# TALKING THE QUALITY TALK, WALKING THE QUALITY WALK: DEVELOPING AN ONLINE QUALITY ASSURANCE TRAINING PROGRAM

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**ABSTRACT**
Quality Assurance (QA) aims to ensure and enhance educational quality, promote accountability, and foster sustainable improvement and is considered a crucial element for higher education systems in a world of constant change, increased competitiveness, technological innovation, and rising costs. In the last several years, quality assurance in Turkish higher education has experienced substantial improvements. The current developments reflect ongoing efforts in Turkish higher education to improve quality assurance processes, comply with international standards, and guarantee the consistency of academic offerings and institutional standards. The development and training of human resources are of paramount importance in creating sustainable QA efforts. Thus, the Quality Coordinatorship of Anadolu University developed a unique online training entitled "Institutional Self-Evaluation Training Programme" to equip the staff involved with the required knowledge and skills to conduct internal evaluation in academic programs at the university. Following a cross-sectional research design, and making use of learning analytics and satisfaction survey, this research investigated the learning patterns and satisfaction of the participants involved in this course. The high learning resources access and activity completion rates in this course suggest that there was a significant interest in the course considering it was only a recommended course. In addition, high levels of satisfaction, which was supported by the qualitative findings, show that the online training was endorsed by the participants as a viable training activity.

**INTRODUCTION**
As institutions work to deliver top-notch educational experiences and satisfy stakeholder expectations, quality assurance (QA) has taken on a fundamental role in the area of higher education. The development of QA frameworks and methods contributes to the achievement of better student learning outcomes and institutional accountability in order to guarantee and improve the quality of higher education programs. Quality assurance in higher education entails the systematic and ongoing examination, monitoring, and improvement of educational processes, programs, and results (Harvey & Green, 1993). It includes a variety of initiatives, regulations, and procedures aimed at ensuring and improving the standard of instruction, learning, research, and student support services in higher education institutions (Weinrib & Jones, 2014). The European Association for Quality Assurance in Higher Education (ENQA) (2015) underscores that QA is focused on the creation of standards, the design of evaluation standards, and the use of processes to assure compliance and improvement.

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Higher education institutions (HEIs) worldwide are recommended to establish a QA system in order to provide a transparent and accountable approach to the services they provide and the outputs they produce. In addition to their own standards, HEIs are also subjected to the internal and external evaluation processes carried out by the institutions they are affiliated with. Furthermore, in some instances, the accreditation system of an independent institution provides QA for higher education institutions (Işık & Beykoz, 2018). Today, HEIs have increased their efforts to establish QA systems, depending on the goal of ensuring sustainable quality in education. In order for these established mechanisms to function systematically and regularly, institutions have also been involved in internal and external evaluation processes (Soyer & Güler, 2021).

Quality assurance activities in HEIs have gained considerable momentum in Turkiye as well. In the Turkish higher education scene, with the start of the Bologna Process in 2001 and the strategic planning activities that have intensified since 2006, developing standards and making longer-term plans by complying with these standards have gained importance. The quality assurance system envisioned for the Turkish HEIs recommend that institutions set their own goals and objectives, make various practices to achieve common goals and objectives, monitor these practices and evaluate their results.

QA attempts in the Turkish higher education scene have gained new momentum with the establishment of the Turkish Higher Education Quality Council (THEQC) in 2015. Turkish HEIs have begun to conduct their own self-evaluations, and produce annual reports called "Institutional Self- Evaluation Reports". The scope of these internal evaluations is composed of topics including "Learning and Teaching", "Research and Development", "Service to Society", and "Leadership, Governance and Quality", which are considered among the primary functions of HEIs in Turkiye (THEQC, 2022). Since the Turkish HEIs have been required to establish their own internal QA systems, the development and training of human resources to be involved in QA and evaluation processes have proved to be an important issue. For this reason, the attempts of Anadolu University to establish its own unique and sustainable quality assurance system included the training and development activities of the staff involved in quality processes. Making use of its more than four decades of experience and expertise in open and distance learning, the Quality Coordinatorship of Anadolu University developed a unique online training course to equip the university staff with the required knowledge and skills to conduct internal evaluations depending on the standards set by the THEQC. This study, therefore, reports the development and evaluation of this online course entitled "Institutional Self-Evaluation Training Programme".

## QUALITY ASSURANCE IN HIGHER EDUCATION

Quality Assurance (QA) aims to ensure and enhance educational quality, promote accountability, and foster sustainable improvement, and is considered a crucial element for higher education systems in a world of constant change, increased competitiveness, technological innovation, and rising costs (Harvey & Green, 1993; Weinrib & Jones, 2014). With the increase in the demand for higher education, technological developments, and the social changes they bring, the expectations for high quality service and outputs from HEIs have also increased (Uygur, 2018). According to Külcü (2005), organizations aiming for the future need to take important steps towards learning how to plan for quality, raise awareness and organize their stakeholders, establish and maintain a sustainable QA system.

There are several facets to the importance of quality assurance in higher education. Firstly, it is essential in fostering educational excellence by establishing and upholding high standards for instruction and learning. Institutions may improve the overall quality of education by identifying areas for improvement, implementing evidence-based practices and using QA processes (Weinrib & Jones, 2014). By ensuring that institutions of higher learning uphold their commitments to students, society, and other stakeholders, QA also improves institutional accountability. It creates systems for assessing and monitoring educational quality, which fosters transparency and trust (Özcan et al., 2022). Today, certification, strategic management-based accountability performance indicators reporting, accreditation, external evaluation process are practices carried out in universities within the scope of quality assurance (Taştan & Yılmaz, 2022). Quality management in higher education is an approach that comes from the philosophy of total quality management and brings together the systems of independent external evaluation institutions as well as considering the unique standards of HEIs.

In conclusion, a vital procedure that protects and improves the quality of educational services and activities is QA in higher education. Institutions may provide high-quality education, encourage accountability, and fulfill stakeholder expectations by setting standards, observing procedures, and putting improvement initiatives into place. Clear learning objectives, reliable assessment procedures, faculty development, and external quality control systems are the main pillars of QA. Effective QA methods are becoming more and more crucial in ensuring

educational excellence as higher education institutions continue to face emerging difficulties and challenging social demands.

## QUALITY ASSURANCE IN THE TURKISH HIGHER EDUCATION SCENE

The history of quality assurance in Turkish higher education dates back to the early 1990s. The Higher Education Quality Board (HEQB) was founded in 1993 by the Turkish Council of Higher Education (CoHE). The HEQB undertook the tasks of developing and implementing a quality assurance system for the Turkish HEIs. This was followed by the accreditation of some engineering programs in 1994 and the teacher training programs in 1998 (Uygur, 2018). With the effect of the Bologna Declaration, an accreditation board was established by the CoHE in order to realize the goal of achieving the quality of education policies matching that of European higher education (Süngü & Bayrakçı, 2010). Between 2016 and 2019, the TURQUAS project which aimed to support the implementation and sustainability of European Higher Education reforms was carried out by the CoHE (YÖK, 2019).

Developments gained momentum with the Bologna Process, and two programs of the Faculty of Engineering at the Middle East Technical University, Ankara were accredited by the Accreditation Board for Engineering and Technology (ABET) in 1994 (Süngü & Bayrakçı, 2010). In 2002, the Association for Evaluation and Accreditation of Engineering Programs (MÜDEK) was established. This was followed by the establishment of the Higher Education Academic Evaluation and Quality Improvement Commission (YÖDEK) in 2005 (Uygur, 2018). The establishment of YÖDEK is considered a vital step toward the QA standards developed by ENQA (Süngü & Bayrakçı, 2010). YÖDEK recommended that universities should create their strategic plans as a result of their own evaluations every year, carry out improvement activities, and receive an external evaluation every five years (Tezsürücü & Bursalıoğlu, 2013).

In 2008, the CoHE requested each university to establish a "Bologna Coordination Commission". In 2010, the Turkish Higher Education Qualifications Framework (THEQF) was completed and took its place in the historical process. YÖDEK was abolished with the "Regulation on Quality Assurance in Higher Education" in 2015 and the "Turkish Higher Education Quality Council (THEQC)" was established within the body of the CoHE (YÖK, 2019). With the relevant regulation, internal and external quality assurance and accreditation processes of all activities of higher education institutions are defined. In general, the quality assurance system in Turkish higher education is carried out within the scope of internal and external evaluation processes in order to measure the quality of teaching outputs, determine their standards and provide accreditation (Işık & Beykoz, 2018).

The importance of quality assurance in Turkish higher education cannot be overstated. The THEQC is actively promoting high standards in Turkish education (Taşcı & Lapçın, 2023). There are still a few issues that need to be resolved, though. Turkey can significantly advance the caliber of its higher education system with commitment from stakeholders, international cooperation, and technical innovation. One critical element in advancing the QA processes in the Turkish HEIs is the sustainable development of human-resources through training activities. Therefore, this study undertook to investigate the learning patterns and satisfaction of the involved staff regarding the online "Institutional Self-Evaluation Training" course developed by the Quality Coordinatorship of Anadolu University.

## RESEARCH METHOD

This research employs a cross-sectional survey design since, firstly, it attempts to examine the usage patterns regarding the learning resources delivered in the online in-service training course, and secondly it investigates the satisfaction of participants with the course. With the cross-sectional research design, researcher collects data at one point in time to investigate the attitudes, beliefs, opinions, or practices (Creswell, 2014, p. 337) . This research particularly focusses on practices by examining the utility of learning resources by the participants of the online training course. Learning analytics data is utilized as indicators of learning resources usage, thus, usage patterns are examined depending on the learning analytics data accessed from the Learning Management System (LMS). In addition, participant satisfaction with the course was assessed through an online questionnaire developed by the researchers. The course satisfaction questionnaire was posted on the final module as a course evaluation activity, and involved 7 items regarding satisfaction from orientation activities, instructional videos, case studies, self-evaluation activities, time given to complete the course, and finally the perceived degree to which the course met participant expectations. These items were assessed through a five-point Likert scale ranging from 1 = Very Dissatisfied to 5 = Very Satisfied. Additionally, the questionnaire included an open-ended comments section for the participants to share further opinions on the course.

**Research Context**

This research was conducted in a completely online in-service training course on internal quality evaluation in higher education delivered at Anadolu University, Turkiye. The online "Institutional Self-Evaluation Training" course was developed based on the evaluation standards by the THEQC involving the main evaluation topics and evaluation criteria. The primary objective of the course was to equip the participants with the knowledge and skills to conduct internal evaluations of the academic programs using the standards recommended by THEQC. The online training was composed of 8 modules. The course began with an Orientation module, then went on to include modules on the evaluation topics, and ended with the Course Summary module. Each module began with an *Instructional Video* covering the main issues in the module. Each instructional video was followed by a short *Quiz*. This was followed by *Module Reading*, a text-based learning resource addressing the topic in detail involving the criteria, sub-criteria, and associated rubric. *The Case Study* that followed allowed the participants to put theory into practice in a discussion forum. Finally, *the End-of-Module Test* enabled self-evaluations reporting the level of learning in each module. The course was delivered on Canvas, the open-source LMS adopted by the university.
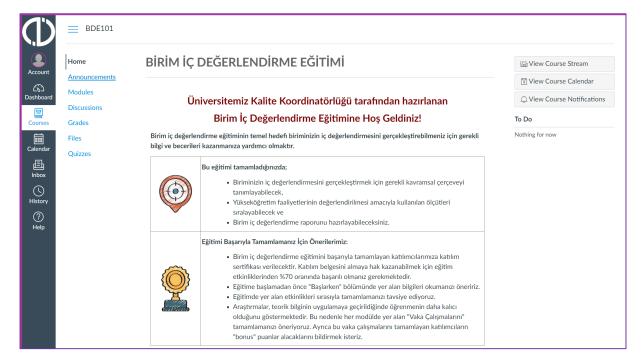


*Figure 1. The online in-service training course welcome page*

**Participants**

The participants of the course were recruited among the members of academic unit quality evaluation commissions through email invitations. A total of 375 invitations were sent, 319 (85%) of which were accepted. The course was not a compulsory course, but it was a recommended course. The participants were primarily academic staff, however, there was administrative staff, though in minority. These staff were given the task to conduct internal evaluations in the related academic unit. Therefore, this research incorporated the learning analytics data composed of the digital footprints left by the 319 participants throughout their online learning experiences. The online satisfaction questionnaire posted on the final module was completed by 63 course participants voluntarily.

**Data Collection and Analysis**

Learning analytics data was accessed from the learning analytics dashboard of the LMS. Also, the researchers used the Tampermonkey v. 4.1.18.1 userscript to unearth further learning analytics data from the online course. Course satisfaction data was collected through an online questionnaire. Data from both resources was analyzed through descriptive analysis to investigate the learning patterns and satisfaction of training participants. Qualitative data analysis was conducted to explore the comments made on the open-ended section of the online questionnaire.

**RESULTS**

This section, firstly, presents the descriptive statistics depending on the learning analytics data involving access to the learning resources and activities as well as quiz, test and case study completion rates. Next, course satisfaction

results are reported through descriptive statistics. Finally, the qualitative satisfaction results are triangulated with the qualitative results.

**Learning Analytics Data and Learning Patterns**
Descriptive analysis of the learning analytics data revealed that 259 (81%) of the 319 registered participants made a total of 31,174 visits with an average of 120.36 per participant (Table 1). On the other hand, the completion data showed that relatively fewer number of participants completed learning activities (quizzes, tests, and case studies). One-hundred and forty-seven participants (46%) completed a total of 2,032 activities with an average of 13.82 activities per participant, which shows that some participants completed the same activity more than once.
Research in the literature on online learning reports completion rates as low as from 0.7% to 52.1% with a median of 12.6% for non-compulsory online courses (Jordan, 2015). Additionally, studies report lower levels of student participation and interaction in online courses (Dixson, 2010; Hollister et al., 2022). However, the access and completion rates in this course indicate that there was a significant interest in the course considering it was only a recommended course.

*Table 1. Descriptive statistics on page visits and activity completion*

|  | *n* | *f* | $\bar{x}$ | *SD* | *Min.* | *Max.* | *Skewness* | *Kurtosis* |
|---|---|---|---|---|---|---|---|---|
| Page Visit | 259 | 31,1474 | 120.36 | 116,95 | 1 | 877 | 1.97 | 7.27 |
| Completion* | 147 | 2,032 | 13.82 | 10,98 | 1 | 45 | 0.41 | 0.89 |

*\* Completion data involves submissions of quizzes, end-of-module tests, and case study discussions.*

The analysis of access data to each individual learning resource showed that the most frequently visited learning activity was self-evaluation activities ($f = 6,416$, $\bar{x} = 33.24$) by the greatest number of participants (n = 193) (Table 2). This result was expected considering the interactive nature and the number of these activities (N=13). Also, participants were given unlimited attempts to try out. In addition, the high frequencies might be due to the fact that the quizzes were requisites to qualify for the course certificate.

*Table 2. Descriptive statistics regarding access to learning resources and activities*

|  | *n* | *f* | $\bar{x}$ | *SD* | *Min.* | *Max.* | *Skewness* | *Kurtosis* |
|---|---|---|---|---|---|---|---|---|
| Module Reading | 157 | 1,847 | 11.76 | 11.39 | 1 | 64 | 2.24 | 7.20 |
| Instructional Videos | 161 | 1,615 | 10.03 | 11.42 | 1 | 78 | 2.62 | 10.15 |
| Self-Evaluation Activities | 193 | 6,416 | 33.24 | 33.23 | 1 | 139 | 0.88 | 0.04 |
| Case Studies | 158 | 3,116 | 19.72 | 25.06 | 1 | 211 | 3.89 | 22.95 |

The breakdown of access to each instructional video demonstrated that the most frequently accessed instructional video was the 'Introduction' video ($f = 356$, $\bar{x} = 2.40$) by the greatest number of participants (n = 148) (Table 3). This was followed by the 'Quality Discussions' video which was the second video on the course ($f = 284$, $\bar{x} = 2.20$) viewed by 129 participants. The least viewed instructional video was the 'Common Mistakes' video posted on the final module ($f = 161$, $\bar{x} = 2.06$) by 78 participants (Table 3).

*Table 3. Descriptive statistics regarding access to instructional videos*

|  | *n* | *f* | $\bar{x}$ | *SD* | *Min.* | *Max.* | *Skewness* | *Kurtosis* |
|---|---|---|---|---|---|---|---|---|
| Research & Development | 104 | 198 | 1.90 | 1.28 | 1 | 7 | 1.78 | 3.06 |
| Learning and Teaching | 111 | 228 | 2.05 | 1.57 | 1 | 9 | 2.01 | 4.99 |
| Quality Assurance | 116 | 273 | 2.35 | 2.16 | 1 | 17 | 3.64 | 19.12 |
| Common Mistakes | 78 | 161 | 2.06 | 1.30 | 1 | 6 | 1.19 | 0.431 |
| Service to Society | 94 | 148 | 1.57 | 0.92 | 1 | 5 | 2.05 | 4.59 |
| Management System | 89 | 155 | 1.74 | 1.04 | 1 | 7 | 2.16 | 7.05 |
| Introduction | 148 | 356 | 2.40 | 2.35 | 1 | 18 | 3.41 | 16.10 |
| Quality Talks | 129 | 284 | 2.20 | 2.11 | 1 | 17 | 3.80 | 20.63 |

In addition to individual instructional video trace data analysis, quiz trace data and quiz submission data was analyzed. As expected, the most frequently accessed quiz was the first quiz in the course ($f = 187$, $\bar{x} = 5.05$), and access to the quizzes gradually decreased depending on the order in which the quiz was presented. However, the descriptive statistics revealed that the least accessed quiz was Quiz 7 on the course page (Table 4).

*Table 4. Descriptive statistics regarding access to quizzes*

|        | *n* | *f* | $\bar{x}$ | *SD* | *Min.* | *Max.* | *Skewness* | *Kurtosis* |
|--------|-----|-----|-----------|------|--------|--------|-----------|-----------|
| Quiz 1 | 187 | 955 | 5.05 | 3.87 | 1 | 23 | 1.97 | 5.10 |
| Quiz 2 | 140 | 659 | 4.70 | 3.92 | 1 | 27 | 2.97 | 12.54 |
| Quiz 3 | 127 | 629 | 4.95 | 3.03 | 1 | 21 | 1.90 | 6.77 |
| Quiz 4 | 112 | 546 | 4.87 | 3.33 | 1 | 18 | 1.86 | 4.31 |
| Quiz 5 | 103 | 435 | 4.22 | 2.41 | 1 | 12 | 1.29 | 2.19 |
| Quiz 6 | 100 | 470 | 4.69 | 2.82 | 1 | 14 | 1.31 | 1.83 |
| Quiz 7 | 91 | 344 | 3.78 | 1.73 | 1 | 14 | 2.39 | 12.57 |
| Quiz 8 | 94 | 425 | 4.52 | 2.79 | 1 | 22 | 2.87 | 15.83 |

Learning analytics data regarding quiz submissions show a similar pattern to quiz access data in that the most submitted quiz is the first quiz ($f = 202$, $\bar{x} = 1.42$) by the greatest number of participants (n = 142). However, unlike access data there are fluctuations in the number of submissions as participants progressed though the course (Table 5).

*Table 5. Descriptive statistics regarding quiz submissions*

|        | *n* | *f* | $\bar{x}$ | *SD* | *Min.* | *Max.* | *Skewness* | *Kurtosis* |
|--------|-----|-----|-----------|------|--------|--------|-----------|-----------|
| Quiz 1 | 142 | 202 | 1.42 | 0.77 | 1 | 5 | 2.44 | 7.03 |
| Quiz 2 | 110 | 161 | 1.45 | 1.29 | 1 | 11 | 5.21 | 32.86 |
| Quiz 3 | 107 | 179 | 1.66 | 1.01 | 1 | 7 | 2.52 | 9.17 |
| Quiz 4 | 96 | 159 | 1.65 | 1.04 | 1 | 6 | 2.21 | 5.19 |
| Quiz 5 | 87 | 117 | 1.33 | 0.52 | 1 | 3 | 1.22 | 0.47 |
| Quiz 6 | 88 | 145 | 1.64 | 1.05 | 1 | 6 | 2.17 | 5.04 |
| Quiz 7 | 84 | 101 | 1.19 | 0.65 | 1 | 6 | 5.48 | 37.04 |
| Quiz 8 | 83 | 116 | 1.39 | 0.75 | 1 | 5 | 2.66 | 8.53 |

Research suggests that online learners tend to lose interest, and the engagement rates regarding the learning activities & resources decline gradually in online courses as the course progresses (Lee & Choi, 2011; Kim & Frick, 2011; Zhou, 2017). Therefore, the gradual decline in engagement rates found in this study is expected considering the previous literature.

Within the scope of this research, quiz grades were also examined through descriptive statistics. Even though the participants had unlimited attempts, the average grade received from the attempts were calculated to determine the final grade for each quiz (Table 6). The highest average grade was received from Quiz 1 while the lowest grade

was achieved on Quiz 2, which was on the 34 minute "Quality Talks" video. The length of the video might be a factor for the lower grades for Quiz 2.

*Table 6. Descriptive statistics regarding quiz grades*

|  | *n* | $\bar{x}$ | *SD* | *Min.* | *Max.* | *Skewness* | *Kurtosis* |
|---|---|---|---|---|---|---|---|
| Quiz 1 | 130 | 5.05 | 2.67 | 1.00 | 9.50 | -0.34 | -1.04 |
| Quiz 2 | 110 | 2.74 | 2.76 | 1.00 | 8.50 | 1.08 | -0.64 |
| Quiz 3 | 106 | 4.62 | 3.32 | 1.00 | 9.43 | -0.04 | -1.83 |
| Quiz 4 | 96 | 4.08 | 3.00 | 1.00 | 8.83 | 0.12 | -1.75 |
| Quiz 5 | 87 | 3.92 | 3.26 | 1.00 | 9.00 | 0.30 | -1.79 |
| Quiz 6 | 86 | 4.16 | 3.14 | 1.00 | 9.25 | 0.11 | -1.83 |
| Quiz 7 | 83 | 2.13 | 2.46 | 1.00 | 8.67 | 1.85 | 1.71 |
| Quiz 8 | 83 | 2.84 | 2.84 | 1.00 | 9.25 | 1.04 | -0.68 |
| Quiz Mean | 75 | 3.37 | 1.78 | 1.00 | 6.73 | 0.26 | -1.13 |

*\* The highest possible grade was 10 for the quizzes.*

Except for the orientation and the conclusion modules, each module ended with an "end-of-module" test that aimed to assess the learning level for each module. As was the case with the quizzes these tests were grades out of 10, and the participants had unlimited attempts while the average of the attempts were used as success level. Descriptive analysis of the learning analytics data regarding the end-of-module tests revealed that the most accessed test was the first test ($f$ = 527, $\bar{x}$ = 4.28) by the greatest number of participants (n = 123), and the access dropped as the course progressed. Therefore, the least frequently accessed test was the final one ($f$ = 336, $\bar{x}$ = 3.94) (Table 7).

*Table 7. Descriptive statistics regarding access to end-of-module-tests*

|  | *n* | *f* | $\bar{x}$ | *SD* | *Min.* | *Max.* | *Skewness* | *Kurtosis* |
|---|---|---|---|---|---|---|---|---|
| End-of-Module Test 1 | 123 | 527 | 4.28 | 2.94 | 1 | 21 | 2.10 | 8.24 |
| End-of-Module Test 2 | 103 | 489 | 4.74 | 3.20 | 1 | 17 | 1.32 | 1.87 |
| End-of-Module Test 3 | 97 | 419 | 4.31 | 2.72 | 1 | 14 | 1.52 | 3.22 |
| End-of-Module Test 4 | 91 | 382 | 4.19 | 2.42 | 1 | 15 | 1.58 | 4.85 |
| End-of-Module Test 5 | 91 | 383 | 4.20 | 2.20 | 1 | 13 | 1.44 | 3.30 |
| End-of-Module Test 6 | 85 | 336 | 3.94 | 1.61 | 1 | 9 | 0.61 | 0.46 |

*\* The highest possible grade was 10 for the end-of-module tests.*

Learning analytics data regarding end-of-module test submissions show a similar pattern to the access data in that the most submitted quiz is the first test ($f$ = 134, $\bar{x}$ = 1.34) by the greatest number of participants (n = 100). Except for module test 4, submission rates gradually decreased as the course progressed (Table 8).

*Table 8. Descriptive statistics regarding quiz submissions*

|  | *n* | *f* | $\bar{x}$ | *SD* | *Min.* | *Max.* | *Skewness* | *Kurtosis* |
|---|---|---|---|---|---|---|---|---|
| End-of-Module Test 1 | 100 | 134 | 1.34 | 0.65 | 1 | 4 | 2.38 | 6.43 |
| End-of-Module Test 2 | 87 | 150 | 1.72 | 1.03 | 1 | 5 | 1.56 | 1.77 |
| End-of-Module Test 3 | 86 | 139 | 1.62 | 1.10 | 1 | 6 | 2.62 | 7.52 |
| End-of-Module Test 4 | 79 | 115 | 1.46 | 0.75 | 1 | 5 | 2.04 | 5.57 |
| End-of-Module Test 5 | 82 | 121 | 1.48 | 0.89 | 1 | 6 | 2.64 | 8.67 |
| End-of-Module Test 6 | 79 | 96 | 1.22 | 0.47 | 1 | 3 | 2.14 | 3.99 |

Descriptive statistics regarding the end-of-module test grades revealed that, despite by a small margin, the highest mean was achieved for Module 2, which was on "Quality Assurance" ($\bar{x}$ = 6.61, SD = 2.71). As was the case with access data, the mean grade gradually dropped as the course progressed, however, the range of the mean difference is as low as 2.46 (Table 9).

*Table 9. Descriptive statistics regarding the end-of-module test grades*

|  | *n* | $\bar{x}$ | *SD* | *Min.* | *Max.* | *Skewness* | *Kurtosis* |
|---|---|---|---|---|---|---|---|
| End-of-Module Test 1 | 99 | 5.88 | 3.34 | 0.33 | 9.67 | -0.62 | -1.38 |
| End-of-Module Test 2 | 87 | 6.61 | 2.71 | 1.00 | 9.50 | -1.10 | 0.01 |
| End-of-Module Test 3 | 85 | 5.76 | 3.05 | 0.50 | 9.00 | -0.72 | -1.14 |
| End-of-Module Test 4 | 79 | 4.72 | 3.26 | 0.67 | 9.00 | -0.05 | -1.72 |
| End-of-Module Test 5 | 80 | 5.45 | 3.32 | 1.00 | 9.50 | -0.40 | -1.54 |
| End-of-Module Test 6 | 78 | 4.15 | 3.54 | 1.00 | 9.50 | 0.35 | -1.75 |
| Module Tests Mean | 71 | 5.49 | 1.68 | 1.00 | 9.03 | -0.50 | -0.05 |

The relatively low results from the grand mean success scores of the quizzes (34%) and of the end-of-module tests (55%) might be due to the fact that participants had unlimited attempts and these tests were not designed as high stakes tests. Research also reveals similar findings in that success rates in online courses tend to be lower (Hart, 2012; Rovai & Downey, 2010; Shaikh, 2022). These tests could be designed in a way that they will better represent participant achievement in the course, or a final end-of-course test might be incorporated that will assess the learner performance in a summative fashion.

The final learning activity for the online training course was the "Case Study", which was made up of discussions of higher education evaluation cases. The learning analytics data showed a similar pattern as the previous learning activities in that the most frequently accessed case was the first case in the course ($f$ = 757, $\bar{x}$ = 5.69), and the access frequency gradually decreased as the participants progressed though the course (Table 10).

*Table 10. Descriptive statistics regarding access to case studies*

|  | *n* | *f* | $\bar{x}$ | *SD* | *Min.* | *Max.* | *Skewness* | *Kurtosis* |
|---|---|---|---|---|---|---|---|---|
| Case Study 1 | 133 | 757 | 5.69 | 7.18 | 1 | 64 | 5.16 | 35.62 |
| Case Study 2 | 121 | 601 | 4.97 | 4.08 | 1 | 23 | 2.19 | 5.57 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Case Study 3 | 106 | 559 | 5.27 | 5.74 | 1 | 49 | 4.77 | 32.16 |
| Case Study 4 | 99 | 498 | 5.03 | 5.36 | 1 | 45 | 4.98 | 32.73 |
| Case Study 5 | 89 | 428 | 4.81 | 5.09 | 1 | 43 | 5.36 | 37.08 |
| Case Study 6 | 88 | 387 | 4.40 | 2.72 | 1 | 15 | 1.48 | 3.01 |

Participation to the case study discussions was an optional learning activity, and one submission from each participant would complete the task. For this reason, the descriptive statistics showed that of the 319 registered participants, 54 (17%) participated in the first case study discussions, and the range of the participating learners did not change dramatically as the course progressed (Table 11).

*Table 11. Descriptive statistics regarding participation to case studies*

| | **n** | **f** | **$\bar{x}$** | **SD** | **Min.** | **Max.** | **Skewness** | **Kurtosis** |
|---|---|---|---|---|---|---|---|---|
| Case Study 1 | 54 | 57 | 1.06 | 0.30 | 1 | 3 | 5.82 | 35.17 |
| Case Study 2 | 51 | 52 | 1.02 | 0.14 | 1 | 2 | 7.14 | 51.00 |
| Case Study 3 | 50 | 50 | 1.00 | 0.00 | 1 | 1 | | |
| Case Study 4 | 48 | 50 | 1.04 | 0.20 | 1 | 2 | 4.74 | 21.32 |
| Case Study 5 | 50 | 51 | 1.02 | 0.14 | 1 | 2 | 7.07 | 50.00 |
| Case Study 6 | 50 | 50 | 1.00 | 0.00 | 1 | 1 | | |

An ongoing and grave problem for online and distance learning is the low level of student engagement in discussion forums. Research reports that only a small percentage of learners actively engaged in discussion forums, with most participants being passive observers (Hew & Cheung, 2014; Kizilcec et al., 2013). Similar findings are reported by Du et al (2022) and Kanuka et. al (2007) who observe low levels of participation and limited engagement in online discussions. Therefore, considering that the online discussions were optional elements in this course, the rate of participation and engagement is parallel to the literature in online learning.

**Satisfaction with the Course**

Satisfaction with the course was assessed through a course satisfaction questionnaire developed by the researchers. Of the 319 registered participants 63 (24%) voluntarily completed the satisfaction questionnaire online. The mean total satisfaction was 4.44 (SD = 0.64), the highest satisfaction was achieved with the instructional videos, though by a very small margin ($\bar{x}$ = 4.49, SD = 0.64) (Table 12). Descriptive statistics revealed that the course was a success in meeting the participants expectations ($\bar{x}$ = 4.48, SD = 0.64). Therefore, the results indicated that participants were highly satisfied with the course.

*Table 12. Descriptive statistics regarding satisfaction with the course elements*

| | **$\bar{x}$** | **SD** | **Skewness** | **Kurtosis** | **Min.** | **Max.** |
|---|---|---|---|---|---|---|
| Orientation Activities | 4.41 | 0.56 | -0.22 | -0.90 | 3.00 | 5.00 |
| Instructional Videos | 4.49 | 0.54 | -0.29 | -1.23 | 3.00 | 5.00 |
| Text-Based Resources | 4.51 | 0.69 | -1.38 | 1.77 | 2.00 | 5.00 |
| Case Studies | 4.37 | 0.68 | -0.61 | -0.68 | 3.00 | 5.00 |
| Self-Evaluation Activities | 4.48 | 0.56 | -0.46 | -0.80 | 3.00 | 5.00 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Time to Complete the Course | 4.35 | 0.74 | -0.92 | 0.30 | 2.00 | 5.00 |
| Level of Meeting the Expectations | 4.48 | 0.64 | -0.84 | -0.30 | 3.00 | 5.00 |
| **Total Satisfaction** | 4.44 | 0.47 | -0.49 | -0.77 | 3.29 | 5.00 |

In addition to the quantitative items, the questionnaire had an optional open-ended section for further comments from the participants. The comments were also qualitatively analyzed to triangulate the quantitative findings. Sixteen (25%) of the 63 questionnaire participants filled in the open-ended section. The qualitative analysis of the comments revealed three themes which included *thank you messages*, *satisfaction with the course*, and finally *suggestions*.

Fourteen participants conveyed thank you messages due to the success of the course in terms of increasing the level of understanding into the quality assurance processes in higher education. The participants used positive descriptors such as "useful", "informative", "detailed", "comprehensive", "clear" to describe the course. Additionally, when communicating satisfaction with the course, Participant 15, for example, wrote:

> *"This is a very systematic and straightforward course. You can begin the course with almost no idea and come out as an expert in the end. I would like to express my gratitude to all involved." Participant 15.*

The suggestion from the participants primarily focused on the improvement areas of the course such as updating the course resources to conform to the updated THEQC evaluation standards. Also, one participant (#59) suggested more examples be given focusing on individual academic units. Another participant (#49) recommended the official guide from the THEQC to be presented as a reference document on the course page as well. The updated version of the course delivered in 2022 included all these improvements.

Course satisfaction is a crucial aspect to consider when examining the effectiveness and acceptance of online learning. Studies show high levels of satisfaction with online courses depending on factors such as instructional design, interaction, and self-regulation which are considered as important predictors of satisfaction (Artino & Stephens, 2009; Sun et al., 2008). Students who perceived their courses as well-designed, interactive, and supportive report higher levels of satisfaction (Tallent-Runnels et al., 2006). Therefore, the "straightforward", "clear", and "informative" nature of the course design might have contributed to the high satisfaction levels with this course.

## CONCLUSION

Quality assurance (QA) plays an essential function in the field of higher education as institutions seek to deliver high-quality educational experiences and increase their service to society while dealing with the pressing issues in today's ever-changing world. In a world of constant change, increased competition, technological innovation, and rising costs, QA seeks to ensure and improve educational quality, promote accountability, and foster sustainable improvement.

In the last several years, quality assurance in Turkish higher education has experienced substantial improvements. The current developments are a reflection of ongoing efforts in Turkish higher education to improve quality assurance processes, comply with international standards, and guarantee the consistency of academic offerings and institutional standards. While catering to the changing demands of both students and society, the goal is to improve the overall quality and reputation of Turkish higher education institutions. Such efforts to engineer a sustainable QA system in higher education cannot be without dedicated and qualified human-resources. For this reason, the sustainable development and training of human-resources involved in QA processes is of paramount importance. Thus, the Quality Coordinatorship of Anadolu University developed a unique online training programme entitled "Institutional Self-Evaluation Training Programme" to equip the human-resource with the required knowledge and skills to conduct internal evaluation in academic programs at the university. To the best of our knowledge, this course is the only online course developed within this regard in Turkiye. Following a cross-sectional research design, and making use of learning analytics and satisfaction survey, this research investigated the learning patterns and satisfaction of the participants involved in this course.

The high access and completion rates in this course suggest that there was a significant interest in the course considering it was only a recommended course. In addition, high levels of satisfaction, which was supported with the qualitative findings, show that the online training was endorsed by the participants as a viable training activity.

However, gradual decrease has been observed in participation and engagement throughout the course, which is in line with the literature in online learning (Hew & Cheung, 2014; Lee & Choi, 2011; Kim & Frick, 2011; Kizilcec et al., 2013; Zhou, 2017). Future research could look into factors for the gradual decrease in engagement and participation in such training courses. For instance, future research could investigate the relationship between learning analytics data, course satisfaction, and course completion to investigate the predictors of engagement and learner performance.

Even though some literature reports perceived positive outcomes among the academic staff in terms of implementing QA processes in HEIs (Dill, 2000; Rasmussen, 1997), several research reveals negative perceptions towards QA processes in higher education (Baldwin, 1997; Newton, 2000; Stephenson, 2004). QA processes are mostly an unknown territory to most academics, and what is unknown might be scarry. However, our observations as the Quality Coordinatorship of Anadolu University, along with the participant statements, suggest that training activities that familiarize the academic staff with the QA processes contribute to overcoming the psychological barrier, especially when these trainings are designed in a way that enables participants to digest the materials in their own pace and time, thus online training. Also, the role of leadership in establishing QA mechanisms in an institution cannot be overstated. The leading role and the support shown by the top leadership reflects on to what degree the QA processes are endorsed by the staff. The quality with which the training is designed shows the importance the leadership attaches to QA, which help increase organizational commitment, trust, and perceived competence. Therefore, such training activities could also include other stakeholders, particularly students, to boost institution-wide diffusion and internalization of QA processes, which would help achieve better educational outcomes, promote accountability, and foster sustainable improvement in higher education.

## References

Artino, A. R., & Stephens, J. M. (2009). Academic motivation and self-regulation: A comparative analysis of undergraduate and graduate students learning online. *The Internet and Higher Education*, *12*(3–4), 146–151. https://doi.org/10.1016/j.iheduc.2009.02.001

Baldwin, G. (1997) An Australian Approach to Quality in Higher Education, The Case of Monash University, in Brennan, J. de Vries, P. and Williams, R. (eds.) *Standards and Quality in Higher Education*, Higher Education Policy Series 37, Jessica Kingsley

Creswell, J. W. (2014). *Educational research: Planning, conducting and evaluating quantitative and qualitative research* (4th ed.). Pearson.

Dill, D.D. (2000). Designing Academic Audit: Lessons learned in Europe and Asia. *Quality in Higher Education, 6*, 187 - 207. https://doi.org/10.1080/13538320020005945

Dixson, M.D. (2010). Creating effective student engagement in online courses: What Do students find engaging?. *Journal of Scholarship of Teaching and Learning, 10*(2), 1-13. Retrieved June 17, 2023 from https://www.learntechlib.org/p/54817/.

Du, Z., Wang, F., Wang, S., & Xiao, X. (2022). Enhancing learner participation in online discussion forums in massive open online courses: The role of mandatory participation. *Front. Psychol. 13*. https://10.3389/fpsyg.2022.819640

European Association for Quality Assurance in Higher Education [ENQA]. (2015). Standards and guidelines for quality assurance in the European Higher Education Area (ESG). https://enqa.eu/wp-content/uploads/2015/11/ESG_2015.pdf

Hart, C. (2012). Factors Associated with Student Persistence in an Online Program of Study: A Review of the Literature. *Journal of Interactive Online Learning, 11*, 19-42.

Harvey, L. & Green, D., 1993, 'Defining quality', *Assessment & Evaluation in Higher Education*, 18(1), pp. 9–34. https://doi.org/10.1080/0260293930180102

Hew, K. F., & Cheung, W. S. (2014). Students' and instructors' use of massive open online courses (moocs): Motivations and challenges. *Educational Research Review*, *12*, 45–58. https://doi.org/10.1016/j.edurev.2014.05.001

Hollister, B., Nair, P., Hill-Lindsay, S., & Chukoskie, L. (2022). Engagement in Online Learning: Student Attitudes and Behavior During COVID-19. *Front. Educ., 7*. doi: 10.3389/feduc.2022.851019

Işık, S., & Beykoz, S. Y. (2018). Türk yükseköğretiminde yeni bir arayış: Kalite güvence sistemi. *Kastamonu Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 20*(3), 7-22.

Jordan, K. (2015). Massive open online course completion rates revisited: Assessment, length and attrition. *The International Review of Research in Open and Distributed Learning*, *16*(3). https://doi.org/10.19173/irrodl.v16i3.2112

Kanuka, H., Rourke, L., & Laflamme, E. (2007). The influence of instructional methods on the quality of online discussion. *British Journal of Educational Technology, 38*(2), 260–271. https://doi.org/10.1111/j.1467-8535.2006.00620.x

Kim, K.-J., & Frick, T. W. (2011). Changes in Student Motivation During Online Learning. *Journal of Educational Computing Research, 44*(1), 1–23. https://doi.org/10.2190/EC.44.1.a

Kizilcec, R.F., Piech, C., & Schneider, E. (2013). Deconstructing disengagement: analyzing learner subpopulations in massive open online courses. *International Conference on Learning Analytics and Knowledge*. https://doi.org/10.1145/2460296.2460330

Külcü, Ö. (2005). *Kamu üniversitelerinde kalite yönetimi ve kalite system dokümantasyonu çerçevesinde belge yönetimi.* [Unpublished doctoral dissertation], Hacettepe Üniversitesi, Ankara.

Lee, Y., & Choi, J. (2011). A review of online course dropout research: Implications for practice and future research. *Education Tech Research Dev* 59, 593–618. https://doi.org/10.1007/s11423-010-9177-y

Newton, J. (2000) Feeding the Beast or Improving Quality?: academics' perceptions of quality assurance and quality monitoring, *Quality in Higher Education*, *6*(2). https://doi.org/10.1080/713692740

Özcan, B., Kalaycı, N. & Lı, T. (2022). A Comparative Analysis of the Institutional Quality Evaluation Processes in Turkish, European, and American Higher Education Systems. *Yükseköğretim Dergisi,* 85-98. https://doi.org/10.2399/yod.21.816017

Rasmussen, P. (1997) A Danish Approach to Quality in Higher Education, The Case of Aalborg University, in Brennan, J. de Vries, P. and Williams, R. (eds.) *Standards and Quality in Higher Education*, Higher Education Policy Series, Vol. 37, Jessica Kingsley Publishers

Rovai, A.P., & Downey, J.R. (2010). Why some distance education programs fail while others succeed in a global environment. *Internet and Higher Education, 13*(3), 141-147. Retrieved June 17, 2023 from https://www.learntechlib.org/p/108384/.

Shaikh, U. U., & Asif, Z. (2022) Persistence and Dropout in Higher Online Education: Review and Categorization of Factors. *Front. Psychol. 13*. doi: 10.3389/fpsyg.2022.902070

Soyer, B. ve Güler, M. (2021). Yükseköğretimde yeniden yapılanma: Türk Yükseköğretiminde kalite güvencesi sisteminin gelişimi. *Trakya Üniversitesi Kalite ve Strateji Yönetimi Dergisi 1*(1), 45-89.

Stephenson, S. L. (2004). Saving quality from quality assurance. *Perspectives, 8*(3), 62-67. https://doi.org/10.1080/13603100410001676687

Sun, P. C., Tsai, R. J., Finger, G., Chen, Y. Y., & Yeh, D. (2008). What drives a successful e-Learning? An empirical investigation of the critical factors influencing learner satisfaction. *Computers & Education*, *50*(4), 1183–1202. https://doi.org/10.1016/j.compedu.2006.11.007

Süngü, H., & Bayrakçı, M. (2010). Bolonya süreci sonrası yükseköğretimde akreditasyon çalışmaları. *Türk Eğitim Bilimleri Dergisi, 8*(4), 895-912. Retrieved from https://dergipark.org.tr/tr/pub/tebd/issue/26102/275018

Tallent-Runnels, M. K., Thomas, J. A., Lan, W. Y., Cooper, S., Ahern, T. C., Shaw, S. M., & Liu, X. (2006). Teaching courses online: A review of the research. *Review of Educational Research, 76*(1), 93–135. https://doi.org/10.3102/00346543076001093

Taşcı, D. & Lapçın, H. T. (2023). Yükseköğretimde kalite güvencesi sistemi: Kurumsal akreditasyon raporları üzerinden bir değerlendirme. *Eskişehir Osmangazi Üniversitesi Sosyal Bilimler Dergisi, 24*(1), 1-16. DOI: 10.17494/ogusbd.1185953

Taştan, K. & Yılmaz, S. (2022). Kalite yönetimi uyma ölçeğinin yükseköğretim için işlemselleştirilmesi: Yükseköğretimde kalite yönetimi uyma ölçeği. *Yükseköğretim ve Bilim Dergisi, 12*(3), 573-587. DOI: 10.5961/higheredusci.1110795

THEQC. (2022). Turkish Higher Education Quality Council Institutional Self Evaluation Report (ISER) Writing Guide. Retrieved from http://yokak.gov.tr/Common/Docs/KidrKlavuz1.4/ISER_writing_guide_3.1.pdf

Tezsürücü, D. & Bursalıoğlu, S. A. (2013). Yükseköğretimde değişim: Kalite arayışları. *Kahramanmaraş Sütçü İmam Üniversitesi Sosyal Bilimler Dergisi, 10*(2), 97-108. Retrieved from https://dergipark.org.tr/tr/pub/ksusbd/issue/10273/126042

Uygur, M. (2018). *Yükseköğretimde kalite güvencesi bağlamında öğretme-öğrenme süreçlerinin incelenmesi ve öğretim elemanlarına yönelik bir eğitici eğitimi programı geliştirilmesi.* [Unpublished doctoral dissertation]. Eğitim Bilimleri Enstitüsü, Mersin Üniversitesi.

Weinrib, J., & Jones, G. A. (2014). Largely a matter of degrees: Quality assurance and Canadian universities. *Policy and Society, 33*(3), 225–236. https://doi.org/10.1016/j.polsoc.2014.07.002

YÖK (2019). Türkiye Yükseköğretim Sistemi. Retrieved from https://www.yok.gov.tr/Documents/Yayinlar/Yayinlarimiz/2019/Higher_Education_in_Turkey_2019_tr.pdf

Zhou, J. (2017). Exploring the factors affecting learners' continuance intention of MOOCs for online collaborative learning: An extended ECM perspective. *Australasian Journal of Educational Technology*, *33*(5). https://doi.org/10.14742/ajet.2914