system. On one hand, this new trend is based on recent relevant proposals and classifications of competencies, on the other hand it generates new creative attempts to approach students' competencies and produce relevant taxonomies.

The new interest in competencies has its roots in changes in society, knowledge, economy and education. Several influential psychological and pedagogical movements, such as behaviorism, cognitivism and constructivism have brought their contribution to better understanding learning focusing not only on inputs to the learning process, but also on processes and learning outcomes.

One could actually distinguish input-based curriculum approaches, and output-based ones. In the case of input-based models of fostering learning, special attention is given to learning objectives, syllabi, textbooks and teaching aids, teachers and schools. In the case of output-oriented approaches, curriculum developers and education decision makers try to focus on results of learning processes, in terms of learning outcomes and students competencies. In this second model, curriculum

developers are keen to develop quality indicators and benchmarks in order to make sure that learning has actually happened.

If considering different 'historical' focal points for curriculum development, one could distinguish three basic models:

- *Knowledge/content-driven curriculum.* In this model, curriculum development starts with questions addressing what should the instructional content be: what would be important for students to learn, taking into consideration the wide range of knowledge in different fields of human activity.
- *Objectives-driven curriculum.* Curriculum developers base their endeavor on general and specific learning objectives, taking into consideration specific taxonomies. In this approach, it is very important to have in mind specific targets to attain, in compliance with a certain image of students' development based on education aims and goals a certain society sets for a certain period of time.
- *Competencies-driven curriculum.* Curriculum developers consider end results of learning processes as starting points for identifying, selecting and organizing meaningful learning experiences. End results of learning processes are seen as learning outcomes in terms of students' competencies.

With regard to the definition of competencies, there are different interpretations. Quite often they tend to be equated with skills or capacities. Yet, they would also include elements such as values, knowledge, attitudes, behaviours, procedures, patterns of action, habits and routines. As stated in prof. Tiana's paper, *competencies could be considered acquisitions and abilities to think, act, learn, transfer knowledge and look for solutions independently.* The use of the term 'competencies' reflects actually some important challenges of today's world, that is the need of adaptation to change. 'Competencies' is seen an appropriate term for depicting how should student be equipped in order to face quick and substantial changes successfully.

'Competencies' or student achievement/learning outcomes are yet controversial terms. In developing further a 'theory' of student competencies, one should pay attention to several questions, such as:

- Are competencies universal?
- Are they context-dependent?
- How to decide which competencies are important?
- Are competencies individual or characteristic to a group, that means social?

In defining competencies, it is also important to distinguish between generalized versus specialized competencies, between a single competence versus sets of competencies, between competencies and meta-competencies (such as learning to learn and monitoring ones own learning). Much attention is also given to the so-called 'key competencies', seen as multifunctional, transferable and trans-disciplinary competencies.

In analyzing the issues of student competencies and the present debates on what competencies are and how they should be classified and fostered, it is important

to look at some international studies, such as the PISA study (OECD – Project on International Student Assessment, focusing on reading, mathematical and scientific literacy at the age of 15), DeSeCO (OECD – defining and selecting student competencies), TIMSS (IEA – Third International Study on Mathematic and Sciences), CIVED (IEA – Study focusing on civic education).

There are many definitions and classifications of competencies available. If considering ‘umbrella competencies’ of some international organizations, such as UNESCO (see ‘education pillars’ in the Delors Reports, 1996) and UNICEF (1997), one could deal with five basic categories of competencies:

- Competencies related to ‘to know’;
- Competencies related to ‘to do’;
- Competencies related to ‘to be’;
- Competencies related to ‘to work and live together’;
- Competencies related to ‘to transform ourselves and the world we live in’.

Other possible classification of competencies distinguishes between cognitive competencies (generalized and/or specialized), action competencies and meta-competencies (ability to judge the availability, use and ‘learnability’ of personal competencies).

In general, countries using today a competencies-based approach for reshaping their curriculum, tend to identify a limited number of broad ‘areas of competencies’ and identify specific knowledge, skills, attitudes, values, behaviors, etc., which constitute the operational content of the respective competencies. Based on analyzing and comparing different classifications of competencies, following list could be addressed:

- Instrumental competencies (reading, writing, numeracy, computer literacy);
- Mastery of at least one foreign language;
- Independent learning strategies;
- Divergent thinking, critical judgements;
- Social competencies,
- Technological competencies;
- Media competencies;
- Spiritual competencies;
- Emotional competencies;
- Economic competencies.

As experience shows in countries using a competencies-based approach for re-designing their curriculum, there are several advantages in terms of time allocation and ratio-weight. Competencies-based approaches give more space to integrated learning, thus allowing a more flexible and creative use of time and reducing considerably curriculum fragmentation and curriculum overload.

Education research also shows that in countries which adopted a competencies-based approach and a flexible use of school time (based on students personal needs), students’ achievements are better than compared to the situation of

students in 'traditional' settings, where the curriculum is teacher- or subject-centred and time allocation is rigid and fragmented.

It is yet important that each country should choose those solutions for reshaping the curriculum, which are most suitable to existing contexts and prospects for the future.

PLENARY PRESENTATIONS OF THE STRUCTURAL DESIGN TOOL AND CLASSIC RATIO-WEIGHT TOOL (MR. TONY MACELLI). The ABEGS/GASERC/IBE partnership has also produced two computerized tools relating to curriculum development planning. The workshop presented the two electronic tools interactively on several computers so that the high-level curriculum specialists could experiment with them.

Mr. Macelli introduced the tools assisted by Mr. Ali Merzouk. Two screens were available for simultaneous projections in English and Arabic. Participants could also use the Training Manual in both English and Arabic versions.

Mr. Macelli focused on explaining the functions of the tools and stressed out that some things can be changed in the tool while others should not be touched. Users for introducing and changing their own data can utilise all areas in the blue-greenish boxes.

Since it is the users who set their personal criteria for evaluating different options and rankings of their respective decisions, by using the tool they cannot achieve a "scientific, neutral" decision, but only by a good group discussion. Every time somebody would introduce new criteria and new rankings, one would get a different result. The same happens if, in evaluating solutions for a given question, different groups would design different criteria or would rank them differently. During their own simulation activities, in order to facilitate decision-making processes based on using the electronic tools, participants should operate with only few specific and preset criteria.

As visual instruments, the tools enhance users' capacity to explore connections, errors, problems, etc., in the process of decision-making for curriculum change. They are helpful instruments in revealing problems and consensus building.

- (A) *The Structural Design Tool* enables a group of curriculum planners to design or alter a curriculum-related policy to the curriculum itself, by systematically combining judgements of various design questions according to the planners' criteria.
- (B) *The Classic Ratio-Weights Tool* enables curriculum planners to visualize the implications of inserting new time allocations into the school timetable, such as time for project work, decentralised time allocation, time for integrated or combined subjects, and others.

HANDS-ON SESSIONS

USING the TOOLS

Participants used the tools to create scenarios for subject ratio-weights in timetables, and for the construction of related policies and curriculum guidelines.

Based on hands-on group activities, several suggestions for improving the tools and their usage in training activities and real-life decision-making processes have been made, as follows.

- If both tools are to be used together in some future workshop, it is clear that the Classic Ratio-Weights tool should be used before the Structural Design Tool. Not only is the Classic tool more evolved, but it is also of more immediate relevance and interest.
- The tools should be introduced based on a concrete example, without interruption. Then, the presentation should be repeated, with participants asking questions, making comments, etc. Group work should be based on dividing the participants into small groups, according to their level of computer skills.
- There is a need to simplify the user interface. The software should be improved to be simpler, user-friendly and allow more useful interaction with and assistance to users. The tools should be improved and simplified (i.e. reduce options, concentrate on essential operations) whilst carefully defining target users. Directors of curriculum bodies and other decision-makers seem however not to be the most appropriate target group.
- In the case of the Classic Ratio-Weights tool, an improved version should enable the user to change directly the weekly periods, instead of changing directly the annual number of hours, for specific subjects.
- In order to improve the tools, new features could be considered. For instance, it would be useful to facilitate comparisons between countries, adding more elements: what countries and what cycles are considered? The total amount of hours should be relevant for discussion.
- The specific functions of the tools have to be clearly differentiated and highlighted: (a) what are the functions of the tools in training/capacity building activities and (b) what are the functions of the tools in the

case of real-life situations of curriculum (time-allocation) decision-making.

- In the case of situation (a) – the tools to be used in training/capacity building activities on decision-making regarding changes in time allocation and ratio-weights, the tools could be extremely useful for facilitating consistent group discussions and consensual decision-making processes. The tools decompose (analytically) the necessary steps and operations of a responsible decision-making process. They also facilitate the analysis of useful connections between decisions and consequences. As such, they help clarifying issues and solutions, but they are not actually advancing the way to reach ‘right decisions’.
- In the case of situation (b) – tools to be used in real-life situations of concrete changes regarding time allocation and ratio-weights, they could be very useful in recording different scenarios and facilitating an accurate ‘database’ of possible solutions, dilemmas, questions and consequences decision-makers have to take into consideration. They also reduce the time needed for exploring different solutions, since data are introduced into the software, and information does not have to be recorded on paper.
- Users need to work with tools that are as developed as possible, and not with working versions. Various elements in the tools should be highlighted to facilitate perception and discrimination of different sets of data (for instance: rows, columns and tables). Users should find clear and simple orientations on the screen in order to be able to concentrate on the screen and on tasks to be performed with the help of the tools. Users should not deal with the mathematics of programming, but should be able to access different functions and features of the tools by pressing buttons on the screen.

The two-day hands-on session based on using the electronic tools developed in the framework of the GASERC-ABEGS I project, have facilitated a shared understanding regarding possibilities for using the Structural Design Tool and the Classic Ratio-Weights Tool in a process of rationalising curriculum decision-making, based on team-work, debates and consultations.

PARTICIPANTS' EVALUATION OF SEMINAR PROCEEDINGS AND OUTCOMES (see also Annex 3)

As participants stated in their evaluation, the seminar helped them adopt a comprehensive vision of curriculum development and yielded a more focused attention of curriculum specialists on ways to reach an optimal use of time in schools.

- The general feeling about the seminar was very good. Although expectations of participants somehow differed, there are some common outcomes all of them can make good use in their future work, such as interesting reading materials, resources and issues one could refer to in common.
- The documents prepared and interactive presentations were excellent. However, in the future, one should consider shortening presentations and leaving more space to hands-on sessions, related to practical work.
- Although most of the seminar sessions have been planned to be interactive, more time for real interaction among participants from the Gulf countries should be considered in the future. Sessions like the one of experience sharing during the last day of the seminar offered people in the Gulf region the possibility to know better what happens in other countries and what the plans for future development are (for instance in countries like Kuwait, Saudi Arabia and the United Arab Emirates).
- More attention should be given in the future to the selection of participants to such seminar and workshops. If possible, participants should have a similar profile suiting seminar goals and working methods. In the case of this seminar, some of the participants were curriculum technicians, while other were high-level decision-makers, which created problems in approaching certain tasks, like working in simulation activities and using the draft tools (Classic Ratio-Weight Tool and Structural Design Tool).
- The seminar agenda was very dense and tried to address many important issues in curriculum design and planning. It would perhaps be recommendable to prioritise better seminar topics and objectives, and to maybe plan several seminars addressing different (yet related) topics each.
- Participants should be involved more in chairing different sessions, and they should also have had a say in the overall planning of seminar activities.
- The experience of using curriculum tools was new for most of the participants, who were not accustomed to this kind of exercise and practice. It is thus recommendable that tools should be developed as a ready-to-be-used prototype, and not only as a draft working-version. The electronic tools have a great potential for capacity building in either explicit or implicit ways. Sometimes they can help curriculum decision-makers in an indirect way. The tools' potential for capacity building and assistance of decision-makers should be clearly differentiated and specifically envisaged in future training & simulation sessions.
- Using both tools altogether (Classic Ratio Weight tool & Structural Design tool) is probably a bigger challenge than using only one tool at a time. Thus, in future

capacity building and simulation activities it is recommendable to either use only one tool, or reverse the order of tools: the Classic Ratio-weight tool should be definitely used first. For the tools to be used more effectively, it would have been probably a good idea to focus on certain models or examples of concrete situation in curriculum decision-making. One should also need to tackle not just plans of study, but also lesson plans in depth.

- In addition to the electronic Tools, working procedures and/or guidelines should also be developed. These procedures could be very helpful in decomposing specific steps and operations in curriculum decision making related to time allocation. Comprehensive presentations of tools for the IBE-UNESCO website should also be considered.
- The participants see IBE-UNESCO as their ‘window’ to the broader world. IBE’s collection of curricula and plans of study from abroad help participants from the Gulf region to get in touch with experiences of other countries from many different regions of the world.

LESSONS LEARNED AND SUGGESTIONS FOR FOLLOW-UP

There was a general feeling of the participants that the GASERC-ABEGS I project and the seminar as such represented a special event in the region, generating important transferable experiences to other countries and regions of the world. The seminar contributed significantly to improving participants' awareness of needs and possibilities for curriculum change in the region.

It also highlighted needs and possibilities for capacity building in ABEGS countries and set good grounds for wider dissemination of project outcomes. Based on discussions regarding seminar outcomes, needs and possibilities for follow-up, several issues were tackled, in terms of lessons learned and recommendations for improving project planning, activities and achievements in the future:

- Participants should contribute to disseminating seminar outcomes and engage in further capacity building, based on experiences along the five-day seminar in Manama/Bahrain. They should select the most useful papers and other seminar documents and materials, and present them to their fellow-colleagues in their respective countries.
- Papers and other seminar documents and materials should be also selected and disseminated through IBE-UNESCO's website.
- A monthly newsletter, focusing on curriculum work and curriculum reform issues in the Gulf region should be published. Such a newsletter could have an important impact on improving awareness of education specialists of what is going on in the region and how do developments in the Gulf region relate to international developments in education reforms and curriculum change.
- It would probably be a good idea to create an e-mail discussion group and facilitate exchange through thematic discussions and specific (thematic) assignments to its members.
- Discussions on improving time allocation and ratio-weights should be linked with discussion on curriculum development and curriculum renewal based on students' competencies more closely. They have to also be linked with discussions regarding teacher and school autonomy in determining instructional content. School timetables reflect a certain philosophy of education and didactic perspective, thus one should first deal with all kind of aspects underlying time-related decision in curriculum development and curriculum revision.
- All issues approached during the seminar were highly interesting and important for curriculum renewal in the Gulf region. More time is yet needed for internalizing seminar outcomes and dealing with all these issues in depth. It would probably be a good idea to organize several similar seminars at national level and use this opportunity for in-depth professional debates at country level.
- In order to support the implementation of new ideas in the Gulf region, A Training Centre for Gulf Countries should be established.
- There is a need for better communication between planners and organisers of project activities and country teams. Members of country teams should be

informed timely about developments in the project and should also be more engaged in organising and running specific activities. It is also necessary to clearly define roles and responsibilities of different partners in the process; not only in regard to overall tasks, but also to 'small' details, like seminar discipline or time keeping.

- While the translation from English into Arabic of the project papers and electronic tools was appreciated as good and useful, simultaneous and consecutive translation during the seminar has unfortunately earned less appreciation. Thus, in the future, more attention should be given to issues of oral fluent communication and facilitation of seminar interaction.

As stated by the participants in their evaluations, the seminar provided an excellent framework for discussing the links between a competencies-based approach in curriculum development, strategies for curriculum integration and needs, and possibilities for improving time allocation and ratio-weights in order to foster quality learning. In continuation of GASERC-ABEGS I, the GASERC-ABEGS II project will have to further explore the links mentioned above and also to address the way curriculum integration could become an important factor for influencing students' achievements.

As expressed by participants, it is expected that the GASERC-ABEGS II project should provide the framework for in-depth analyses related to questions already tackled in GASERC-ABEGS I:

- Whether there is a clear way to reshape the curriculum in compliance with clear/ideal ratio-weights;
- What are most appropriate curriculum areas and which competencies should be developed through each of them/through all of them/through groups of subjects/curriculum areas;
- How to provide a better balance in the curriculum;
- How to develop the curriculum so that it meets the needs of both individuals and the society;
- What trends do exist in regards to relationships between curriculum, textbooks and other teaching aids, and teaching and learning methodologies?

GASERC-ABEGS II should also continue to improve the process of experience sharing among education specialists from the Gulf countries, envisaging issues of common interest, such as:

- How to unify in the ABEGS countries educational concepts/terminology such as 'aims', 'competencies', etc.;
- How to make good use of valuable information about ratio-weights in other countries and informative plans of study;
- What are best practices in classroom organisation/management (size of class, students' motivation, dispositions, etc.);

- What are interesting projects in curriculum innovation, such as curriculum integration projects;
 - How to contribute, through curriculum changes, education for all and life-long learning processes?
 - How to use new technologies, such as electronic tools, for analysing, evaluating and reshaping the curriculum, based on international good practices, such as curriculum integration;
 - What are the best mechanisms for exchange of information and productive networking;
 - What are the best mechanisms for effective participation of education stakeholders in the process of decision-making related to curriculum change and curriculum improvement;
 - How to relate curriculum change with important findings in international educational research more effectively?
-

ANNEXES

SEMINAR AGENDA

LIST OF PARTICIPANTS

REPORTS OF EVALUATION OUTCOMES

COMPILATION OF PARTICIPANTS' OPINIONS (TONY MACELLI)

PRESENTATIONS

**CECILIA BRASLAVSKY
MASSIMO AMADIO
HUGO LABATE
DAKMARA GEORGESCU
ANTHONY MACELLI**