Needs - Based

Curriculum Development Process: A Multilevel Conception

By:

Mahmoud Mehrmohammadi (PhD)

Associate Professor

Education Department

Tarbiat Modarres University (T. M. U.)

P. O. Box 14115-111

Tel: 0098 (21) 8011001 Ext. 3608

Fax: 0098(21) 8028236

e-mail: Mehrmohammadi @ hotmail. Com

Introduction

Curriculum specialists have not dealt extensively and explicitly with the issue of needs assessment. This is in contrast to the field of "educational planning" and "instructional design" where many different conceptions of this process has created a voluminous literature on the subject.

The assessment of needs is a critical and complex issue, which comprises the most significant component of curriculum development process. Teachers should play a pivotal role in this process if effective learning is ever going to take place.

Basic Premises of the Proposed Curriculum Development Model

The model presented is rooted in five basic assumptions as follows:

1. Curriculum and Instruction (Instructional Design) are not separate or independent academic fields functioning in isolation from one another (Klein. 1991; Goodlad 1979; Mehrmohammadi, 1998). Instead, they lie on one continuum and occupy different places on it. In other words curriculum, considering its different meanings; as "a document", "a system", or "a field of study" (Beauchamp, 1981); is regarded to be a realm so inclusive that incorporates instruction as an integral part.

- Curriculum discourse, it is believed, can legitimately address issues that are frequently relegated to the field of instruction.
- 2. All three "fundamental factors of education " (Dewey, 1902) or " sources of decision-making" (klein, 1980) must be incorporated in a needs based curriculum model to assure the desirability of the outcome.

In other words, the long held view of the contradictory nature of these sources of information can be fundamentally, and not superficially as in Tyler rationale (Kliebard, 1986), reconciled. Such integration or reconciliation paves the way for distancing the curriculum from its traditional conceptions [i. e. technical, means- ends, or "measured curriculum" (Klien, 1986)].

- 3. A centralized curriculum development system is considered to be a more realistic option at least for developing countries. In many developing countries too, this indeed is the functioning mode and many developed countries are moving, though with different paces, toward developing centralized "national or state mandated curriculum" (klein, 1991; Schubert, 1989). The proposed model operates within the boundaries of such a curriculum development system.
- 4. The model, from another perspective, transforms centralized interests of policy makers into a reasonable state by stimulating the distribution of decision making power while keeping the central office as a key player. It might, therefore, alternatively be regarded as

an scheme aimed at curbing radical centralization tendencies.

5. Reasonable, purposeful and localized efforts at decentralizing the curriculum development process effectively increases the chances for obtaining the intended consequences of the program by capitalizing on factors proven to be involved in the implementation process, such as the "sense of ownership".

Major Concepts (Features) of the Model

1. Multiple Levels of Needs Assessment

In line with the illuminating concept of "levels of curriculum decision making" (Goodlad,1979 and Klein, 1991), it is proposed that needs assessment be undertaken at different levels and stages, each being distinguishable by certain unique characteristics.

2. Differential Emphasis on Information Sources

Different levels or stages of needs assessment require emphasis to be placed on different sources.

"Macro Level" decision making calls for an assessment where major attention should naturally be paid to subject matter and society as relevant information sources for purposes of identifying "educational needs" (Unruh and Unruh, 1984), while relatively less attention can be paid to students for purposes of extracting "psychological needs". On the

contrary; "micro level" needs assessment represent an activity which require stronger emphasis put on students as a data source aiming at the identification of "psychological needs." While less strong emphasis on other two sources, namely subject matter and society, is required.

3. Dynamic and Interactive Nature

Needs- based curriculum development is a highly dynamic process. This is in contrast to the static image usually portrayed for this process within centralized contexts. It is a principle contention of this model that dominant views on curriculum development focusing exclusively on the planning stage are consonant with the traditional means- ends conception of curriculum. A more defensible needs assessment, it is argued, entails continued participation in curriculum decision making as a primary concern of curriculum practitioners at all stages or contexts of "curriculum engineering" process (Beauchamp, 1981). In addition, the levels or stages are interactive and, as depicted in figure1, mutually inform and reinforce one another.

In other words, needs-assessment is not done once in for all. It is, rather, a continuous process and curriculum delibration should never be considered final. Otherwise, decisions and actions that follow the percieved terminal stage will be conducted in a non-delibrative spirit which is thouroughly incommensurate with the requirements of any educative process.

4. the Necessity of Appeal to Different Types of Data

The proposed curriculum development model incorporates and encourages the utilization of different types of data, namely quantitative and qualitative or interpretive data (Eisner, 1994). Each type of data is best suited to the process of acquiring needs information or decision or decision making at a specific level, mindful of the type of data expected from each data source.

The proposed Curriculum Development Model

Based on the points presented thus far, the following conceptual model is proposed as a multilevel approach to curriculum development process. Phases of "curriculum planning," "curriculum implementation" (rooted in Beauchamp's concept of "curriculum engineering") are dealt with in its own right. Evaluation, the final phase of curriculum engineering however, is seen as an encompassing element, i. e. no activity in this domain can or should be carried out devoid of an evaluative character of some sort. Therefore, including evaluation in the needs assessment process in the same way as planning and implementation are included is not deemed plausible.

Evaluation, in other words, need not be treated independently as an isolated phase in this model, since decision inevitably takes place within a broad evaluation context, either formal or informal. Decisions, in other words, can or should only be understood as a byproduct of conscious or

unconscious act of evaluation.

The conceptual model is depicted in figure 1 and major characteristics of each level of needs – based curriculum development are summarized in the following table. Detailed discussion of each level of curriculum development, based on ten characteristic dimensions identified by the model, is presented next. The ten dimensions are: geographic coverage, subject matter specificity, final decision product, orientation to time, dominance by type of need, dominance by source, dominance by type of data, key players, final product stability and ainal product specificity.

The model's claim is rather modest. It is thought to represent a rough estimate of what should take place in terms of division of labour in the curriculum delibration process.

MALSFNA*

This is the first level of macro scale curriculum development.

Decisions made at this level lead to the determination of the educational manifesto of the state or what some curriculum scholars refer to as curriculum ideologies (Eisner. 1994). This statement serves as the foundation for curriculum decision-making and includes general, subject-free, value choices, which embrace a particular notion of educational needs. In his last attempt, Eisner has identified six such ideologies and refers to them as:

Religious orthodoxy, Rational humanism, Critical theory,
 Reconceptualism, Progressivism and Cognitive pluralism.

Ideologies or orientations (Miller, 1983) are necessarily statements oriented towards the future, not meant to inform immediate teaching - learning decisions or the here – and – now.

The dominant data source is society or culture at large and the most pertinent type of data are normative, not empirical, making the statement robust and less susceptible to change. Key players are, typically, system wide policy makers or politicians who traditionally try to influence this document of national significance by resorting to whatever means accessible to them (Kliebard, 1986). Teacher's professional organizations, however, depending on social and political strength can play a significant role at this stage of curriculum development.

8

^{*}Macro-Level Subject-Free Needs Assessment

MALSPNA*

This level represents the second and final stage of macro scale curriculum development. Decisions made at this level lead to the determination of curriculum framework/ guides or curriculum standards, which is necessarily subject (topic or theme) specific. The model proposes that this document mark the termination of curriculum planning deliberations and that curriculum developers should not carry it further to culminate in a more detailed specification of curricular elements.

In other words, deliberations aimed at curriculum development should sieze at a point where a subject or topic – specific perception of educational needs is born out and major decisions about the curricular commonplaces have been reached by the group involved.

Decision makers, who are usually comprised of subject specialists (academics), curriculum specialists and practicing teachers (Mehrmohammadi, 1998), draw on two major sources of decision making, namely subject matter structure and knowledge about societal needs. Genuine and comprehensive attention to students and their needs, interests, background, etc., however, is not deemed possible at this stage of development.

Data used as the basis for deliberation at this stage is mainly of quantitative type drawn from scientific theory and research in areas such as social needs and deficiencies, developmental tasks of the age group in

9

^{**} Macro-Level Subject-Specific Needs Assessment

focus, country's strategic development plans, learning theories, less than adequate conduct of public(citizenry) in different social domains, etc. as it pertains to the subject matter or topic in focus.

Finally, the product of this stage of curriculum development is expected to be less stable and also less diffuse than the product of previous stage.

MILSPNA*

This level represents the first level of micro scale curriculum development. This stage of development which marks the starting point of implementation of the curriculum, leaving behind the realm of planning, leads to the modification of the curriculum framework representing the final product of the previous level. The modification is based on the perceived needs and requirements of the particular region (province) of the nation. Additionally decisions made at this stage could conclude in the selection and adoption of curriculum materials or textbooks deemed suitable for the social, economic, historical, political and educational parameters peculiar to the region and consistent with its future development directions as stipulated in official documents.

Decisions made at this level, in contrast to previous two levels, are made for the here- and- now, intended to approximate operationalized curriculum for a relatively specific context of use. As far as decision

^{*} Micro-Level State-Specific Needs assessment

sources are concerned, society and students enjoy a priority over the subject matter or the disciplines. Moreover, while both educational and psychological needs play an active role in the deliberations at this stage, attention to students as a data source or consideration of psychological needs is prominent enough to become the distinguishing element drawing a line between this level of decision making and the first two.

State level curriculum specialists and practicing teachers should optimally play a major role in making decisions, i.e.: adaptation of curriculum frameworks and/ or adoption of curriculum materials.

MILCSNA*

This level of curriculum development is where curriculum takes its final shape and embrace decisions made to adapt the curriculum framework or the state adopted textbooks to the needs, interests and background of a particular group of students at a specific site. Decisions are highly specific (contextuaized)and are taken to align the curriculum with knowledge, skills, capabilities and possible learning difficulties of a particular group in a particular subject area.

Site-specific curriculum adaptation (Short, 1982), or what constitutes narrow scale school- based curriculum development (Lewy, 1991), represents a critical stage in this process in which teachers play a pivotal

^{*} Micro-Level Classroom-Specific Needs Assessment

role. Teachers' sensitivity, reflectiveness (Shon, 1987), competencies and professional knowledge and skills literally spells out how effectively this substantial task is carried out. The appropriateness of this set of decisions in turn, determine the effectiveness of learning or the quality of learning students experience.

Teachers should obviously rely more on qualitative data, engaging in constant transaction with or meaning extraction from the learning environment, interpreting the unfolding events to reach spontaneous decisions that is immediately carried out in the classroom. This spontaneity of decision-making in light of active perception of what transpires in the classroom is the most important dimension of teacher involvement in curriculum decision-making. This is the development stage where most of the literature on teacher participation and teacher adaptation put emphasis on (Elbaz, 1989, Smylie, 1994).

Concluding Remarks

Curriculum development is a complex undertaking. The complexity of this process necessarily translates into a complex conceptualization.

However, by trying to integrate the appearantly inconsistent knowledge available through curriculum literature, the achievement of such end must be rigirously pursued.

This article proposes a mode, which regards curriculum development as a multilevel needs- assessment activity. Two phases of curriculum

planning and curriculum implementation should be considered as critical stages where curriculum formation takes place. Decisions made at macro level are farther apart from the classroom and represent generic decisions. While decision made at micro level are those that are more attentive to the special needs and concerns of a better-known group of learners.

This conceptualization places a heavy burden on the shoulders of practicing teachers and calls for their participation in macro level decision-making and their reflectivenss in the teaching – learning process. A reflective and thoughtful teacher is the one who sets the limit of effectiveness of learning since he or she literally transforms the curriculum from a so-called "dead" entity to a "live" or operationalized one.

The model, therefore, requires serious attention be paid to teacher training and in- service programs to further consolidate the professional knowledge base and skills of the teaching force. Creating a support infrastructure is also necessary to encourage and facilitate teacher's involvement in the sphere of curriculum decision-making.

References

- G. A. Beauchamp. Curriculum Theory. 3 rd edition. (P. E. Peacock Publishers Inc, 1981). P.7
- J. Dewey. The Child and the Curriculum. (University of Chicago Press, Chicago, 1902).
- E. W. Eisner. The Enlightened Eye. (Macmillan Publishing Company, 1994).
- F. Elbaz. Teacher Participation in Curriculum Development.

 (International Encyclopedia of Curriculum. 1989).
- J. I. Goodlad. Coda: The Conceptual System for Curriculum Revisited.
 Chap. 14, Goodlad and Associates, Curriculum Inquiry: The Study
 of Curriculum Practice. (Mc- Graw Hill, N. Y., 1979).
- M. F. Klein. A Conceptual Framework for Curriculum Decision –
 Making. In the Politics of Curriculum Decision Making. Klein (ed.), (SUNY Press. 1991)
- M. F. Klein. Beyond the Measured Curriculum. Theory into Practice. (TIP). (winter, 1986).
- M. F. Klein. Curriculum Design. (International Encyclopedia of Education, 1980, V. 2)
- H. M. Kliebard. Reappraisal: The Tyler Rationale. In Curriculum Theorizing, W. Pinar (ed.), 1986.

- H. M. Kliedard. The struggle for the American Curriculum 1893- 1958. (Rutledge Kegan Paul, Boston, 1986).
- A. Lewy. National and School- Based Curriculum Development. (UNESCO, IIEP. 1991).
- M. Mehrmohammadi (2000). Optimum Configuration of Curriculum
 Decision Making Groups. Journal of Humanities. Az Zahra
 University Summer 2000.
- J. P. Miller. The Educational Spectrum: Orientations to Curriculum.

 (Longman, N. Y., 1983)
- D. A. Schon. Educating the Reflective Practitioner. (Jossey Bass Publishers. San Francisco, 1987).
- W. H. Schubert. National Curriculum Histories: An Overview.

 International Encyclopedia of Education, 1989, V. 2)
- E. C. Short. Curriculum Development and Organization. (Encyclopedia of Educational Research, 1982, V. 1.)
- M. A. Smylie. Curriculum Adaptation. (International Encyclopedia of Education, 1994, V. 2)
- D. Tanner. Curriculum History. (International Encyclopedia of Education, 1982, V. 1)
- G. G. Unruh and A. Uuruh. Curriculum Development: Problems.
 Processes and Progress. (Mc. Cutchan Publishing Corporation, 1984).

Summary Characteristics of the Multilevel Model of Curriculum Development

	FEATURES LEVELS		Geographic coverage	Subject matter specificity			Dominance by	Dominance by Source	Dominance by type of data	Kev players	Final product	Final product specificity
Planning Phase	1	Macro	Country/state	Subject free	Manifesto/ Ideology/ Conception	Future	Educational needs	Society (culture at large)	Normative	Policy makers, politicians	high	Highly general, diffuse
	2	Macro	Country/state	Subject specific	framework/	Future	Educational needs	Society subject matter	Quantitative	Subject specialist, practicing teachers	Moderate	General
Implem- entation	3	Micro	Region/ Province	Subject	framework or text	Present	Psychological needs educational needs	Students society	Qualitative	State level curriculum specialists, practicing teachers	Moderate	Specific
Phase	4	Micro	School/ classroom	· c		Present	Psychological needs	Students	Qualitative	Teacher or a group of teachers	Low	Highly Specific

EVALUATION

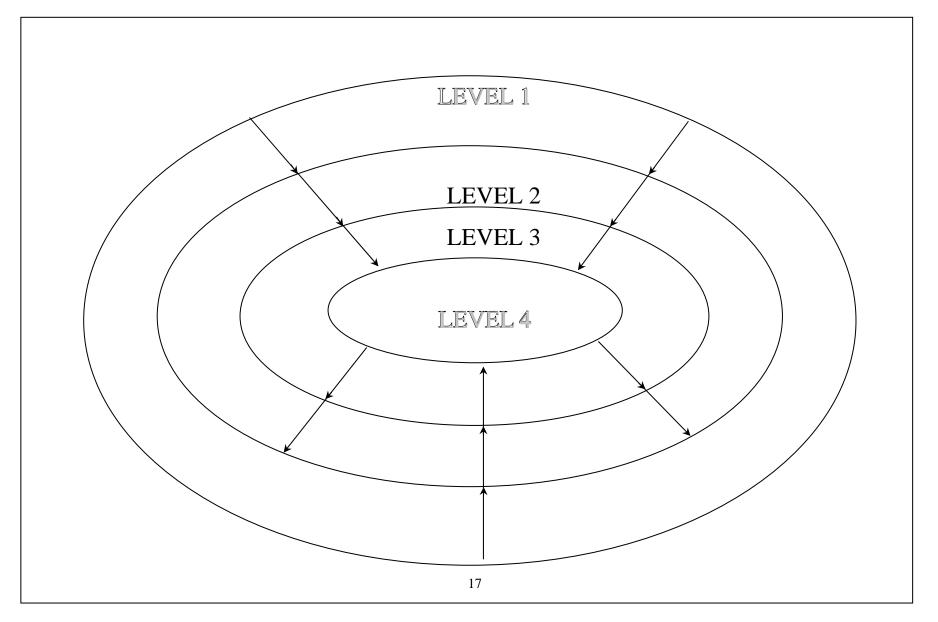


Figure 1: The Conceptuel