

Using an Online System with Exemplary Teaching Videos to Support the Professional Development of Prospective Faculty Members

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Abstract. The quality of teaching in higher education is an issue which takes the researchers' and policy makers' attention especially after the second half of 1990s. Using online environments is a potential strategy for faculty development on teaching. This project aims to investigate the needs of early career and prospective faculty members' needs on teaching and examine the design, implementation and evaluation of an online environment incorporating discussions and exemplary teaching videos to support prospective faculty members' teaching profession. Findings are expected to provide a framework about using online strategies for faculty development aims.

Keywords: faculty development, teaching in higher education, online support, instructional videos.

1 General Issues about the Problem Domain

In western countries, the universities are under the pressure of change to cope with the increased marketization and managerialism within the broader policy milieu. In this competitive context, the research and other activities of the academics need to be improved [1]. Academics need to demonstrate achievement in many areas of activity in which teaching is one of them.

Boyer [2] identified four distinct but interrelated forms of scholarship for the academics; discovery, integration, implementation, and teaching. He is the one who proposed that the scholarship of teaching is one of four forms of activities associated with university practices. Many models of the scholarship of university teaching have been advocated after his introduction [3].

Teaching initiatives in higher education are becoming more visible, and a new scholarship of teaching and learning forces the faculty to share their thoughts about classroom practice with educational specialists and colleagues [4]. Faculty development programs in higher education institutions are introducing innovative pedagogies to faculty

members from different disciplines. However the efforts on faculty development are usually not meeting the needs of the 21st century by using new technologies [5].

Although teaching could be thought as a very social work, it is usually a private activity for faculty, taking place behind doors [6]. All higher educators share a commitment to knowledge creation in which teaching and research are equally important aspects, however teaching has not been promoted as well as the other activities of the faculty [1], [2], [7].

Since teaching aspects of the higher education is becoming an important issue, different implications have been started for supporting the professional development of faculty members in the area of teaching and learning. The higher education institutions provide either formal qualifications or meetings, symposiums, or inquiry communities in which the faculty with different backgrounds participate [1], [3], [8], [9], [10]. On the other hand, the formal qualification strategies are sometimes criticized by the faculty [1], [10]. So, more flexible and practice-oriented approaches are suggested by the researchers instead of the strict and theory-based applications. Effective professional development should be continuing, active, social, and related to practice [11], [12].

Online technologies can be effective ways of distributing faculty development activities by providing contextualized teaching cases and communication between the faculty members from different disciplines. These environments grow collective “knowledge”, or “practice” by incorporating the interaction between the members. Moreover, these online environments provide flexibility in access for the members.

2 Research Questions and Purpose of the Study

The purpose of this study is two-dimensional which aims to present the big picture of early career faculty members’ needs on teaching at Middle East Technical University (METU) and also evaluate the effectiveness of an online environment designed as a support to a graduate course offered to improve the prospective faculty members’ professional development on teaching and learning. The aim is to generate outputs in the forms of knowledge and product. Knowledge is related to the needs analysis and the systematic approach for design and development of a tool for supporting faculty in their teaching. Product refers to the tool itself, which aims to bring about improvement in academics’ professional development on teaching. The following research questions guided the study:

- What are the early-career faculty members’ opinions, needs, and expectations about their own teaching?
- What are graduate assistants’ perceptions about the effects of using an online environment in regards to their teaching profession?

3 Ph.D. Project’s Contribution to the Problem Solution

The attention given to the quality of teaching in higher education has been compelling the institutions to focus on faculty development programs. Although many higher education

institutions provide formal meetings or inquiry communities for their faculty, these strategies are sometimes criticized for being not so flexible and practice-oriented. Among different ways of faculty development efforts, the more flexible, context-oriented, and practice-based need to be developed to meet the expectations of higher education in 21st century.

In this study, online technologies have been thought as effective ways of distributing faculty development activities by providing contextualized teaching cases and communication between the faculty members from different disciplines. These environments have the potential to grow collective “knowledge”, or “practice” by incorporating the interaction between the members. Moreover, the online environments provide flexible access for the members.

The findings of this study will be valuable in two aspects. First of all, it will contribute to the faculty development efforts on teaching/learning at METU by presenting the needs of the early-career faculty members and examining an online environment as a support to a graduate course on teaching in higher education. Considering the increase on world-wide importance given to teaching and learning in higher education, results would be helpful for the policy makers in designing faculty development programs especially in training the graduate assistants as prospective faculty members.

The second value will be about contributing to the knowledge base. The needs of early-career and prospective faculty members on teaching and learning will provide an example from a Turkish university. Besides being a national case, findings will contribute to the knowledge base on designing faculty development programs on teaching in general. Effects of using an online environment which incorporates exemplary teaching videos of relevant and contextualized cases, and knowledge sharing for improving the teaching profession of prospective faculty members will be examined in the study. Although these strategies are successfully used in preservice teacher education, effective ways for the higher education still needs to be investigated. Opinions of prospective faculty members who didn't have too much concern on teaching will provide insights about developing the most effective strategies for faculty development programs. Finally, evaluation of the online system will provide suggestions for designing online environments for faculty professional development.

4 Research Methodology and Preliminary Findings

The study consists of two phases; while the first phase was done through quantitative methods, second one use mixed methodology approach. For the first phase, a survey design was used to explore the needs of the early-career faculty members about teaching. For the second phase, an online environment was designed as a support to a graduate course on teaching in higher education based on the needs analysis and course instructors' opinions. Then, it was evaluated through the course participants' (namely graduate assistants) point of view. A mixed methodology approach was chosen, so strategies derived from both qualitative and quantitative methods have been incorporated.

4.1 Phase 1: Surveying the Early-Career and Prospective Faculty about Their Needs

Phase 1 of the study is descriptive in nature and aims to explore the opinions, needs and, expectations of the early career faculty about teaching in higher education. Data were collected during the Fall-2008 semester and have been used as a needs analysis for the design of the online environment. A survey was developed to collect data about the teaching and learning related concepts in higher education consisting of three main parts: demographics, perceptions and needs of teaching and learning processes, and background on and preferred strategy for support in improving their teaching.

The survey administered included fifty-three faculty members who had been teaching for not more than six years and 195 graduate teaching assistants. The intended participants of the survey were the graduate assistants and the instructors including assistant professors and lecturers who have less than 12 semesters of teaching experience, but two associate professors have been surveyed too, since their titles reported as assistant professor on the department website. Their data have not been excluded, since they had less than 12 semesters teaching experience. On the other hand, 11 of the assistant professors and lecturers had more than 12 semester experience, but they have not been excluded either and grouped as the fourth group of teaching experience.

4.2 Design and Development of the Online Environment

A graduate course -Teaching in Higher Education- is provided to improve the graduate assistants' teaching profession as prospective faculty members. Based on the aims of the Ph.D. project, the course was redesigned by adding an online environment to the course without making a major change in its content, so the online system was used to support the course objectives. The researcher worked in accordance with the course instructor while deciding on the types and content of the materials for this aim. Findings of the needs analysis survey were also taken into consideration.

The online environment was designed to include three main parts in total; seminar presentations and supportive materials, exemplary teaching and informative videos, and discussion.

4.3 Phase 2: Implementation and Evaluation

Since the evaluation phase was exploratory in nature, the qualitative method was the driven approach for the research study. Participant interviews, responses to the open-ended questions in weekly surveys and discussion logs were the data sources which helped to explore the participants' opinions in-depth. In addition, the research is supported by quantitative data collection and analysis. Weekly surveys provided quantitative data about participants' opinions on each unique online activity.

23 graduate assistants from 11 different departments of 3 colleges (Engineering, Arts & Science, Architecture) at METU have been enrolled to the course at the Spring 2009. All of them participated into data collection for website visits, discussion logs, and weekly surveys. Then, semi-structured interviews have been conducted with 10

participants at the end of the semester. The aim was to collect data about their general impressions on using an online environment for learning in general, and the effects of online materials especially the exemplary teaching and informative videos and online discussions on their teaching profession.

4.4 Preliminary Findings

Analysis of the survey data on phase 1 revealed early career faculty members' and graduate assistants' perceptions on the importance of and needs about the teaching-related concepts. Moreover, their previous participation into faculty development activities and preferences about possible teaching-related faculty development efforts have been examined. See Table 1 for each group's top mean scores.

Table 1. Mean scores on a four-point scale and std. deviations for top three scores of graduate assistants and early career faculty members.

ITEMS		
How important are the following issues in your opinion?	Grad. Assistants	
	M	SD
6. Course design based on determined goals	3.58	.57
16. Ability to establish communication with students	3.58	.59
11. Facilitating students' active participation into classes	3.56	.56
	Faculty	
	M	SD
16. Ability to establish communication with students	3.72	.50
11. Facilitating students' active participation into classes	3.60	.53
14. Ethics in teaching/learning	3.57	.67

In terms of the strategies for faculty development activities, most of the participants preferred workshops. In case of an Internet-based system, most of the participants wanted to see case videos to support their professional development on teaching.

The data analysis of the second phase is still under investigation. A mixed methodology will be used at this phase. The interviews, discussion logs and open-ended answers of the weekly surveys will be examined through content analysis, while the Likert-type questions of the weekly surveys will be analyzed statistically.

5 Conclusion

Findings of the first phase gave us the big picture of early-career and prospective faculty members' needs and expectations about their teaching. This part of the study has been

used in designing the online environment, as well as contributing to the knowledge base on teaching in higher education field.

Although the findings of the second phase are still being examined, it's expected to provide insights about technology-enhanced faculty development programs. The Ph.D. project is aiming to propose a new framework to use online strategies for supporting faculty development on teaching based on the evaluation of the current online system.

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