



## CURRICULUM DEVELOPMENT: PROCESS, STRATEGIES AND PROSPECTS

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### Abstract :

*The curriculum is a coherent unit of planned activities that are undertaken by a learner during his entire learning career under the coaching of school to university. The curriculum indicates what objectives must be achieved by the student and what tasks must be fulfilled in order to achieve these. A curriculum always primarily relates to an entire study program and consists of course subjects and possibly groups of course subjects. Traditionally content has always been considered the most important and relevant component of the curriculum. Process of curriculum development is essential for successful achieving educational goals. Outcome-based education and a performance-based approach help to process of curriculum development in a way that offers a powerful and appealing way of reforming and managing education system of a country. This paper is an attempt to answer the following questions of curriculum development: What sort of outcomes should be covered in a curriculum? How should they be assessed and how should outcome-based education be implemented?*

**Keywords:** Curriculum, Educational Goals, Performance-Based Approach, Process of Curriculum Development, Study Program.

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### INTRODUCTION

The term curriculum is a Latin word meaning “the course of a chariot race” (Schubert, 1986). Traditionally curriculum included two elements: content and examination (Harden and Stamper, 1999). According to Burton & McDonald (2001) it is difficult to provide a simple dictionary definition for this term because of its complex nature. Simply it can be considered as the list of topics taught in the school or in an institution. In wider view it encompasses all the experiences that the student undergoes through while being part of that institution.

Strength of the curriculum is beyond the written documents produced by the faculty. Harden et al. (1997) said that a curriculum should be viewed not simply as an aggregate of separate subjects, but rather as a program of study where the whole is greater than the sum of the parts. According to Garcia-Barbero (1995) curriculum is the result of bringing together a number of elements - content, strategies and methods – to ensure quality in education and excellence in performance, but should have a right mix of elements to ensure efficiency and to facilitate learning. Harden (2001) has elaborated on this concept “a curriculum is a sophisticated blend of educational strategies, course content, learning outcomes, educational experiences, assessment, the educational environment and the individual students’ learning style, personal timetable and the program of work”.

Process of curriculum development is essential for successful achieving educational goals. It asks for systematic approach which should respect several aspects: the needs of the society, the students and teaching staff. This process should be maximal efficient and effective; it should be built upon previous work. Process itself should be done in a specific algorithm starting from the definition of final goals of the educational process, through the selection of the certain tools for achieving this goals, and integration of different elements inside one curriculum. Curriculum should present mosaics of different courses, learning and teaching strategies, and integrate it into one picture which is specific for a certain institution. It has to respect all existing material and human resources of the institution.

Involvement of the key subjects in process of curriculum development should be from the first stage of process, and that first stage is creation of a mission statement of the institution. The student is the central figure in the process of education and modern education institutions use “student centered approach” as their main philosophy in process of curriculum shaping. Students should be involved in process of design and curriculum development. Representatives of students and their organizations should be



involved in work of committees and bodies in charge for curriculum design. This fact that students are involved in shaping of their learning gives special quality to education process.

All stakeholders of institution should be included in process of curriculum development, and they all should give their view of the reasons why the institution exists. The mission statement should partly give sort of picture, what kind of student and society do we want.

### **ELEMENTS OF CURRICULUM**

Curriculum in narrow view includes content and examination. In wider frame curriculum includes aims, learning methods and subject matter sequencing. Broader concept of curriculum describes it as a sophisticated blend of educational strategies, course content, learning outcomes, educational experiences, assessment, the educational environment and the individual students' learning style, personal timetable and the program of work. Curriculum not only covers the formal teaching/learning but also the other aspects of human development associated with institutional life. It will transform a student into a productive citizen.

In the time of information explosion, the curriculum planners must not only decide what should be taught but also what can be eliminated from the curriculum, hence the need to define minimum essential knowledge and skills i.e. core knowledge and skills.

Curriculum should force learning process which is as similar as possible to professional activities (Garcia-Barbero, 1995). The curriculum is a coherent unit of planned activities that are undertaken by a learner during his entire learning career under the coaching of the university. The curriculum indicates what objectives must be achieved by the student and what tasks must be fulfilled in order to achieve these.

A curriculum always primarily relates to an entire study program and consists of course subjects and possibly groups of course subjects. Traditionally content has always been considered the most important and relevant component of the curriculum.

Outcome-based education and a performance-based approach help to process of curriculum development in a way that offers a powerful and appealing way of reforming and managing education system. The emphasis is on the product -what sort of citizen will be produced- rather than on the educational process. In outcome-based education the educational outcomes are clearly and specified. These determine the curriculum content and its organization, the teaching methods and strategies, the courses offered, the assessment process, the educational environment and the curriculum timetable. They also provide a framework for curriculum evaluation. It encourages the teacher and the student to share responsibility for learning and it can guide student assessment and course evaluation. What sort of outcomes should be covered in a curriculum, how should they be assessed and how should outcome-based education be implemented are issues that need to be addressed.

### **CURRICULUM DEVELOPMENT PROCESSING**

According to Kern it is possible to use a six-step approach to curriculum development:

#### **1. Problem identification and general needs assessment**

The most important step is the first one, the general needs assessment (GNA). The goal of step 1 is to focus the curriculum, by defining the deficits in knowledge, attitude, or skills that currently exist in practitioners and the ideal approach to teaching and learning these objectives. When completed, the GNA makes a strong argument for the need for the curriculum and identifies potential educational research questions.

A well-researched step 1 impacts steps beyond the learner objectives by identifying educational methodologies, faculty development resources, potential funding resources, and opportunities for dissemination of the curriculum. The general needs assessment is usually stated as the knowledge, attitude, and performance deficits that the curriculum will address.

#### **2. Needs assessment of targeted learners**

The general needs assessment is applied to targeted learners. What kind of learner do we want to educate it depends mostly on social needs but it can reflect job opportunities, financial rewards and attitudes acquired during process of studying. Sometimes it is very difficult to make balance between these several needs. Needs



can be obtained on different ways. It can be done through study of errors in practice. It is very difficult to design curriculum which will fully meet the needs of society and students.

At the base of the general needs and needs of targeted learners should be made essential documents for every institution, the mission statement. The mission statement should partly give sort of picture, what kind of student do we want. Involvement of the key subjects in process of curriculum development should be from the early stages of process of curriculum development, and one of the first steps is creation of mission statement of institution. All stakeholders of institution should be included in this process, and they all should give their view of the reasons why the institution exists.

### 3. Goals and objectives

Institution should define overall goals and aims for the curriculum. Specific measurable knowledge, skill/ performance, attitude, and process objectives should be stated for the curriculum. Learning goals and outputs for every course and subject should be compatible with mission of institution. It means that achieving of learning goals of different subjects and courses will lead to reaching mission of institution at the end of student studying process. Planning of new curriculum and reform of old one asks for defining of philosophy which is ` behind ` the curriculum and all its elements. Learning goal and outputs should also determinate the educational philosophy and institutional culture. So, mission of institution, educational philosophy and institutional culture are key elements of educational settings necessary for curriculum implementation.

An aim indicates the direction or orientation of a course in terms of its content. An aim is written in terms of level, teaching intentions and management of learning. The aims of the course encapsulate the purpose of the course and what the institution trying to do in providing the course. Aims are therefore more about teaching and the management of learning.

Educational objectives are the end qualifications that are aimed to be reached by the student at the end of the study program. Curriculum is in continuous process of tuning objectives to the expectations of external actors (stakeholders) and internal actors (clients). Tuning of curriculum and objectives clarifies which course subjects or which groups of subjects contribute to the different objectives.

- It is an instrument to make sound decisions for the learning environment.
- It is an instrument for evaluating subjects reliably.
- Students can derive from the objectives what they may expect from a study program; the list of objectives guides their studies.

### 4. Educational strategies

It is necessary to make a plan how to maximize the impact of the curriculum, which content should be included, how content should be organized and with which educational methods, how elements of curriculum should communicate, what kind of educational environment and climate should be developed. Content which is included must provide to student critical thinking. It must be selected and organized on the way to initiate critical approach to facts and development skill of information retrieval.

#### ➤ Some possible educational strategies:

##### • Student centered/ teacher centered

Student centered strategy ask for active role of student in process of definition of curriculum, decision about learning methodology and decision what and when they will study. Second strategy is based on teacher decisions what, when and how will certain subject be studied.

##### • Problem solving/ information gathering

Problem solving strategy is based on student acquiring of knowledge through process of problem solving approach. Information gathering is a strategy based on student presentation of gathered information.

##### • Integrated multidisciplinary approach

This strategy is based on integration of different disciplines. Mostly integration is made around certain social systems. Basic sciences, mathematics, civics, languages and Social sciences subjects are integrated around the social system which they studied.

##### • Community based approach



Community based teaching is educational strategy based on studying in community problems and their solutions.

- **Elective/ standard**

In elective strategy studying process is organized on the way that all students have the same core curriculum while they choose certain aspects which they want to study more deeply through elective courses. In standard curriculum all students have same curriculum without possibility to choose elective subjects.

- **Systematic planned/ opportunistic**

In systematic approach teaching and learning experience are planned. In opportunistic approach student follow the instructions of a trained teacher as it is.

## 5. Implementation

A plan for implementation, including timelines and resources required, should be created. A plan for faculty development is made to assure consistent implementation.

- **Management of curriculum implementation**

Clear responsibility of certain bodies, committees and individuals should be one of key elements in the process of curriculum implementation. Role of the students in process of curriculum management should be clearly defined. The committee for coordination among courses in order to synchronize objectives of courses and overall curriculum should be established.

- **Teaching environment**

Very important aspect of successful implementation of curriculum is teaching environment and fact whether the atmosphere inside the institution is encouraging for the people with ideas, initiatives and cooperation among students. It is desirable to establish a sort of “department of curriculum development”. The role of this department should be strengthening and expanding of faculty and curriculum development programs at the school and its attributes, with the purpose of enriching and advancing the school's educational mission. It should play a key role in the educational activities of the school. It works in collaboration with faculty to design, implement, and assess new courses, innovative teaching methods, and distance learning and educational technology initiatives. This department should provide programs in numerous aspects of classroom teaching, so that faculty can expand their knowledge base in education and enhance their teaching skills; develops workshops and seminars upon faculty request; assists individual faculty who would like to improve their teaching; and provides faculty with consultation on and assistance with projects.

- **Organization of course content**

Organization of courses inside curriculum must be done in accordance with the needs which are derived from the mission statement of the institution. Finding of appropriate ratio between different subjects in aspects of time and quantity of number of lessons and exercises is a special problem. The ratio between theoretical and practical teaching should be made in that way that final student knowledge is the highest possible level of the Millers pyramid of knowledge. According to modern trends in education and following by certain suggestions in Bologna declaration it has to be 60% of practical, and 40 % of theoretical work.

Special accent is put into integration of different courses inside curriculum. The vertical and horizontal curriculum coherency of the course must be provided. By integration we mean that the position of certain course inside curriculum is very precisely determined. Its position is based on the student previous knowledge, and it should make student able to follow the teaching process on other courses at the same academic year. Student learning achievements at the end of certain course should make student able for the following of the teaching process at the next academic year.

Definition and organization of the course inside curriculum include:

- Defining of requirements for attending of teaching process from particular course
- Course content
- Class timetables of contact hours,
- Learning and teaching methods
- Course credits and student workload



- Schedule of examinations, structure of examination,
- Compulsory and optional course elements
- Details of each component course, include:
- Learning outcomes,
- Objectives, syllabus,
- Assessment criteria,
- Reading lists (essential and background).

➤ **Teaching Methodologies**

Teaching methods for certain course must be carefully selected. It has to provide to the students although having different habits the same possibilities for adoption of the knowledge. The methodology must be suitable to provide life-long learning and the capacity for the application of student's knowledge in the practice. Methodologies can be selected according to the human and technical capacities of the institution. It has to respect educational philosophy of the institution. Modern educational institution follow student centered approach in their philosophy.

Teaching methodologies must provide the “active process of learning. When we want to implement new curriculum we have to reconsider two main questions related with good settlement of teaching methodologies:

What is the size of the student group?

Which teaching tool should we use?

Size of the group can be influenced with learning objective and some of the objectives are more achievable in the small group while other ones can be reached in large groups or in the individual.

Finding suitable technical tools which are the most suitable for certain learning goals is second important issue. These tools should offer student possibility to choose tool, time and place where to learn. Certain tools can be used in some particular context, but mostly all tools can be used in all settings. Using of different tools depends on course objectives, technical possibilities of institution and possibility of staff to use certain technical equipment. Variety of teaching tool such as: computers, slides, posters, videotape, audiotape, cameras, simulators, patients should be available to teaching staff but to students as well. Certain teaching tool can be more suitable for work with some particular size of the group for example computers can be used for individual work. Combination of using of teaching tools can be used for teaching units.

**6. Evaluation and feedback**

Evaluation of curriculum presents the final stage inside cyclic process of improvement and development of curriculum. Without evaluation procedure it would be hard to imagine monitoring of institution progress toward desired needs. This process is necessary to provide the evidences that institution made a step in the right direction, as well as useful information to stakeholders. It helps in the process of identification of problems inside curriculum and institution, solving of problems and redesigning of certain aspects of curriculum. Evaluation can be performed as short-term and long-term evaluation. Short-term evaluation has a role of “friendly” criticism, while the long term evaluation is a crucial one, with much deeper impact. Department for quality assurance is usually in charge for conducting of such procedures and it is up to them to decide about many aspects of this process.

Evaluation of curriculum can be made through evaluation of many different aspects as:

- Psychological and interpersonal skill
- Continuing learning
- Professional satisfaction
- Behavior of the learner
- Educational achievement and cognitive development
- Institutional issues
- Student passing rates
- Making of mistakes/errors
- Problem solving



- Educational cost per student
- Cost efficiency of every student

It is very important to carefully define the appropriate time for evaluation for each of these areas as well as the methods for its measuring. Evaluation will only have full meaning if it is followed by action in order to improve areas which are estimated as weak points of curriculum. This action is obligatory for relevant bodies and management structures and should be described precisely inside document policy agreement.

### CONCLUSION

Curriculum is not something static, and permanent change is one of their key features. Curriculum development in education is a process that integrates a content area with educational theory and methodology and evaluates its impact. When curriculum development follows a systematic approach, it easily provides high-quality evidence of the impact of a faculty member's efforts in order to improve educational process at the institution. Perhaps one of the possible ways is to measure key outputs of one curriculum. We can measure several outputs such as: physical aspects, social aspects, interpersonal skills, continuing education, clinical problem solving, student satisfaction, costs of education. In the time of information explosion, the curriculum planners must not only decide what should be taught but also what can be eliminated from the curriculum, hence the need to define minimum essential knowledge and skills i.e. core knowledge and skills.

### REFERENCES

- Burton , J. L. & McDonald. S. (2001). Curriculum or syllabus: which are we reforming? *Medical Teacher*, 23(2), 187-191.
- Garcia-Barbero, M. (1995). Medical education in the light of the world health organization health for all strategy and the European Union. *Medical Education*. 29:3–12.
- Harden, R. M. (2001). Curriculum mapping: a tool for transparent and authentic teaching and learning. *Med. Teach*. 23 (2):123-137, DOI:10.1080/01421590120036547.
- Harden, R. M., & Stamper, N. (1999). *What is a spiral curriculum medical teacher*, 21, 141-143. doi10.1080/01421599979752.
- Harden, R. M., Davis, M. H. and Crosby, J. R. (1997). The new Dundee medical curriculum: a whole that is greater than the sum of the parts. *Medical Education*, 31: 264-271.
- Schubert, W.H. (1986). *Curriculum: perspective, paradigm, and possibility*. New York: Macmillan.