The purpose of this design case is to report on the design of a course template to be used for institutional training at a public university in Turkey and to be published on the in-house learning management system of the university. Following a detailed description of the design context, the step-by-step design process is explained in detail with supplementary visualizations. Although several limitations such as the need for improving the characteristics of the design for more interactive activities and for formative and process-oriented assessment, and a more detailed external evaluation are still apparent in the design, this design case highlights the critical role of collaboration both within the design team and with the authorized institutional bodies to ensure a practical training course template design. Finally, results from this design case suggest that providing the tool and the content would not be sufficient alone if not accompanied by the support and collaboration of all parties involved in the process.

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INTRODUCTION

Universities constitute the main institutional bodies of research and education in higher education. Based on their reason for being, the functions of universities are explained as providing education, conducting research, introducing innovation, and contributing to public and international engagement (Boulton & Lucas, 2011). Therefore, the quality of universities mostly depends on their effectiveness in the fulfillment of their functions.

In addition to fulfilling their basic functions, these institutions are also organizational bodies to be managed and thus seek ways to update and enhance the professional qualities of both academic and non-academic staff. Administrative units of universities plan, organize, implement and evaluate the essential training programs. In other words, these activities in higher education can also be considered among the expected functions of universities as organizational bodies. This function is highlighted in the Graz Declaration by the European University Association (2003), where one of the roles of universities is quality assurance procedures that promote both academic and organizational quality and develop internal quality cultures.

This paper reports on the design of a course template to be used for the institutional in-service training at a public university in Turkey and to be published on the in-house learning management system of the university. We first describe the overall institutional and design context of staff in-service training, in particular, then the role of the Distance Education Application and Research Center (DEARC) at
the university, which is followed by the introduction of the design team. We then share the step-by-step design process to illustrate the design process in detail. The design process, which is described under two sections, namely the conceptualization stage and developing design, includes a clear description of the design supported with visuals. Finally, we conclude with a discussion of some design failures and implications for further research and policies.

**DESIGN CONTEXT**

The design case is set in a public university in Turkey. It is one of the leading universities with 50 years of scientific experience. The DEARC is responsible for coordinating online education and training activities for all units of the university and conducting research on distance education.

The overall functional context of higher education and universities in Turkey is not so different from the global context in that their goals are set externally, in our case by Higher Education Act No. 2547, which states that higher education and research organizations are responsible for conducting high-level scientific research, promoting knowledge and technology, disseminating scientific findings, supporting national growth and development, collaborating with national and international institutions and contributing to universal and contemporary progress in the country (Council of Higher Education, 2000). The Act also defines creating, promoting, using, and disseminating education technologies as one of the missions of higher education institutions.

The administrative structure of universities in Turkey is also enacted by decree-law no. 124. The decree-law defines 11 administrative units such as secretary general, directorate of construction and technical works, registrar office, directorate of health culture and sports, directorate of personnel department, etc. The decree law also sets the main responsibilities of university administration. In particular, organizing and implementing in-service training of non-academic staff are among the responsibilities of directorates of personnel departments in universities. The scope of this design case is built on contributing to the promotion of in-service training capacity and quality of a state university through collaboratively designing an online training course template.

In accordance with the relevant legal regulations in Turkey, the university offers a broad range of training activities to its academic and administrative staff. Termed *in-service training* in our local context, these training activities include induction training, compliance training, personal development training, civil protection training, occupational health and safety training, and academic training for faculty members (e.g., sessions on components of writing scientific papers, measurement and evaluation methods, and student information system software). The primary objective of in-service training activities at the university is to equip the staff with the knowledge, skills, and behaviors required for offering better service.

Until the outbreak of the COVID-19 pandemic, the university periodically offered these training activities face-to-face and in large groups. However, this usual process was disrupted due to the pandemic, and delivering these training sessions face-to-face was no longer possible. Previously, the Personnel Affairs Directorate (PAD) coordinated in-service training events by performing the following steps: First, the PAD arranged the trainers, trainee groups, venues, subjects, and schedule. Then trainees were usually assembled in large conference halls and attended their assigned training events. A typical training session involved a subject expert making lecture-style presentations using slides that included texts, images, and videos projected on a large screen. Finally, at the end of training sessions, trainees normally sat for an exam about the content of the training. The exam was generally a quiz consisting of multiple-choice questions about the topic covered in the training. Each of these training sessions lasted one hour on average.

These in-service training activities presented some difficulties in arranging the appropriate time frame and place for trainers and trainees. To begin with, it was a problem to find an appropriate time for all the staff who were required to attend the training. Next, due to practical reasons, staff had to attend training sessions in large groups and it was difficult to find an appropriate venue. In addition, while the university staff was required to attend these trainings, attendance was not at the expected level. It was difficult to keep a record of trainees’ attendance in crowded groups. Moreover, while there were several in-service training sessions taking place during an academic year, there was not a scheduled annual training plan. Finally, there were concerns about the integrity of the crowded exam environments and the effort to assess thousands of papers.

**Emerging need for a design**

In the fall term of 2019, considering all of the problems mentioned above, the PAD decided to move most of these trainings to an online platform. Seeking advice and help in building an online platform for in-service training activities at the university, an analyst from the PAD who was in charge of in-service training first contacted the Department of Informatics, which was the unit responsible for distance education at the university at the time. This department used an open source learning management system (LMS), Moodle, to provide faculty members with the ability to asynchronously deliver their instructional materials. However, by the spring term of 2020, the department’s workload had increased greatly with the outbreak of the pandemic and, with its limited staff and server capacity, it could hardly meet the academic needs. The pandemic also increased the PAD’s wish to move in-service training to an online platform.
The analyst in charge of in-service training then contacted the DEARC in the spring term of 2020. In the summer of 2020, the university senate decided to authorize the DEARC to coordinate all distance education processes and all courses offered online at the university. The DEARC had built the open source version of Canvas LMS on the university’s information and technology infrastructure and it had already been offering some undergraduate and graduate courses via this system since 2014. By the fall term of 2020, several meetings had already been held, and during these meetings, the priorities of the PAD concerning in-service training were identified. In these meetings, the researchers took initial notes on the needs and priorities which were explicitly stated by the PAD staff. After the meetings, the researchers met online and each researcher shared his/her notes with other researchers. After that, one of the researchers made a list of these needs and priorities with other researchers. The researchers worked on these lists online collaboratively and finalized the list of priorities together. The major considerations highlighted by the PAD staff were monitoring trainee attendance and participation, granting trainers authenticated access to training content, and providing learning assessment tools.

Both the PAD and the DEARC agreed that a web-based approach would be an appropriate alternative solution for in-service training at the university because an online environment would allow trainees to study and revisit the learning materials at their most comfortable time and place and would allow trainers to review, modify and reuse training course content for possible future courses. On the other hand, contrary to the PAD’s request to build an online platform allocated exclusively for in-service training, the DEARC believed that an LMS would be the best fit for the purpose. Therefore, the DEARC suggested using the existing in-house LMS (i.e., Canvas), where the DEARC would then design an online in-service training course template. Ultimately, Canvas was chosen as the online platform for the university’s in-service training activities for several reasons: First, building an online educational platform from scratch would require a great deal of software work and was not feasible in our case. Choosing Canvas also allowed the design team to be more focused on the design process. As Canvas had been used solely for all the courses offered online since the fall of 2020, most of the faculty members were already familiar with this particular LMS. Moreover, Canvas is an open source and web-based LMS used by “institutions to manage digital learning, educators to create and present online learning materials and assess student learning, and students to engage in courses and receive feedback about skill development and learning achievement” (Canvas, 2021). It also allows downloading or uploading a course as a whole package with all of its components, such as learning or assessment activities or files. Therefore, it allows trainers to replicate and use a training course multiple times with or without modifications. This is a useful feature, particularly for training activities that are carried out regularly. Finally, Canvas provides several customizable course creation, management, and reporting tools (e.g., for monitoring learner attendance and progress). Canvas features such as assignments, discussions, modules, quizzes, and pages can be used to design and share learning materials and experiences.

**DESIGN TEAM**

Before describing the design team, it is worth mentioning the overall structure of DEARCs in Turkish universities. Distance education has become widespread recently and started to be preferred by many institutions and universities in Turkey as well. Universities in particular have been making great efforts to establish distance education centers in their structures. In Turkey, the Council of Higher Education (CoHE) determines the procedures and principles of distance education, providing regulations to establish a national standard in distance education and comply with higher education goals and objectives. Based on the procedures determined by CoHE, DEARCs have been established within the bodies of universities. In general, the staff of these centers consists of a director, assistant directors, a technical system manager, a learning management system manager, and a multimedia manager.

This particular design was developed at the DEARC of a public university. Since the very beginning of the pandemic in Turkey, the institutional response of our university to date—explained in detail below—has been two-fold, focused on technological and pedagogical empowerment. Currently, all educational activities for synchronous and asynchronous courses, including assessment and interaction among the lecturers and students are carried out via an open-source version of Canvas LMS, which has been configured and managed by the DEARC.

Our center’s staff included a director and an assistant director with two teams. The technical team consisted of two technical system managers, two LMS managers, a multimedia manager, and a secretary. The research and development team consisted of three instructional designers. At first, the meetings with the PAD had been conducted with the whole staff in the center, but then we decided to continue with only the research and development team. Since using Canvas does not require advanced technical skills, having the technical team in the design process would be both unnecessary and time-consuming, though they helped solve problems as needed. Rather, the research and development team with three instructional designers would be more appropriate to work with PAD in the design. Thus, this particular design project was conducted by members of the research and development team. This team included the authors of this design case: two instructional design faculty members, one faculty member with a Ph.D. degree in distance education, one faculty member with a Ph.D. degree
in curriculum and instruction, and one Ph.D. candidate in distance education. Cumulatively, our design team members had experience in educational technology, instructional design, design and development of learning environments both face-to-face and online, curriculum evaluation, and online teaching and learning.

**DESIGN PROCESS**

Every design context is unique and thus needs to be addressed in a unique manner when it comes to instructional design decisions. The online in-service training course template was developed based on a set of design decisions made by the design team. These design decisions, which we refer to as the conceptualization stage of the design, were made based on our previous distance education experience both as faculty members teaching online and as subject experts in the field, the existing information technology infrastructure of the university, and theories related to the design of an online learning environment. Below, we first describe the conceptualization stage of our design case, and then we explain the development of our design in detail.

**Conceptualization Stage**

As mentioned above, it was already decided that the in-service training activities of the university would be offered in the form of individual online courses to be published on the in-house LMS and the design team’s task would be to design an online training course template in line with the training content, objectives, and the general characteristics of trainers and trainees in the context of the university.

The university’s training events typically included training sessions on topics ranging from occupational health and safety to the fundamentals of writing scientific papers. The group of trainers included subject experts (e.g., experts in occupational health and safety) with or without an academic background. In other words, this group included both faculty members who had been teaching undergraduate and graduate courses at the university and non-faculty experts who had been offering face-to-face training to university staff on job-related topics. Some of these faculty members were already familiar with teaching in an online learning environment, while others had never taught online. This was also the case with the trainees. The university had been offering online individual courses for its students for almost a decade at the time of the study, but it had never offered an online learning experience targeted solely at its staff. Therefore, apart from their individual learning experiences which they might have gained outside the university, we assumed that some of the trainers and trainees were not familiar with teaching/learning in an online environment.

Considering the diversity of the training subjects and the varying levels of experience of both trainers and trainees with online training, the design team decided to build a modular and adaptable online in-service training course template to be compatible with any in-service training activity within the context of the university. We envisioned a template flexible enough to be modified according to the target content, learning objectives, and audience in question. Since some of the trainers and trainees had little or no experience in teaching/learning online, we decided to include an orientation phase with the fundamentals of teaching/learning online as well as the basics of the in-house LMS. Moreover, we decided to design the template in a way that would not only offer pedagogical and technological considerations in theory but also in a fashion that would reflect the application of these suggestions. In other words, we designed the template including a step-by-step approach based on procedural knowledge rather than a theoretical one. We considered not only this phase but also our entire template as an opportunity to model the use of online instructional tools by integrating some insights of pedagogy and theory-informed practice into learning environment design.

The next decision for the design team was how to deliver the content of orientation modules for both trainers and trainees. We already had both text and video materials about how to use the LMS as a teacher or as a learner because we had been using it for quite some time. These materials, on the other hand, mostly covered technical aspects of the LMS use and they did not address pedagogical dimensions of teaching online. One thing we aimed to achieve through orientation modules was to guide our in-service trainers about effective ways and practical hints to present their training content. They would certainly have text materials like PDF files, which they conveniently used to deliver through e-mail. In addition, delivering training content as instructional videos would be practical and offer trainees an alternative source of learning content. In our design meetings, we decided to have dynamic instructional videos and provided key content-delivery tools in online learning environments, which have long been highlighted as effective tools in online learning settings by several researchers (Moore & Smith, 2012; Beheshti et al., 2018; Kay, 2012; Lloyd & Robertson, 2012; Rackaway, 2012). We considered the practicability of sharing videos via our LMS, and we thought trainers/instructors could modify and reuse videos, and learners/trainees could watch, pause and re-watch them as they wish. Therefore, we anticipated that presenting orientation module content in the form of instructional videos, in addition to other text materials, and designing the content like an actual learning module would be best in our case so that our trainees could experience an example of the content.

Finally, considering that the usual target audience of any in-service training activity mostly consists of individuals who are already employed and expected to perform the tasks required by their work, we assumed that our trainees would have to balance conflicting demands from their professional...
and personal areas of life. To address this issue, we sought an instructional strategy that emphasized managing how the content would be presented to optimize knowledge acquisition. A strategy that has become prominent in this sense is bite-sized or microlearning, two terms frequently used interchangeably. Bite-sized learning is a style of teaching that uses short, targeted learning units (Manning et al., 2021) to facilitate learning by minimizing inessential cognitive load and focusing on key content (Young et al., 2014). Therefore, we decided to build the online in-service training course template based on a modular design approach and using bite-sized (i.e., micro-learning) modules. We anticipated that such a design would better assist in building a flexible and customizable course template so that any given online in-service training at the university could be tailored based on the particular training content, objectives, duration, procedure, and measurement and evaluation tools. Moreover, we believed that trainees could find learning materials presented in chunks highlighting theories, frameworks, and real-life examples, and trainers could reuse these materials in future training activities. We, therefore, decided to break orientation materials for both trainers and trainees into smaller, bite-sized chunks to offer an improved sense of progression and accomplishment as well as the flexibility to advance through a learning experience at their own pace.

Developing Our Design

As highlighted in the design context section, one of the requests by the PAD was authenticated access to the online platform where online in-service training courses would be delivered. Authenticated access was particularly required in this design case as in-service training was one of the obligatory tasks of the university. Since this process was official, it needed an authentication system that would allow each trainer and trainee to log in to the LMS with their unique official user information, which would later be used for official in-service training records. Normally, the university has an authentication system used for wireless and automatic IP access to the university network. In this system, every member of the university, whether a registered student or a staff member, is given a unique registration number as their user ID and a login password. The login interface of the LMS had already been integrated with the authentication system (see Figure 1). This allowed direct access to the user IDs of all the staff at the university, easily enrolling a staff member in a training course and tracking trainees’ activity and progress in the course.

Based on the design decisions made in the conceptualization stage and considering the varying levels of experience of both trainers and trainees with online teaching/learning,
the next phase involved preparing two modules for orientation, one for trainers and one for trainees, two sample module templates and one module sample for overall assessment activities (see Figure 2).

As the first module of the online in-service training course template, we prepared an orientation module named “Trainers’ Guide” to serve as a guide for trainers. We anticipated that the module would provide the trainers with theoretical and practical information about how to effectively prepare and deliver learning materials in an online setting and how to use the LMS to deliver learning content (see Figure 3).

We felt an emergent need for such a module for trainers because of our previous experiences at the DEARC, especially during the emergency remote teaching period due to the COVID-19 pandemic, which showed that even experienced faculty members had difficulty shifting their instruction, including their teaching style and teaching materials, to an online platform. As the design team, we were aware that merely providing information about the features of the LMS or other content presentation tools would not be enough. Therefore, we decided to include in this module what our experience and knowledge as both faculty members and distance education experts would offer to trainers in pedagogical terms alongside technological practicalities. The module was configured so as to be accessed only by trainers. We did this by leaving the module unpublished as this is the only way to limit student access to a specific module in the current version of the LMS. This issue was also explained to the trainers in the “Fundamentals of the LMS” part of the module. In this way, only trainers would be able to see the module and its contents upon logging into the platform. The module included five separate pages:

1. **INTRODUCTION TO THE TRAINERS’ GUIDE:** We prepared this page to introduce trainers to the scope and layout of the Trainers’ Guide module. We also thought that this page would set an example for trainers about making an introduction before starting a training course in general and a new lesson in particular.

2. **COURSE STRUCTURE FOR THE TRAINING:** This page aimed to give trainers information about how an online training course could be designed based on a tree-structured directory and what kind of modifications could be performed on the components (see Figures 4a and 4b, next page).

We added this tree-structured diagram to help trainers mentally visualize a sample layout for an online in-service training course/activity. Below the image, we suggested that:

- All subjects included in a training course could be divided into modules (i.e., units).
- Each module could consist of lessons.
- Each lesson could include three components, meant to be performed sequentially:
2. Ders Yapısı

UZEM tarafından, görevini arz eden yöneticiler için tasarlanan ders yapısı genellikle işleyebilir. Modüller ve dizin mantığına uygun bir yapıda eğitim alan, içeriği ve hefedileceği gibi değişiklikleri sağlar. Tüm bileşenlerin ve eylemlerin çalışma sürecini destekleyen bir eğitimin yapılığını sunar.

![Diagram](image.png)

**FIGURE 4A.** "Course Structure for the Training" page.

**FIGURE 4B.** Suggested layout for an online in-service training course (in English).
- Pre-Assessment: An ungraded assessment (e.g., "ungraded quiz") consisting of 1 or 2 questions aimed at generating interest and activating the course attendee's schema in the subject and enabling learners to see their current knowledge of the lesson topic.

- Presentation of Core Instructional Materials: All kinds of files, including audio-visual learning materials (e.g., presentations, PDF, Word, Excel, image files, links to external resources, graphics, and videos).

- End-of-Lesson Assessment: Assessment at the end of each lesson to measure the level of learning related to the lesson topic (e.g., graded quizzes).

- There could be a Post-Training Overall Assessment module that functions as an assessment activity performed after all modules and lessons are completed, covering all the content. Although exams are usually held for such assessments, alternatives such as homework or projects can be used depending on the type of training and content.

- In this modular and index-like structure, it is possible to add, omit or modify any of the components, depending on variables such as training topic, objectives, and target audience.

3. INSTRUCTIONAL MATERIALS PREPARATION GUIDE:
We prepared this page to present a framework for trainers with hints and insights about the principles, practices, and tools that will help to prepare instructional materials specifically meant for online teaching. Based on the emergent decisions made during the conceptualization phase, we decided to prepare these guiding materials mostly in the form of bite-sized informative videos. All the videos were uploaded to the YouTube account of DEARC and shared on the corresponding pages of this sub-module via a media link to YouTube. Normally, the LMS allows uploading video files on a page but we did not prefer to do so because this would increase the load of the course, causing the pages to open more slowly. Instead, we embedded the links of these videos on pages, which allowed viewers to watch videos in a frame without leaving the course pages. Figure 5 shows an example of these pages. The materials addressed six topics.
• **3.1. PREPARING INSTRUCTIONAL VIDEOS** (video: 09:16 min): This video included suggestions to prepare effective instructional videos. We wanted to prepare this video on instructional videos by particularly utilizing the methods and techniques addressed in the video. In other words, we not only provided trainers with suggestions to make effective videos, but we also applied all the hints we gave while preparing this video. The video addressed topics such as the importance of instructor presence for online motivation and learning, recommended video length, segmenting the learning content strategically (i.e., bite-sized learning); using a script; intonation and pace while speaking; avoiding cognitive overload (e.g., use of titles, images or keywords instead of reading a PDF file for instance); visual consistency; making brief introductions; use of guiding questions; integrating video content with assessments or homework, and effectively ending a video. One particular challenge when preparing this video was to make it as short as possible because it was difficult to split the subject into short yet meaningful chunks. When it comes to instructional videos, research results generally favor shorter videos over longer ones, but there is not an ideal length for all videos. TechSmith Corporation (2018) suggests that most viewers prefer informational and instructional videos that are shorter than 20 minutes long, with the 3-6 minute range being the most popular while Guo et al. (2014) suggest that videos not exceeding 6 minutes in length are more favorable and the rate of watching a video to the end falls below 50 percent for lecture videos lasting longer than 9 minutes. In our video, we recommended that, on average, a video clip should be aimed to be 5-6 minutes long, and care should be taken not to exceed 9 minutes. Some of the videos in our guide are longer than others due to the nature of the content, but they are still within the limits we recommended.

• **3.2. PRESENTATION PREPARATION PRINCIPLES AND A POWERPOINT TEMPLATE** (video: 09:28 min, sample PDF and PPTX files): The primary aim of this video was to offer trainers insights about making effective presentations. The topics included practical hints and tips such as visual consistency, format ideas, using bullets for key points, and using page numbers, in addition to pedagogical suggestions such as structuring the presentation with a warm-up, development, and conclusion phases, providing and receiving feedback, varying the pace, pitch, and volume of delivery and making a summary. Just as the case with the previous video, both this bite-sized instructional video and the following ones demonstrated a translation of pedagogical and technological guidelines into practice. A sample presentation template was included on this page as downloadable PDF and PPTX files. As the university aimed to build a university brand identity and encouraged all staff to use identical visual elements from the university logo to stationery and brochures, we added these to the presentation template files.

• **3.3. ADDING/DELETING AUDIO ELEMENTS IN POWERPOINT PRESENTATIONS AND SAVING PRESENTATIONS AS VIDEOS** (video: 03:09 min, video: 01:58 min): Because MS PowerPoint was a popular slide-show presentation program, we anticipated that most trainers would already be familiar with the program and would feel comfortable using it to prepare their teaching materials. Introducing (or reminding) trainers about adding/deleting audio clips to PowerPoint presentations and saving PPTX presentations as videos would be useful for trainers’ computer skills.

• **3.4. SCREENCAST-O-MATIC SCREENCASTING TOOL** (video: 05:21 min): The Screencast-O-Matic program is a free and easy-to-use option that helps create a lecture video on the computer screen and webcam view. We decided to include this video for two reasons. Firstly, we had this video at hand as a part of informative videos prepared by the DEARC for faculty members teaching online. Secondly, we wanted to offer trainers an alternative tool for creating instructional videos using their lecture notes.

• **3.5. CREATING INSTRUCTIONAL VIDEOS WITH ZOOM** (video: 04:50 min): Zoom is a cloud-based conferencing software that allows multiple users to meet online via video link. It might not be a wild guess to suggest that the word “Zoom” could be one of the most frequently used words around the world during this pandemic era. Taking its global popularity into account, we believed that most trainers would already be familiar with the software. Also, we simply wanted to offer trainers another alternative.

• **3.6. UPLOADING INSTRUCTIONAL VIDEOS TO YOUTUBE AND SHARING ON THE LMS** (video: 04:09 min): As mentioned earlier, the university’s LMS allowed uploading videos on a course page but the space allocated for a course on the LMS was limited. It would be practical to upload videos to online platforms like YouTube and to share them on the corresponding pages of a course via a media link. Therefore, we prepared a video about how to do that.

4. **FUNDAMENTALS OF THE LMS**: This page consisted of seven informative videos about the basic system usage that trainers may need while using the LMS. These informative videos had been prepared before this design case by the DEARC team for faculty members teaching online. In other words, these videos were already available and could serve as user manuals. The videos addressed the following topics: Module Creation and Editing (6:35 min), Adding Pages to Modules (6:09 min), Adding a Video or a Link to a Page (3:29 min), Announcements (4:25 min), Quiz Settings (4:24),
Multiple Choice Questions in Quizzes (4:56), and Other Question Types in Quizzes (8:55). For easy access, we added these videos on a single page under corresponding titles. We also included a link to the DEARC website for further inquiry about the use of the LMS (see Figure 6).

5. **END OF THE TRAINERS’ GUIDE**: We prepared this page to make a closure for the trainer orientation module and to introduce the modules following it.

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**Trainee Modules**

As mentioned earlier, we configured the trainer orientation module to be invisible to the trainee view. Therefore, the first module a trainee can access upon logging into the course is the orientation module for trainees, “Introduction to X Training.” The module consists of four parts. The first part, the “Fundamentals of the LMS” page, includes a six-minute video demonstrating the LMS features a trainee would need to know about and use throughout the course (e.g., providing an active email address in the profile settings to receive notifications about course announcements or
Eğitim Hakkında

[Buraya bir kısa bir kapağın mesajı yazabilir veya kısa bir video bağlantısı verebilirsiniz]

**Eğitimini Veren:** 

**İletişim:** 

**Eğitim Kapısı:**

Bu eğitimin **bu** konularını içermektedir.

**Eğitim Amacı:**

Eğitim sonunda,

- --------------------------- değerliyecek,
- --------------------------- değerliyecek,
- --------------------------- onaylayabileceğiniz.
- ...

**Eğitim Sürűcü:**

- Eğitim boyunca gerçekleştirilecek tüm etkinlikler yukarıdaki amaçlar doğrultusunda modüller halinde tasarlanmıştır.
- Eğitim, konularda uygun görsel-ışıklı materyaller ve pekiştirici ögneyle degerlendirilecek sorular üzerinden formlanmaktadır.
- Etkinlikler belirli bir oryantasyon etiketten olup, öncelikle olayın tamamlanmasından bir sonrakine geçmektedir.
- Tüm eğitim içeriğinin parçalar har bir konuya ilgili yapıtların doğru değerlendirme ekliklere katılmaları gerekmektedir.
- Öncelikle, bu eğitimlerin her modülü aşağıdaki adımları içerir.
  - Ön Değerlendirme: Eğitimin her konu başlığı, bir başlık altında konu hakkında özetlenecek ve 1 ya da 2 sorunun bir ön değerlendirme ile sağlanmaktadır. Konunun herhangi bir konu ile ilgili olmayan herhangi bir konu kabul edilememektedir.
  - Eğitim Materyali: Ön değerlendirme sonuna göre eğitim aşamasına geçilir. Eğitim materyalleri, eğitimin uygun geçişini herNTAX ders notu, görsel-ışıklı içerik, ders içeriği dosyalarıyla yapılır.
  - Son Değerlendirme: Her konu başlığındaki eğitim materyalleri aşamasının ardından konu ile ilgili bir test sınavı vardır. Bu testi paralel olarak o konuyu tamamlamak durumdadır.
  - Eğitim Sonu Genel Değerlendirme: Tüm eğitim modulleri ve konu başlıkları bilinen konulara yapıtılan bu değerlendirme şeklinde, XX. soru/ödev

**Onay Sayfası**

**Başlık:** 28 Mar 0:36

Kısa Sınav Yönergeleri

**Soru 1**

100 puan

X Eğitimine devam edebilmeniz için aşağıdaki ifadeyi okuyun ve onay vermelisiniz:

X Eğitimini tamın, telif hakları, paylaşıma ve diğer kurallara ilişkin bilgileri okudum ve anladım.

X Eğitim sürecinin tamamında bu ilkeler doğrultusunda hareket edeceğim.

6698 SayıliKişisel Verilerin Korunması Mevzuatı Uyarınca Uzaktan Eğitim Süreci Çalışan Aydınlatma Metnini Okudum ve Anladım.

**Onaylıyor musunuz?**

- [ ] ONAYLIYORUM.
updates). The second part, the “About the Training” page, is a template page that trainers can modify depending on the scope and organization of the training course (see Figure 7). The page is meant to serve as an introduction to the course and provide basic information about the course such as the trainer’s name, contact info, the scope (i.e., course syllabus) and objectives of the training, how the training process is constructed in a modular design with pre- and post-training assessment activities and their roles, and other details such as the start and end dates of the course. On top of this page, we suggested trainers write a welcoming message and add their photos or embed a brief introductory video on the page to promote instructor presence, which is positively associated with increased retention, motivation, and learning in online courses (Palloff & Pratt, 2013; Park & Kim, 2020). An introduction to an online course is one of the first components learners meet when they start the course, and it prepares learners for their experience along the course. We prepared this page with blanks to be filled in by the trainer, allowing for modifications. We assumed trainers would have learned how to edit pages after going through the Trainers’ Guide.

The third part of this module, the “Terms of Use” page, included information about the policies of the university regarding distance education, such as the privacy policy in accordance with the Personal Data Protection Law, the honor code & code of conduct, and copyright policy. We added this page because it is a legal requirement to inform learners about this subject and to ensure that they understand and agree with the terms of use. In order to make sure that trainers agree with the terms of use, we decided to utilize the quiz tool of the LMS as the last part of this module. We prepared a single-question “ungraded survey” type quiz with only one possible answer. Before the actual question, we added a statement informing trainers that they could not continue the course unless they read the information about the policies of the university and answered the question. The question was: “Do you hereby acknowledge that you have read, understood and accept the terms of use?” and the one possible answer was: “Yes, I do” (see Figure 8).

We added an empty module named “NOTE: YOU CANNOT PROCEED UNLESS YOU COMPLETE THE INTRODUCTION MODULE!!” In the LMS, modules are expanded and show all items in the module by default. However, when a module does not include any items, one can only see the module name as just one line of text (see Figure 9). We decided to use capital letters based on experience with students in online environments. As a result, the module title served as a banner reminding trainees to go through the introductory module. Over the past years, we had observed that answers to most questions asked by students enrolled in online courses could be found in introduction modules, which indicated that students might tend to skip the parts with essential information. We also edited the settings of the introduction module and set the requirements for the module. Therefore, trainees would have to view the pages and confirm their agreement to the terms of use.

The next phase involved providing trainers with module templates. We already presented a suggested layout for an online in-service training course (see Figure 4), but now it was time to create that layout. We designed two module templates based on this layout and titled them Module 1 and Module 2 (see Figure 10). We assumed providing two templates with two sample topics would be enough to help trainers understand the point as they had already been informed and shown in the orientation module that Canvas allows adding, removing, and editing modules.

We added, “Introduction to the Module” and “Introduction to the Lesson” pages to encourage trainers to provide a brief overview of the module and a description of what the learner would learn. On these pages, we provided suggestions, explanations, and texts with blanks to be filled in or modified by trainers. On a page for core lesson materials, we included explanations about how to deliver training content and recommendations about employing different types of learning materials such as videos, texts, images, and links to external resources to enrich their instruction. At the end of the module template, we added a “Module Summary” page to summarize and transition to the next module. We also thought it would be useful to revise the objectives and content in the form of keywords or concepts and to enhance

![FIGURE 9. Use of module name as a note for learners.](image-url)
the arrangement of all the modules in a well-organized way. In this phase, one of the researchers in the DEARC team who has expertise in curriculum development supported the trainers and gave them feedback in specifying the course objectives.

The module templates also included sample pre-assessment and end-of-lesson quizzes. We did not add any questions to these quizzes, but we had already shared a video about quizzes and question types in the Trainers’ guide. Both the trainer and trainee orientation modules informed course participants that pre-assessment quizzes would not be graded but end-of-lesson quizzes would be. Nevertheless, as an extra explanation, we added a note at the beginning of each sample quiz specifying whether that quiz would be graded or ungraded.

As the final step in designing the training course template, we added a culminating sample module for post-training overall assessment. Within this module, we created a sample quiz.

After this last step of the design stage, each member of the design team reviewed all the components of the template individually. Following this process, we came together online as the design team and discussed our suggestions for revisions. Each of us shared several editing notes. Most of our suggestions were minor revisions on language use and typos in the design, so it did not take long for us to finish the template and contact the PAD to arrange a meeting. Once the online training course was ready, we had a meeting with the PAD and presented the template to them.

**FAILURE ANALYSIS AND PILOTING**

Our design is innovative in that it will have the potential to transform the obligatory and optional in-service training programs in our university, which in the past, have occurred in face-to-face contexts, by lecture. Since the design is integrated into the currently-used LMS, it is a sustainable approach that should enable further training programs to be continued as online or hybrid practices. We, as the design team, adopted an analytical stance on our design. Accordingly, we are aware of what we have uncovered and what needs to be improved—as Howard (2011) notes as failure analysis in design cases. Krippendorf (2006) highlights the value of explicitly stating the design failures as they can turn into the design's strength in other contexts. An internal failure analysis by the design team has enabled us to reflect on the quality of the design in several aspects.
First, the designed course template, which was built for individual asynchronous practices, does not include interactive discussions. The design could be improved by enabling the trainers and trainees to interact in discussion forums, adding adaptable templates for discussions, and offering training guides and videos for both trainers and trainees.

Another potential shortcoming relates to enabling teamwork and interaction in training programs. Since interaction among the trainees through teamwork is thought to increase their engagement in training programs and accordingly the effectiveness of these programs, structures for group work activities could be incorporated into the template in future design work.

Moreover, our design seems to present some limitations in terms of assessing the trainees’ course performance. Trainees may skip the videos in our design and the LMS system currently lacks a monitoring system for trainees’ pacing the videos. Therefore, we plan to integrate built-in applications so that trainers can monitor trainees’ progress throughout the training with hassle-free analytics, which may constitute another failure in our design.

We piloted the design with two groups of trainers. For the first group, we recruited faculty members who had previously conducted in-service training sessions and who had experience teaching online. Two faculty members volunteered to test and evaluate our training course template design.

For the second group of trainers, we asked the PAD if they could help us pilot the design. The PAD sent us the names and contact information of two civil protection experts, who were assigned to conduct an online training session on disaster preparedness training. Although they had previous experience training university staff on subjects such as occupational health and safety, they did not have any experience teaching online.

We created four copies of our template and added a trainer to each copy in the role of teacher. This meant they could evaluate the design of the course template and the content of the guides by actually using the templates to add their learning materials. We gave them one month to test and evaluate the design. We then sought their feedback about the experience.

What experienced faculty members reflected on our design, fortunately, allowed us to revisit the organization of our design in-depth based on pedagogical aspects. Specifically, faculty members suggested moving content about how to use and navigate the Canvas LMS platform to the top of the modules so that the trainers who are likely to meet the Canvas LMS for the first time would first complete the basics of the LMS module before designing their own training.

The faculty members also recommended including more information about pedagogical aspects of instructional design. Since the design of an online learning environment is comprehensive, the design team had already decided to have another in-service training for supporting teaching online. Rather than focusing on technical aspects, this training will focus on quality online teaching and learning, covering basic concepts of distance learning, writing course objectives, syllabus templates, quality checklists, evaluation, and accessibility. Thus, trainers will have the opportunity to take this training before they design their in-service training activities.

The reflections by our second group including two civil protection experts, who were less experienced in designing and conducting online training, also brought about practical suggestions to develop our design. When we first contacted these civil protection experts, they wanted to have an online meeting as they were unfamiliar with the LMS and online teaching in general. During the meeting, we realized that we would have to start from scratch because they clearly stated that they did not have basic computer skills such as using productivity or presentation software (e.g., Microsoft PowerPoint). We decided to have weekly online meetings with this group and provide additional guidance to them. We also set up a messaging group for them so that they could ask questions. We had four online meetings with this group. We started with how to create and edit documents as well as audio/video files and continued with how to log in to the LMS. We also guided them through each part of the Instructors’ Guide module.

At the end of the one-month duration, one of the civil protection experts stated that she liked the training course template design and she realized that the preparatory modules did help a trainer a lot if followed one by one. She also highlighted a need for integrating a module or several pages on applying basic computer skills at the very beginning of the design. The other civil protection expert, however, stated that he appreciated the effort and liked the training course design but he had a very negative attitude towards online learning. This participant skipped or arrived late to our meetings. The LMS user analytics also revealed that he hardly spent time in the LMS and he viewed a few of the preparatory pages.

To sum up, the pilot use of our design case taught us that assuming trainers assigned to deliver their content online had already possessed basic computer skills and positive attitudes towards online teaching could lead to design failure. The pilot results suggested the preparatory module should start with information about basic computer skills to be followed by fundamentals of the LMS and should cover more information about useful pedagogical insights and hints for online teaching. On the other hand, such supportive...
CONCLUSION

This design case offers a detailed description of processes in the design of a course template published on the in-house LMS to be used for the institutional in-service training at a public university in Turkey. Our experience in this design case taught us the importance of understanding trainer needs, including their readiness and willingness to teach online and their computer skills. As the pilot testing revealed, providing a template with training materials would not be sufficient for some trainers if not accompanied by our additional support and collaboration. Had we conducted a more thorough needs assessment prior to designing, we might have uncovered this diversity in time to design to meet varied needs. This is a perennial problem, as clients and directors are often unwilling to invest resources in problem framing.

Our design started with a shared desire to use the in-house online education facilities and human resources for advancing in-service training practices. Both the administrators and the DEARC researchers were eager to empower the institutional in-service training capacity. Our collaborative conceptualization and development stages resulted in an adaptable in-service training course template. Although our design is specific to our institutional context and needs, our design case may inspire others, such as in our decision to use unpublished modules as embedded training opportunities in the course template.

REFERENCES


