Curriculum evaluation model-KÖNDEM

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Abstract. The aim of this study is the transformation of "Demirel Analytic Curriculum Evaluation Model-DAPDEM" developed by Demirel in 2006 into Curriculum Evaluation Model-KÖNDEM in order to be used in evaluation of the curricula. In KÖNDEM the evaluation of the curriculum is foreseen to be based on "desk-based curriculum analysis" and "curriculum analysis with stakeholder/beneficiary opinions". The first dimension comprises the evaluation of the curriculum itself and the written materials related to the curriculum. In the second dimension, it is aimed at evaluating the curriculum with the opinions of the students, teachers, principals, graduate students, parents, sector representatives, and non-governmental organizations (NGO's) who are affected by the curriculum. In both of the dimensions, the analysis of the draft and existing curricula and the comparative analyses of the draft/existing/previous curricula is done. In the model, it is set forth that the analyses should be actualized in context, aim /objective/ attainment, content, learning-teaching processes and evaluation dimensions.

Keywords: Curriculum evaluation, curriculum analysis, Demirel's analytic curriculum evaluation model- DAPDEM, Curriculum development model-KÖNDEM

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INTRODUCTION

In the 21st Century, the decisions that affect the scope of curriculum will have an important impact on the structure and content of school studies. First, as early as 1918, Bobbitt stated that the concept curriculum development is based on learning objective (Chen, Chen, & Cheng, 2012). According to Tanner & Tanner curriculum is defined as "the planned guided learning experience and intended learning out-comes formulated through a systematic reconstruction of knowledge and experiences under the auspices of the school for the learner's continuous and willful growth in academic, personal and social competence" (cited in Bharvad, 2010, p. 72).

The design process of a curriculum is composed of; all processes of designing, implementation, and evaluation and development stages. Curriculum evaluation process included in curriculum design also comprises all the basic processes needed for curriculum design, implementation and development as curriculum evaluation aims to search for how the curriculum will be designed, implemented and developed. Although curriculum practices are important in deciding for the efficiency of curriculum designs, mostly curriculum designs and implementations could be different. Therefore, curriculum design and implementation should be evaluated and deficient and insufficient dimensions should be developed in accordance with these evaluation results.

Curriculum evaluation refers to the collection of information on which judgment might be made about the worth and the effectiveness of a particular curriculum (Hussain, Dogar, Azeem & Shakoor, 2011, p. 265). There are different evaluation models in literature. Some of the curriculum evaluation models attach importance to documents analysis and focuses on curriculum plan and related materials. Some of them focus on students' achievement and they place emphasis to aims and outcomes of the curriculum. The other curriculum evaluation models are mainly related to learning-teaching process and they focus on curriculum implementation, which means that curriculum in-use. According to Stake (1975, p. 13) curriculum evaluation carry out to accomplish many different purposes such as;

- ✓ to document events
- ✓ to record student change

- ✓ to detect institutional vitality
- ✓ to place the blame for trouble
- ✓ to aid administrative decision making
- ✓ to facilitate corrective action
- ✓ to increase our understanding of teaching and learning

Each of these purposes are directly or indirectly related to the values of curriculum and may be a legitimate purpose for a particular evaluation study.

Stufflebeam (1999) summarizes curriculum evaluation studies as two phases based on chronically the development of curriculum evaluation that the first phase covers 1940-1980 and the second phase includes 1980-2000. The first phase begins with publications by Tyler (1942, 1950), Campbell and Stanley (1963), Cronbach (1963), Stufflebeam (1966), Tyler (1966), Scriven (1967), Stake (1967), Stufflebeam (1967), Suchman (1967), Alkin (1969), Guba (1969), Provus (1969), Stufflebeam et al. (1971), Parlett and Hamilton (1972), Eisner (1975), Glass (1975), Cronbach and Associates (1980), House (1980), and Patton (1980). The second phase includes studies of Cronbach (1982); Guba and Lincoln (1981, 1989); Nave, Misch, and Mosteller (1999), Nevo (1993); Patton (1982, 1990, 1994, 1997); Rossi and Freeman (1993); Schwandt (1984); Scriven (1991, 1993, 1994a, 1994b, 1994c); Shadish, Cook, and Leviton (1991); Smith, M. F. (1989); Smith, N. L. (1987); Stake (1975b, 1988, 1995); Stufflebeam (1997); Stufflebeam and Shinkfield (1985); Wholey, Hatry, and Newcome (cited at Stufflebeam, 1999). The second group studies include alternative approaches or models of curriculum evaluation. Among the most important differences in the first and the second phase is that the first group sets forth doing a curriculum evaluation model with a more linear approach and without a feedback system.

By gathering together at least two or more of the abovementioned curriculum evaluation models, hybrid or mix curriculum evaluation models could be generated. Hybrid and mix models are generated when the current models could not be used in accordance with the aims of the curriculum evaluation research. In some cases, curriculum evaluation models could be far away from fulfilling the need arises. Therefore, when planning and actualizing an appropriate evaluation process in accordance with the aims of the research is necessary hybrid curriculum evaluation model design could be generated.

The aims and processes of curriculum design, practice, evaluation and development studies should be well embraced. Models should be used for the design, practice, evaluation and development of a curriculum. However, when designing models, their effectiveness should be tested on table and operatively and then be used in curriculum studies. Serious problems could occur in the case of design, evaluation and development models of the current curriculum if no field testing is made and just practiced as designed in the theory. Therefore, the curriculum evaluation models should be developed by evaluating. However, no example of a model that has been developed by testing with a very comprehensive research is found in the literature. So, in this study DAPDEM1 designed by Demirel (2011) has been evaluated and developed based on a field testing.

The initial Demirel's Analytical Curriculum Evaluation Model (DAPDEM1) was developed in 2006 by Demirel (Demirel, 2006). Demirel's Analytical Curriculum Evaluation Model, seen in Figure 2, constitutes a basis for evaluation of the curricula and the model has two dimensions. In accordance with the model, the study has been carried out using a mixed method wherein the qualitative and quantitative study patterns were used jointly.

The first dimension includes the curricula itself, as well as the written materials relevant to the curriculum. This dimension, named as curriculum analysis, covers curriculum design, context, need analysis studies and detailed analysis and evaluation of input, process and output dimensions of the curriculum. In the first dimension, analysis procedure starts with curriculum design. Accordingly, the philosophy the curriculum is based on, the learning theory/theories centered and the components of the curriculum dimensions; goal, content, process and evaluation and their interrelationship are respectively analyzed.

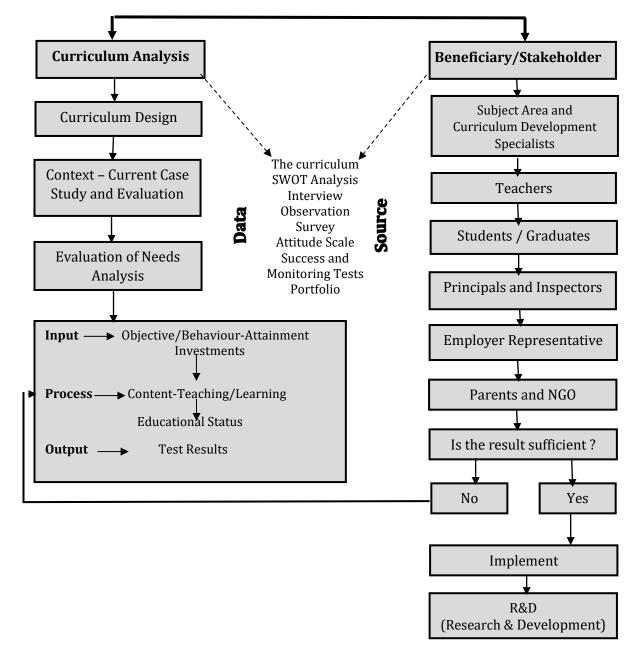


FIGURE 1. Demirel's Analytical Curriculum Evaluation Model (DAPDEM1)

After the analysis of the curriculum design, the current situation is desired to be analyzed and this is suggested to be done with SWOT analysis which examines the strong and weak characteristics as well as the threats of the practice of the curriculum. Also, need analysis during the curriculum design preparation is also suggested to be evaluated in this dimension. Finally, the evaluation of the prepared curriculum is proposed to be evaluated in input, process and output dimensions via examination of the curriculum documents.

The second dimension is the opinions of the beneficiaries of the curricula. This dimension entitled as beneficiaries involves the opinions of field experts, curriculum development experts, students, graduates, principals and inspectors, parents, non-governmental organizations (NGO's) and employer representatives on the curriculum. In the model, the beneficiary/ stakeholder opinions are anticipated to be evaluated separately. In obtaining these opinions, suitable evaluation instruments primarily observation, interview, survey and tests are found appropriate to be benefited from. If the curriculum is not sufficient in terms of beneficiary opinions, feedback on the input, process and output dimensions of the curriculum is anticipated. If the curriculum is

sufficient in terms of beneficiary opinions, then the practice and research and development studies at the end of the practice should be performed. In this research, it is aimed to analyze the structure and context of the Demirel Analytical Curriculum Evaluation Model (DAPDEM1) and transforming it into Curriculum Evaluation Model-KÖNDEM. In accordance with the general aim, answers to the following questions were sought:

- 1. What sort of changes in the structure and functioning of the model has arisen with DAPDEM1's development in practice?
 - a. How is the structure and functioning of DAPDEM2?
 - b. How is the structure and functioning of DAPDEM3?
 - c. How is the structure and functioning of DAPDEM4?
- 2. How is the structure and functioning of KÖNDEM that has arisen with DAPDEM development studies?

METHODS

Delphi method has been used in Demirel Analytic Curriculum Evaluation Model-DAPDEM1's updating and development study. These studies, as seen in Figure 2 are actualized in four stages composed of Delphi rounds between 2011 and 2017.

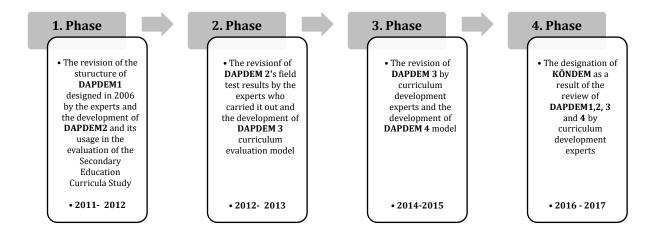


FIGURE 2. The research process on the transformation of DAPDEM1 to KÖNDEM

In the first stage of the research DAPDEM1 curriculum evaluation model designed by Demirel in 2006 was examined and reorganized as DAPDEM2 by the experts in the research group in order to be used in evaluation of secondary education curricula and was applied in the research (MEB, 2012). In the second stage, results obtained from the field test of DAPDEM2 were reconsidered and DAPDEM3 was designed. In the third stage of the research, the need to determine whether the updates made in DAPDEM3 were sufficient or not, DAPDEM3 were broached to curriculum development experts who were not in the research group and DAPDEM4 model was developed. In the fourth stage, all developed models were deeply examined by the three curriculum development experts who took part in all stages of the research and KÖNDEM was designed. KÖNDEM is named after the first letters of the researchers' names who have been working on the model for approximately six years. For designed model, it was decided that it would be appropriate the name KÖNDEM that was formed with KÖN which was formed together with the first letters of the researchers **K**ıymet, **Ö**zcan and **N**evriye and with DEM which was the abbreviation of Evaluation Model (Değerlendirme Modeli). In the process of KÖNDEM's publication as an article, the designer of DAPDEM1 Demirel suggested the name for the new model and recommended that the article would be in the names of the two researchers who have carried out the development study of the model.

The Study Groups of the Research

As data were taken from a different study group in each stage of the research, four study groups were included in the research. A total of 55 experts incorporated in the research. The experts in the four study groups are seen in Table 1:

Table 1. The study groups of the research

Study Groups	The Experts in the Study Group	Number of Experts	The Developed Model (The Model Developed)
Study Group1	Curriculum development expert	8	
	Field expert	3	DAPDEM2
	Assessment and evaluation expert	4	
Study Group2	Curriculum development expert	8	
	Field expert	3	DAPDEM3
	Assessment and evaluation expert	4	
Study Group3	Curriculum development expert	22	DAPDEM4
Study Group4	Curriculum development expert	3	KÖNDEM
Total Number of Experts		55	

Total 55 experts have transformed DAPDEM1 into KÖNDEM by benefiting from all the changes and developments in all processes of the research. Curriculum development experts and assessment-evaluation experts are faculty members working in the educational sciences department of the faculties of education with different status and titles. Field experts are faculty members who teach in the departments of different professional disciplines such as science, social sciences, vocational and technical education in the faculties of education of the universities. The professional experience of all experts ranges from 5-30 years.

RESULTS

In this section the development processes and structure and operation of DAPDEM2, DAPDEM3, DAPDEM4 and KÖNDEM.

The Development Process, Structure and Operation of DAPDEM2

In 2011, after deciding to use DAPDEM1 in Evaluation of Secondary Education Curricula Project research, whether this model is practicable for this research DAPDEM1 and the criterion set forth by the model has been studied. After this process DAPDEM1 and its criterion was developed in line with the project aims and DAPDEM2 and its criterion were formed. Evaluation of secondary education research was planned and practiced based upon this model and its criterion. DAPDEM2 model is presented in Figure 3.

DAPDEM2 is also consisted of two dimensions as in DAPDEM1; curriculum analysis and beneficiary opinions. As for the secondary education curricula research has covered the comparative analysis of the current and the previous curricula, comparative analysis of the current and previous curricula via document analysis was foreseen in the curriculum analysis dimension of DAPDEM2. In these comparisons; comparative evaluation of the input, process and output dimensions of the curricula were taken as a basis. No such comparative evaluation existed in the curriculum analysis dimension of DAPDEM1. Comparative curriculum analysis and evaluation are actualized by the field and curriculum development experts in DAPDEM2. Therefore, unlike in DAPDEM1, DAPDEM2 field and curriculum development experts do not take part in beneficiary opinions dimension. While in DAPDEM1 the analysis and evaluation of input, process and outputs in only curriculum analysis dimension, in DAPDEM2 even opinions of the beneficiaries on input, process and output dimensions are foreseen to be taken in curriculum analysis dimension. Whereas there is only feedback from beneficiary opinions on the curricula in DAPDEM1, in DAPDEM2 there is embracement of both the curriculum analysis and the results from beneficiary opinions and commenting on the curriculum. Document analysis which was not present in DAPDEM1 was added to the data resources and tools in DAPDEM2.

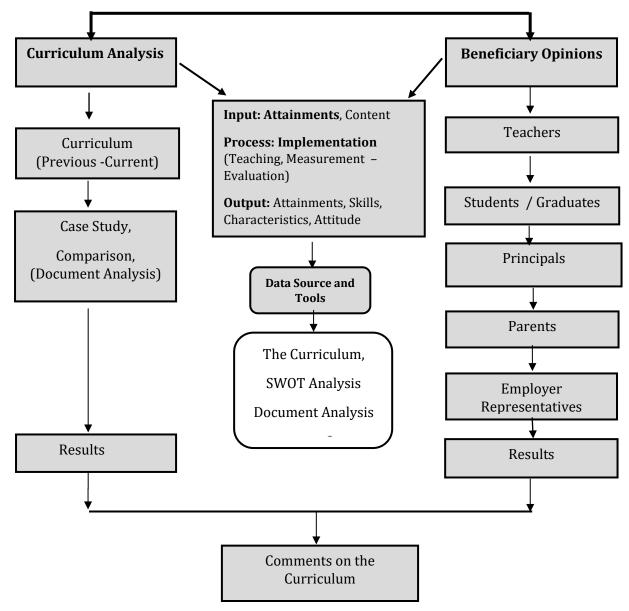


FIGURE 3. Demirel's analytical curriculum evaluation model (DAPDEM2)

In the context of Evaluating Secondary Education Curricula Project, firstly as needed by the curriculum analysis dimension of DAPDEM2, current and previous curricula and curricula evaluation criterion developed with DAPDEM2 (MEB, 2012, p. 45, 86) were taken as a basis and evaluation was done with the opinions of the field and curriculum development experts. As a result, a total of 36, 20 of which are from general secondary education and 16 from the vocational and technical curricula were evaluated (MEB, 2012). Moreover, in the context of the curriculum evaluation study, teacher, student, principal, graduate, parent and employer representative opinions were taken about the all abovementioned curricula.

The Development Process, Structure and Operation of DAPDEM3

DAPDEM2 was reexamined and updated by Demirel, Selvi and Yazçayır (2012) who carried out the field testing of the model in the context of Evaluation of the Secondary Education Curricula Project based on the results taken from the field research and DAPDEM3 seen in Figure 4 was arisen. In developing DAPDEM3, the opinions of the experts who used DAPDEM2 and its criterion and evaluated the secondary education curricula desk-based and determined the beneficiary opinions in the field were benefitted from.

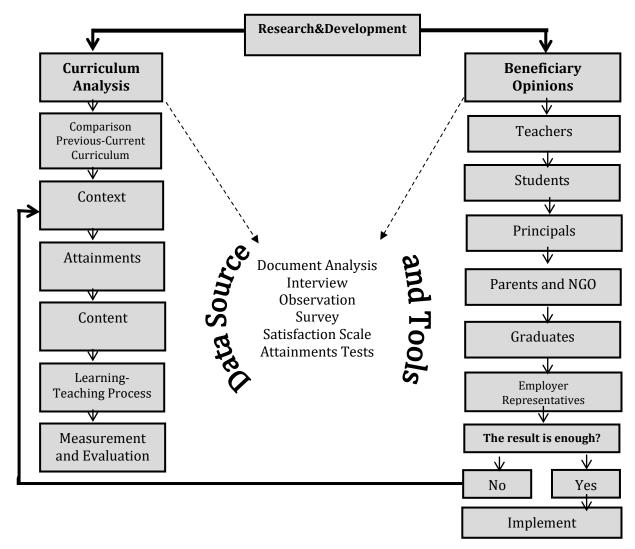


FIGURE 4. Demirel's analytical curriculum evaluation model (DAPDEM3)

Curriculum evaluation operation is divided into two dimensions in DAPDEM3 as curriculum analysis and beneficiary opinions. DAPDEM 3, unlike in DAPDEM 2, curriculum development starts with Research and Development. The difference in curriculum analysis is that the analysis and comparisons of the new and previous curricula are done in terms of context, attainments/competencies, content, learning-teaching processes and measurement and evaluation basic dimensions.

According to the results taken from desk based curriculum analysis studies, as it is not possible to analyze all the dimensions of the curricula of input, process and output with the system understanding in DAPDEM2, the analysis of the five basic dimensions of the curricula in DAPDEM3 was foreseen. In the Evaluation of Secondary Education Curricula research, with the view that not all the beneficiaries/stakeholders could have sufficient ideas on the basic dimensions of the curricula, the views of stakeholders except for teachers and principals were not taken. However, these beneficiaries/stakeholders were asked questionnaire questions with which they could answer about the curriculum dimensions and determine their satisfactions. Therefore, in DAPDEM3 beneficiary/stakeholder views dimension were not directly related with all dimensions of the curricula. Yet, by benefiting from the data resources and tools that could also be used in curriculum analysis dimension, the views of the beneficiary/stakeholders are foreseen to be identified. In DAPDEM3, if the curricula are not adequate in terms of beneficiary views, then all the dimensions starting from the context dimension should be evaluated by analyzing; whether the curricula are seen adequate then it could be practiced is foreseen.

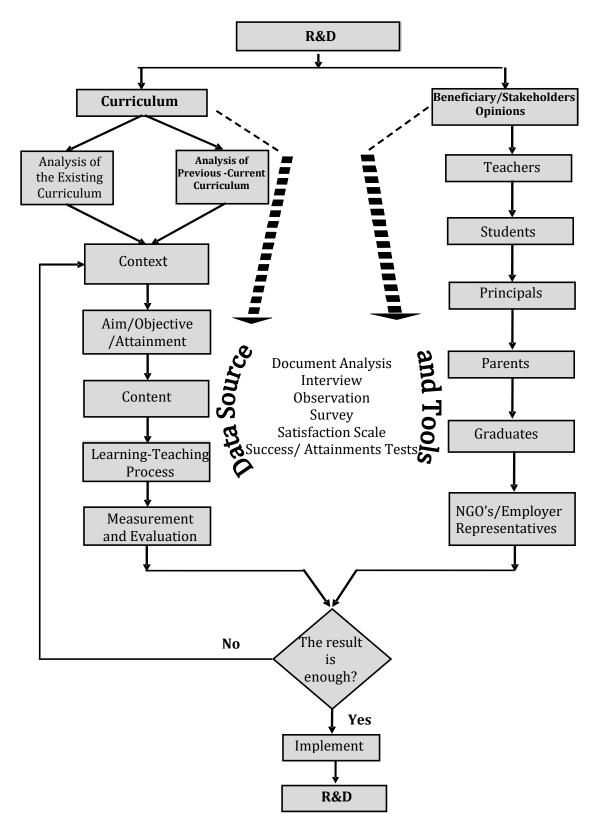


FIGURE 5. Demirel analytic-beneficiary curriculum evaluation model-DAPDEM4 (Yazçayır, 2016)

The Development Process, Structure and Operation of DAPDEM4

After evaluating the results of the experts' views on DAPDEM3, DAPDEM4 seen in Figure 5 is developed. As same in DAPDEM3, curriculum development study in DAPDEM4 model is started with Research and Development, but after all the operations Research and Development is carried out in DAPDEM4. The fact that Research and Development is the last operation in DAPDEM4 is the open sign that curriculum development should be made after curriculum evaluation. Curriculum evaluation operation in DAPDEM4 is divided into two different dimensions. The first is curriculum analysis whereas the second is the opinions of beneficiary/stakeholder on the curricula.

The analysis of the curricula is split into half in itself as the analysis of the current situation and previous/new curricula. This is a distinctive feature from DAPDEM3. These analyses continue with the analysis of the five basic dimensions of the curricula as in DAPDEM3. The second dimension of the model foresees the curriculum evaluation based on taking the opinions of teacher, student, principal, parent, graduate student, NGO and sector representatives which is the same in DAPDEM3. In DAPDEM4 after the analyses in the both dimensions' evaluation results, whether the results about the curriculum is adequate or not is questioned and the next operation to be done is decided. If the results are sufficient then the practice of the curriculum, if not desk-based analyses on the dimensions of the curriculum is turned back. This is a feature not seen in DAPDEM3.

While naming DAPDEM1, DAPDEM2 and DAPDEM3 models, the analytic dimension of the model is emphasized whereas this is different in DAPDEM4. In naming DAPDEM4 the second dimension of the model was also emphasized and DAPDEM4 has been entitled as "Demirel Analytic-Beneficiary Curriculum Evaluation Model. DAPDEM4 is presented in Figure 5.

The Development Process, Structure and Operation of KÖNDEM

KÖNDEM evaluation study starts with Research and Development and then the model divides into two basic dimensions. The first dimension is desk-based curriculum analysis whereas the second dimension is Beneficiary/Stakeholder analysis. Desk-based curriculum analysis sets forth the analysis of the draft and the existing curriculum, and the comparative analyses of the draft/existing/previous curricula. KÖNDEM model takes into account the pilot implementation of the draft program that is the trial and evaluation of the curriculum design process by implementing and the related curriculum development process. Desk-based curriculum analysis covers all the written and visual documents in computer or internet environments as well as the book, laws and regulations about the written text of the curriculum. Analyses in this dimension are made by field and curriculum development experts taking into account the related criteria in terms of the five dimensions of the curriculum. KÖNDEM provides the analysis of the draft and existing curriculum as well as the comparative analyses of the draft/existing/previous curricula as in desk-based curriculum analysis while making curriculum analysis with beneficiary/stakeholder opinions. These analyses should be performed by the curriculum beneficiaries or stakeholders who are teachers, students, principals, partners, graduate students, NGO's and employer representatives.

In both dimensions of the KÖNDEM model, the context, aims, content, learning-teaching processes and measurement and evaluation dimensions should be analyzed individually. Afterwards these should be evaluated together with the whole analysis results and should be decided whether the curriculum is sufficient or not. If the results are sufficient, then implementation is performed, thus the decision to implement the curriculum is given and then the curriculum is both implemented and developed with research and development studies. If the results are insufficient at the end of the curriculum analysis by KÖNDEM then development studies to remedy the deficiencies in the dimensions are started to be performed by going back to both desk-based curriculum analysis processes on curriculum dimensions as well as the curriculum analysis dimension on beneficiary/stakeholder opinions and so the cycle is tried to be completed. Provided the curriculum evaluation results are sufficient then the curriculum is started to be implemented or research and development studies are sustained while the curriculum implementations proceed, thus on the current curricula.

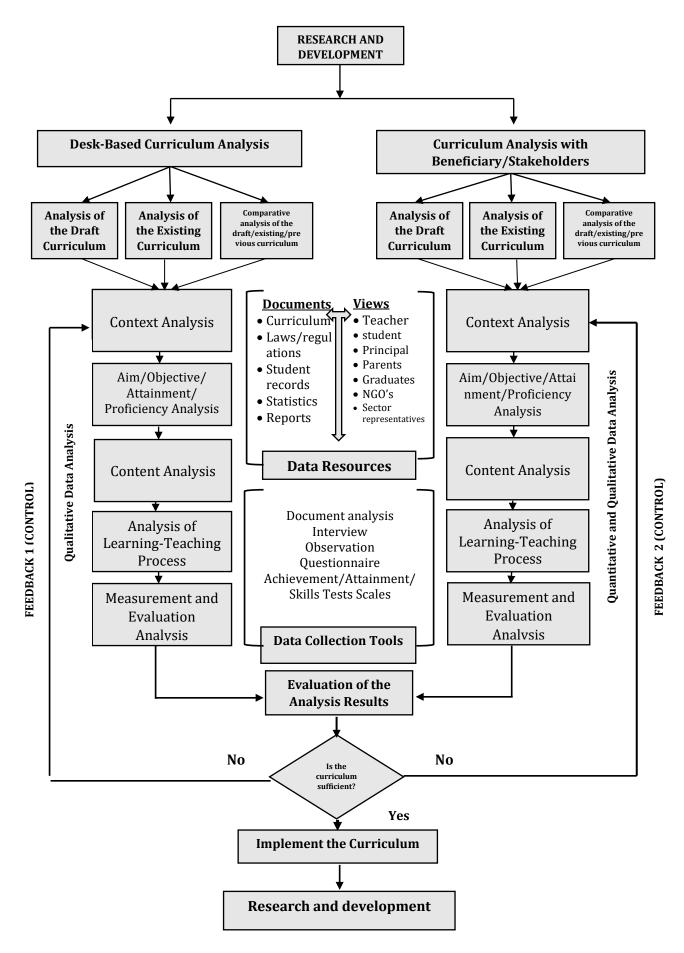


FIGURE 6. Curriculum evaluation model-KÖNDEM

In KÖNDEM model, opinions of teachers, students, principals, partners, graduate students, NGO's and employer representatives and all texts on the curriculum, laws and regulations, student records, statistics and reports are acknowledged as data resources. As for the data collection tools there are document analysis, interview, observation, questionnaire and especially all scales, achievement/attainment tests, skills and performance test on affective domain.

KÖNDEM Curriculum Evaluation Criteria

The most basic common features of DAPDEM models and KÖNDEM is that; the curriculum analysis is performed in the dimensions of context, aim/objective/attainment, content, learning-teaching process and measurement and evaluation.

Context: The context dimension is the starting point and the most important dimension of the curriculum. The remaining four dimensions of the curriculum are shaped depending on context. In this dimension, first the educational philosophy the curriculum is based on and learning-teaching theories and approaches are determined. In the design and preparation phase of the curriculum, all dimensions of the curriculum development are formed according to the educational philosophy the curriculum is based on and learning-teaching theories. Therefore, it is considered necessary that the educational philosophy the curriculum is based upon and learning-teaching theories should be explained at the beginning of the curriculum. Moreover, what the curriculum design approach should be, why this approach or approaches are adopted, what the learning-teaching principles and strategies should be all explained in context dimension. This dimension is effective on the context and implementation of the other four dimensions of the curriculum. The context criteria in the criteria list are listed under seven headings as; Curriculum Development Study Groups, Philosophy/Philosophical Foundations of the Curriculum, Learning Theories Foundations of the Curriculum, Curriculum (Design) Approach and Model, Curriculum Development Model, Need Analysis and Curriculum Implementation Guide.

Aims/Objectives/Attainments/Competencies: The cognitive, affective and psychomotor qualities that would be attained to the students with the implementation of the curriculum should be explained in this dimension. Whether to use which of these concepts aims/objectives/ attainments/competencies should be decided according to the features of the target audience. No matter which of these concepts are used they should be determined based on a taxonomic structure. A system relevant to objectives taxonomy should be adopted and what kind of changes are foreseen in the students should be explained. Aims/objectives/attainments/ competencies should be prepared in such a way appropriate to the students' levels that would form a relational and holistic structure among the context, content, learning-teaching process and measurement evaluation dimensions. Criteria under the heading aims/objectives/ attainments/competencies are placed under two titles as; the relation of the curriculum aims/objectives with objectives/aims vertically and the aims/objectives' horizontal features.

Content: It is the body of subjects and activities related with the objectives. While organizing the content dimension, the preferred system about the aims/objectives/attainments/competencies should be interrelated in terms of content, the content should be organized according to the subject area and taking into account the learning-teaching principles, the area of interests and development characteristics and the need for the student should be meaningfully organized. Which content organization approach or approaches are chosen should be explained and the content choice and organization should be made accordingly. The content and the context should be prepared as to form a relational and holistic structure with the aims/objectives/attainments/competencies, learning-teaching process and measurement and evaluation dimensions. The criteria under the content heading are as three titles as; content choice, content organization/content order and content

Learning-Teaching Process: The fourth dimension of the curriculum is learning-teaching process. The process dimension of the curriculum in which how the objective related content would be attained to the students, it should be decided whether the course is taught teacher or student centered, the student's attendance to the course, learning-teaching strategies, teaching principles, methods and techniques and teaching materials Besides, the learning-teaching process should be prepared as to form a relational and holistic structure with the context, aims/

objectives/attainments/competencies, content and measurement and evaluation dimensions. The criteria under the learning-teaching heading are four titles as; the theoretical foundations of learning/teaching activities, the appropriateness of the learning and teaching activities, learning and teaching approach, strategy, method and techniques, teaching technology and materials.

Measurement and Evaluation: The fifth dimension of the curriculum, measurement and evaluation, covers the measurement and evaluation procedures towards determining at which level the cognitive, affective and psychomotor features were attained to the students. In this dimension, the approach, method and techniques implemented for determining the foreseen qualities to be attained to the students and their qualities and appropriateness should be dealt with. Moreover, should be prepared as to form a consistent structure with the context, aims/objectives/attainments/competencies, content, learning-teaching dimensions of the learning-teaching process. The criteria under the measurement and evaluation heading are three general titles as; general information on measurement and evaluation, the characteristics and appropriateness of the measurement tool to the feature to be measured, curriculum evaluation and development.

A total of 170 criteria were designated for KÖNDEM. 36 items under the seven sub-headings on introduction/context; two sub-headings and 20 evaluation criteria in objective/attainment dimension; 22 criteria under the three sub-headings in content dimension; four sub-headings and 28 criteria under the learning-teaching process dimension and a total of 40 criteria items under three subheadings in measurement and evaluation dimension (Yazçayır, 2016). This criteria list developed and reviewed according to field research and test and expert opinions has been designed very detailed, however those desiring to make curriculum evaluation study could perform their research by choosing from these criteria that fit for the purpose of their aims. When it comes to be implemented in a curriculum evaluation study, these criteria could be used by enlarging or differentiating according to the aims, target audience and characteristics of the curriculum.

DISCUSSION and CONCLUSIONS

When the literature on curriculum evaluation is examined it is seen that there are some insufficiencies in curriculum evaluation models both in Turkey and the world. The most important reason is that the existing designed models have not been developed based on field tests and not been updated according to the new points of view. In this study DAPDEM1 is tested in the field and transformed into KÖNDEM. In this section the similarities and differences between the first and the transformed model are taken and discussed.

While KÖNDEM starts with research and development, it is not the same with DAPDEM. In both DAPDEM1 and KÖNDEM there are curriculum analysis and beneficiary/ stakeholder pinions dimensions. As seen in Figure 1, in DAPDEM1 the curriculum analysis dimension embodies; curriculum design, context, need analysis studies and the detailed analysis and evaluation of the curriculum's input, process and output dimensions. KÖNDEM however as seen in Figure 6, starts with the analysis of the draft curriculum by the experts in the curriculum development team desk-based and sets forth the analysis of the draft and existing curriculum, comparative analyses of draft/existing/previous curricula in the context, aim/objective, content, learning-teaching process and measurement and evaluation dimensions of the curriculum. Whereas DAPDEM1 does not take into account the designed draft curriculum's evaluation, in KÖNDEM the preparation, evaluation and the development processes of the draft curriculum in curriculum design process is taken into account. Moreover, KÖNDEM provides the comparative analysis of the draft curriculum with the existing or the previous one. When viewed from this aspect, KÖNDEM is a model that takes attention to the necessity of the evaluation and the development of the draft curriculum in the curriculum design process.

KÖNDEM it is suggested that curriculum analyses should be performed apart from the system understanding with related documents on the curriculum in easily examined dimensions. Moreover, in DAPDEM1 context elements of the curriculum approached in evaluating the curriculum design, present situation and the need analysis are examined and evaluated in the

context dimension in such a way to ease analysis and evaluation in KÖNDEM. Also in KÖNDEM criteria these elements are designated as detailed criteria. Whereas in DAPDEM1 with which documents the curriculum analyses would be made is not stated, in KÖNDEM these documents are stated explicitly in data resources. In DAPDEM1 and KÖNDEM curriculum evaluation is performed based upon beneficiary/stakeholder opinions. Nevertheless, as seen in Figure 1, in DAPDEM1 field and curriculum development experts, teacher, student, principal, parents, graduate students, NGOs and sector representatives are mentioned.

Even though the data resources are mentioned, there is no addressing which curriculum should be evaluated with stakeholders' opinions in practice. Moreover, in DAPDEM1 it is also not mentioned in which dimension of the curriculum the stakeholders' opinions would be. This was seen as the weak side of DAPDEM1, 2, 3 4 and this weakness was tried to be removed in KÖNDEM. KÖNDEM however, as seen in Figure 6, while curriculum analysis is made with beneficiary/stakeholder opinions, foresees the analyses of the draft and existing curricula, comparative analyses of the draft/existing/previous curricula according to beneficiary/stakeholder opinions in all dimensions (context, aim, content, learning-teaching processes and measurement and evaluation) of the curriculum. In KÖNDEM the beneficiaries/stakeholders are in data resources. The field and curriculum development experts stated as beneficiaries in DAPDEM1 are removed from this dimension in KÖNDEM and are accepted as the experts who perform the desk-based curriculum analysis.

In DAPDEM1 if the curriculum is not sufficient in terms of beneficiary opinions, then feedback to the input, process and output dimensions of the curricula is given. If the curriculum is found sufficient by the beneficiaries, research and development studies should be performed in the implementation and after the implementation. Even though there is information on deciding on the sufficiency of the curriculum after the evaluations in the both dimensions in the explanations of the model, this could not be understood from the structure of the model. However, in KÖNDEM after the curriculum is analyzed in the both evaluation dimensions, the obtained results are evaluated as a whole and whether these results are sufficient or not is questioned. If the results are sufficient, the implementation decision for the curriculum should be taken and the curriculum should be implemented. The curriculum is both implemented and developed by evaluating with research and development studies. If the results are insufficient then the analyses on the curriculum dimensions are returned and the cycle is tried to be completed by performing the studies that would remedy the deficiencies in the curriculum dimensions.

DAPDEM1 and KÖNDEM differ also in terms of data resources and data collection tools. In DAPDEM1 the data resources and tools are; the curriculum itself, SWOT analysis, interview, observation, questionnaire, attitude scale, achievement and follow up tests and portfolios. The data resources and tools in DAPDEM1 are changed in KÖNDEM and were divided into two as; Data Resources and Data Collection Tools. In KÖNDEM curriculum evaluation model, the opinions of teacher, student, principal, parents, graduate students, NGOs and sector representatives as well as all the documents about the curriculum are placed as Data Resource. As for the Data Collection Tools, they are document analysis, interview, observation, questionnaire, achievement/ attainment tests and the all scales especially on affective domain.

The most common basic trait of DAPDEM1 and KÖNDEM is that both models' criteria are named same with the curriculum dimensions. However, the features under these two models' dimensions are completely different form each other. With the development of DAPDEM1 and this model's "Curriculum Evaluation Criteria" review study, it was clearly revealed that just the graphic design of the model is not sufficient but the evaluation criteria that would be used while evaluating the curriculum should be put forward is essential. As these criteria are not explicitly put forward in the many curriculum evaluation models designed, the criteria of the model are usually tried to be determined by the researcher. The fact that the researcher her/himself producing criteria by looking for the graphical structure and the explanations of the model is both difficult and causes many mistakes in the implementation. Determining the curriculum evaluation criteria constitutes one of the most important dimensions of curriculum design.

One of the most important differences between DAPDEM1 and the other curriculum models and KÖNDEM is that a theoretical designed model is tested in the field and researched whether it

is an efficient model or not. There is no sample case that a model is tested and developed with a very comprehensive research in the literature. KÖNDEM is a model that was obtained with the development of DAPDEM1 which was tested with very long and comprehensive studies in terms of functionality. KÖNDEM could be used as an implementable evaluation model. The value of a model is measured with its original theoretical design as well as how much implementable it is. KÖNDEM as a curriculum evaluation model, is a stronger and implementable model than DAPDEM1. It is believed that the process of transformation from DAPDEM1 to KÖNDEM would contribute to the researchers that existing curriculum design, evaluation and development models could be tested in the field and the functionality pf the theoretic models could be questioned. In this respect, this study is believed to bring a new perspective on the curriculum evaluation studies and models in terms of literature.

The comparison of the models in the literature with KÖNDEM requires quite a comprehensive discussion. However, when KÖNDEM is very generally compared to the models in the literature the differences could be shortly summarized as:

The first important difference between KÖNDEM and the other models is that KÖNDEM has been developed in practice with Research-Development studies by testing again and again. Moreover, when Figure 6 is examined in detail, it could be seen that the model should be continuously renewed by sustaining the Research-Development process. So, KÖNDEM does not see itself as a final model. The second important difference is that KÖNDEM has been designed very detailed. The third significant difference is KÖNDEM's clear exhibition of the explanations on how to use it on evaluating the current and the draft curricula.

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