

Chapter 3

Designing and Managing Synchronous and Asynchronous Activities: The Online Training Case for Faculty of Aeronautics and Astronautics Staff

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ABSTRACT

Education conducted during the COVID-19 pandemic process was limited to emergency remote teaching. The situation brings along the need for the planned and systematic implementation of good practice examples especially in higher education institutions which have started to plan distance education and learning activities in line with their own capabilities. In this study, the educational activity and its reports for the design of online learning environments carried out within the Eskisehir Technical University, Learning and Teaching Development Unit, which focuses on increasing the effectiveness learning and teaching activities in the campus, is presented as an example of best practice. In the current chapter, all implementation steps performed within the scope of the study are introduced and discussed.

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INTRODUCTION

Education conducted during the Covid 19 pandemic process could not go beyond Emergency Remote Teaching due to forced, compulsory and rapid displacement (Erkut, 2020; Hodges, Moore, Lockee, Trust & Bond, 2020; Williamson, Eynon, & Potter, 2020). Institutions have tried to adapt very quickly in line with their own capabilities. Unfortunately, this adaptation process could not go beyond being a remote access activity, because there was no time for systematic planning. In particular, asynchronous applications, which are at least as important as synchronous applications in distance education, had not been sufficiently dignified (if not at all), with the transfer of learning activities carried out in traditional face-to-face learning environments to the online learning environment. However, distance education applications offer a very flexible model that progresses in a systematic, planned and applied manner on the basis of asynchronous activities as well as synchronous activities. These applications offer independent study areas for participants as well as collaborative group activities. The chapter here worries on the question of “Is it possible to design and manage asynchronous activities within the framework of interaction types (i.g, learner-learner, learner-content learner-teacher) in an online learning environment similar to synchronous activities?”

This situation brings along the need for the planned and systematic implementation of good practice examples especially in higher education institutions. Institutions have started to plan distance education and learning activities in line with their own possibilities and capabilities. In this study, the educational activity for the design of online learning environments carried out within the Eskisehir Technical University, Learning and Teaching Development Unit, which operates as an important part of the Universities in our country as well as in the world and focuses on increasing the effectiveness and competence in learning and teaching activities presented. Based on the trainees’ feedback at the end of the training, and the approach which could be a road map for other institutions to carry out their online education activities in line with their strategic plan, it is possible to say this study is an example of best practice. In the current chapter, all implementation steps performed within the scope of the study are included.

The Aim and Significance of the Study

The study includes the synchronous and asynchronous application steps within the scope of “Training of Trainers” program carried out in an online learning environment designed in line with the needs of Eskisehir Technical University Faculty of Aeronautics and Astronautics. The study is presented as a best practice example with the effectiveness based on trainees’ views, and a planned and systematic approach in terms of being a roadmap to apply the strategic plan of an institution for the dynamics of online learning environments. Incorporating synchronous and asynchronous applications in an online learning environment based on intensive interaction is significant. Considering the transfer of face-to-face learning and teaching activities to online learning environments without a specific plan and systematic, especially during the Covid 19 pandemic process; this study is functional in that it exemplifies the planned and systematic progress of learning and teaching activities carried out within the framework of the instructional design model. However, there were cases before as well as during the pandemic, where asynchronous activities were often overlooked as part of the learning process. Considering the dynamics of online learning environments; this study does not only consist of synchronous activities; additionally, it emphasizes as a practice that asynchronous activities are also a part of the process in online learning activities. The study aims to introduce an online learning environment designed in line with the needs

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