

**Öğretim Materyallerinin Etkililiğini Artırmaya Yönelik
Disiplinlerarası Materyal Geliştirme Model Önerisi:
DIMAG Modeli**

**The Suggestion for Disciplinary Material Development Model Aimed at
Enhancing the Efficiency of Teaching Materials: Model of DIMAG**

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Oğuzhan SEVİM

Extended Summary

Purpose

In this study an interdisciplinary material development model proposal for increasing the efficiency of teaching materials attempted to present. For this purpose, following research questions searched for answers.

*Which processes should consist of the interdisciplinary material development model (DIMAG/IMD Model) that desired to be developed?

*On which level are effectiveness of the teaching materials developed in accordance with the DIMAG/IMD Model?

*What are the teachers' and prospective teachers' ideas on DIMAG/IMD Model?

Method

As the study has both quantitative and qualitative aspects, the study conducted in accordance with the exploratory sequential pattern which is a kind of mixed methods. Mixed methods research is the use of qualitative and quantitative methods together throughout the data collection and analysis processes for understanding the research problem better and in-depth (Creswell ve Plano Clark, 2014; Hesse-Biber, 2010). Mixed methods research has kinds as explanatory sequential pattern, exploratory sequential pattern, transformational sequential pattern, simultaneously triangulation pattern, concurrent interwoven pattern, and simultaneous transformational pattern (Creswell, 2003). Exploratory pattern is seen as an important method as it can express quantitatively the similarities and relationships of phenomenon created with qualitative methods by participants (McMillan ve Schumacher, 2006). As these properties of exploratory pattern match up with the properties of this study exploratory sequential pattern is used.

Results

With the evaluation of the data obtained from the study these results obtained:

The DIMAG/IMD Model that was revealed as a draft has been implemented in schools with the permission received from the Directorate of Education with reference to relevant literature and expert opinions, the functionality of the each stage of model was evaluated during the application period and the determined deficiencies was completed and the model was given its last form. According to this DIMAG/IMD is a material development model that consists of 12 steps, it includes both process and evaluation of output, and it necessitates cooperative interdisciplinary studies.

According to teachers' grading, who have observed experimental and control groups material development processes, the teaching material development forms a significant difference in favor of experimental group has been found. Namely DIMAG/IMD Model has been seen as an effective model for improving the effectiveness of the developed teaching materials.

According to teachers and prospective teachers DIMAG/IMD Model offers innovation to material development process as it offers the opportunity to study collaborative, interdisciplinary, and in real learning environment. This structure of DIMAG/IMD Model is developing individuals' collaborative, interdisciplinary, and planned study skills. It turns the individuals involved in process into problem solving, strategic, critical, reflective thinking individuals.

Discussion and Conclusion

In our country one of the most important problems in education is non-use of the things learned from the school (Kılıç, 2004; Koç, 2002). This problem is an important factor for DIMAG/IMD Model to become important. The main logic of DIMAG/IMD Model is to ensure removing prospective teachers' abilities to prepare teaching materials out of faculty classes and make them perform these skills in real learning environments. The approach that DIMAG/IMD Model revealed, suggests an efficient and realistic teaching understanding instead of an insufficient and dissatisfactory understanding.

One of the most important results of this study is that the model of DIMAG/IMD provides the environment of learning through experience and especially necessitates this. During learning through experience, by being included more sense organs in the process of teaching, the process of training is improved positively and the learned become permanent (Kaptan ve Korkmaz, 1997). In this process, instead of developing materials in artificial environments in the direction of imitation problems, prospective teachers have developed cooperative materials in the schools where there are real learning environments by considering target group and integrating different information and skills related to different disciplines within the context of flexible program. While the lecturers of the lessons and the teachers in

the schools are in the guide and observer position, the prospective teachers maintain their positions as being active throughout the process. The prospective teachers improve their opinions deeply on educational attainment and negativeness in the process and try to experience the process of material development thoroughly (Açığöz, 2003). In the interviews with the prospective teachers after the application of DIMAG/IMD Model, they state that for themselves this study is a serious and important experience before starting to teaching profession and this supports the study's findings in this field.

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