

**15th INTERNATIONAL CONGRESS ON
SOCIAL, HUMANITIES, ADMINISTRATIVE,
AND EDUCATIONAL SCIENCES IN A
CHANGING WORLD**

**FEBRUARY 13-15, 2025
ONLINE & IN-PERSON PARTICIPATION
ANKARA, TURKIYE**

**CONGRESS PROCEEDINGS
BOOK**

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UNITED STATES | AZERBAIJAN

Published in Baku, Azerbaijan

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<https://changingworldcongress.com/>

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BZT TURAN AKADEMİ YAYINEVİ®
BZT TURAN ACADEMY PUBLISHING HOUSE

Publishing Date: 23.02.2025

DOI: <https://doi.org/10.30546/19023.978-9952-8545-8-9.2025.601>.

ISBN: 978-9952-8545-8-9



CONGRESS ID

CONGRESS NAME

15TH INTERNATIONAL CONGRESS ON SOCIAL, HUMANITIES,
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DATE AND VENUE

FEBRUARY 13-15, 2025

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EVALUATION PROCESS

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EVALUATION IN DISTANCE EDUCATION

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ABSTRACT

This paper explores the evaluation of distance education (DE) through various qualitative and quantitative methods, focusing on key variables that influence student engagement and performance. The research emphasizes the importance of evaluating the use of technology in education, highlighting the need for well-defined variables and clear research questions to measure the effectiveness of DE programs. Generally, the paper discusses three key evaluation tools: Joosten's inventory, the Motivated Strategies for Learning Questionnaire (MSLQ), and the Online Self-Regulated Learning Questionnaire (OSLQ), each tailored to assess different aspects of student experiences and self-regulation in online learning environments. These tools provide valuable insights into how students interact with DE courses and the strategies they use to succeed, with the potential to inform the future development and improvement of distance education programs. The paper concludes by emphasizing the importance of continuous data collection throughout the semester to ensure accurate and timely evaluations, which are crucial for enhancing DE effectiveness and addressing challenges associated with this rapidly growing educational model.

Keywords: evaluating, inventory, distance learning, effectiveness, success

INTRODUCTION

Educators are constantly seeking evidence of what works and what doesn't within the realm of education, especially in an era where time is limited and decisions need to be made quickly. With the increasing reliance on technology in education, particularly the rise of distance education, educators are under pressure to ensure that new methods do not result in inefficiencies that could negatively affect entire generations of students. The adoption of distance education has introduced both opportunities and challenges in learning, and as a result, there is a heightened need for evaluation to determine its effectiveness. For educators, the ultimate goal is to ensure that distance education delivers the same, if not better, learning outcomes as traditional face-to-face instruction. Therefore, it becomes crucial to employ well-thought-out evaluation strategies, considering both qualitative and quantitative methods, to assess the effectiveness of this form of education.

Evaluating distance education requires careful thought about what data to collect, where to collect it from, and which variables are most critical to assess. The evaluation process should aim to answer fundamental questions about the use of technology in education—why certain technologies are being

used and whether they are being employed effectively to support educational goals. The answer should not simply be because a particular technology is trendy or popular, but because it genuinely enhances learning outcomes or student engagement. Joosten (2012) emphasizes the importance of defining clear variables in evaluation—these are the measurable characteristics or attributes that researchers can observe or measure throughout the course of the study. Once the relevant variables are identified, clear research questions can then be formulated to guide the study and ensure it focuses on the most impactful aspects of distance education.

An additional key consideration in evaluating distance education is the timing of the research. Joosten (2012) stresses that evaluations should be conducted while the semester is still in progress. The reason for this is that once the semester ends, it becomes far more difficult—if not impossible—to collect data from students. This dynamic highlights the importance of real-time assessment in distance education settings. Researchers must act quickly and efficiently to gather meaningful data on how students are experiencing the course, which technologies are being used, and what impact these factors have on learning outcomes.

When considering which variables to focus on, researchers should keep in mind the novelty of distance education, as there is still a limited body of evidence in this area. It is important to recognize that there are two broad types of variables: social variables, which measure aspects like student engagement during the course (e.g., interactions with peers or instructors), and outcome variables, which measure the effects of these variables on students' performance or achievement. Both types of variables are crucial in understanding the full scope of distance education's impact and determining its success.

To explore these areas further, we will examine several sample questionnaires used in evaluating distance education and its effectiveness. Through these evaluation tools, we will gain insights into how students engage with distance learning, how they perceive the course content, and how different teaching strategies, technologies, and course designs influence their overall performance and learning experience. The examination will also offer a closer look at how such evaluations can be structured to provide actionable data for improving distance education and ensuring it serves the needs of today's learners.

TANJA JOOSTEN'S INVENTORY

Tanja Joosten (2012) has extensively explored the role of technology in education, particularly focusing on how technology can be effectively integrated into the learning process. As the world of education continues to evolve with the increasing use of digital tools and platforms, the inclusion of technology in the classroom or learning environment has become a central topic of study. Joosten emphasizes the importance of evaluating the effectiveness of these technological interventions, especially in distance education, a relatively newer and rapidly expanding educational model. According to Joosten, one of the primary challenges lies in the lack of extensive research on the topic, making it difficult to draw conclusive results about the best practices for using technology in education. However, the goal of any evaluation is clear: to determine whether the intended educational objectives have been met.

In her approach, Joosten (2012) suggests that the first step in conducting an evaluation is to clearly isolate the specific variables that will be assessed. These variables represent the characteristics or attributes that can be measured or observed within the educational context. Once the variables are defined, the next crucial step is determining the methodology for data collection. Joosten proposes several methods, including Likert scale surveys, narratives, and focus groups. Each method offers its own strengths, allowing researchers to gather different forms of data. Importantly, these data collection methods can be adapted to the digital age, and researchers may choose web-based formats to administer

surveys or collect responses. This flexibility ensures that the evaluation process can keep pace with the technological advancements in the learning environment.

One key aspect of Joosten's approach to evaluation is her emphasis on using Likert scale surveys to measure various elements of distance education. These surveys are particularly effective in capturing students' perceptions and experiences in a quantifiable way. In the case of the questionnaire designed by Joosten, respondents are asked to rate statements on a five-point Likert scale, ranging from "strongly disagree" to "strongly agree." The survey covers a broad range of factors, focusing on aspects of distance education and the use of social media, which are becoming increasingly prominent in modern learning environments. Joosten identifies seven categories in the survey that examine various dimensions of the learning experience in distance education.

The first category in the survey evaluates social presence, which encompasses both immediacy and intimacy in the online learning environment. Social presence refers to how students perceive their interaction with peers in a virtual classroom and whether that interaction mirrors the quality and engagement of face-to-face communication. This category assesses whether students are able to engage in meaningful interactions, receive feedback, collaborate with others, and form personal relationships with their classmates and instructors. Additionally, it investigates the level of comfort students feel when expressing themselves in these online interactions, which can have a significant impact on their overall learning experience and motivation.

The second category focuses on student engagement in distance education. This category explores the extent to which learning activities are academically challenging and encourage students to think critically. It also assesses whether students are actively involved in their learning tasks, making an effort to engage, collaborate, and enrich their overall educational experience. The survey further examines whether the learning activities spark curiosity, creativity, and imagination, and whether they succeed in maintaining students' attention. Finally, this category explores whether students find the activities to be stimulating or boring, fun or tedious, thus providing insight into the overall effectiveness of the course design in maintaining engagement.

The third category assesses the online learning community, specifically looking at the relationships and collaboration between students and instructors. In a distance education setting, the ability to form a sense of community is critical to fostering a supportive and collaborative learning environment. This category seeks to evaluate whether the online platform and course tasks promote cooperation among peers or whether they hinder effective communication and relationship-building. The survey looks into how students collaborate to complete assignments, and whether the online learning environment supports or detracts from the development of these relationships.

The fourth category focuses on students' satisfaction with the course. Satisfaction is a key determinant of the success of any educational experience, and this category examines multiple facets of that satisfaction. It investigates how much students enjoyed the course, how challenging they found it, and whether they would recommend it to others. Furthermore, it looks at the technical support provided during the course and the ease of access to course materials. Understanding students' satisfaction helps educators identify areas for improvement and adapt the course design to meet students' needs more effectively.

The fifth category evaluates the learning outcomes of the course. It assesses whether students were able to understand the course material, whether the material encouraged critical thinking, and whether it was beneficial to their overall learning experience. This category also looks at how well students understood key concepts, whether they were able to make connections between ideas, and how useful

the material was for their academic development. The learning outcomes are a direct reflection of the effectiveness of the course content and its delivery.

The sixth category examines student performance, focusing on the impact of the course on academic success. This category investigates whether the course contributed to better grades, improved performance on exams, or enhanced assignment results. By evaluating student performance, researchers can determine whether the distance education course has had a positive effect on academic achievement and overall performance.

Finally, the seventh category addresses the design of the online learning environment. It assesses the support provided to students before the course begins, the clarity of introductory materials, and the ease with which students understand the components of assignments. This category also looks at how well the assignments encourage interaction, whether the course goals are clearly defined, and how effectively students are graded. It evaluates whether the course structure is logical and well-organized, ensuring that students understand what is expected of them and how to succeed in the course.

In conclusion, Joosten's inventory is a comprehensive and valuable tool for evaluating various aspects of distance education and its effectiveness in fostering student learning. The survey not only captures students' perceptions but also provides insights into the specific factors that influence their learning experiences. This evaluation tool can be used in its entirety or adapted to suit the needs of different research contexts. By examining these seven categories, researchers can gain a deeper understanding of the strengths and weaknesses of distance education and the use of technology in the learning environment.

MOTIVATED STRATEGIES FOR LEARNING QUESTIONNAIRE (MSLQ)

The next inventory that we will discuss in the context of evaluating distance education is the Motivated Strategies for Learning Questionnaire (MSLQ), which was designed by Pintrich and de Groot(1990). This instrument plays a crucial role in assessing how students approach learning in relation to their motivational orientation, the extent to which they self-regulate their learning, and their academic performance in the classroom. The MSLQ provides a comprehensive framework for understanding how different psychological and cognitive factors influence students' learning experiences, especially in environments where motivation and self-regulation are critical for success. As such, it is particularly useful in distance education, where students often have to manage their learning independently, without the constant support of in-person interaction with instructors or peers.

The MSLQ focuses on multiple key aspects of student behavior and perception, and it examines five core dimensions of student learning: self-efficacy, intrinsic value, test anxiety, self-regulation, and the use of learning strategies. These factors are interconnected and help to form a broader picture of how students approach their studies, how confident they feel in their abilities, how motivated they are to engage with the material, and how effectively they use various strategies to succeed in academic tasks. By evaluating these dimensions, the MSLQ helps researchers gain insights into the underlying psychological processes that affect learning outcomes. In particular, the questionnaire is designed to capture the complexity of how students think about and approach learning, beyond just their surface-level behaviors.

The MSLQ consists of 44 statements or items, and each statement is accompanied by a 7-point Likert scale, where students are asked to rate the extent to which each statement applies to them, with 1 being "not at all true of me" and 7 being "very true of me." This scale allows for nuanced responses, making it possible to gauge not only the presence of particular attitudes or behaviors but also their intensity. These statements cover a wide range of topics that reflect students' thoughts, feelings, and behaviors in relation to their learning experience. Some of the items focus on how students feel during class, whether they

perceive themselves as capable learners, and how they compare their abilities to those of their peers. These items help assess the level of self-efficacy, or students' belief in their own ability to succeed. This dimension is especially important in distance education, where students may face unique challenges such as isolation and the need for more self-directed learning.

Other items in the MSLQ assess intrinsic value, which reflects how much students enjoy the learning process and how meaningful they find the material. This is important because students who perceive the content as valuable are more likely to be motivated and engage deeply with the material. The MSLQ also includes questions related to test anxiety, which examines how students feel about testing situations. Since distance education often involves online assessments, understanding students' test anxiety levels can help educators design assessments that reduce stress and support better academic outcomes. Additionally, statements are included that examine the understanding of the material and whether students believe the knowledge gained is useful in real-world applications, which is important for ensuring that the education remains relevant and beneficial to their future endeavors.

Furthermore, the MSLQ explores how students study the material and their use of learning strategies. It delves into how students approach their studies, including how they organize, memorize, and process information. It looks at how students connect ideas, what methods they use to retain information, and whether they actively highlight important information while studying. These items shed light on the cognitive strategies that students use to facilitate learning, which can be critical for academic success. Additionally, the MSLQ explores metacognitive strategies, which refer to the students' ability to monitor and control their own learning. This includes whether they reflect on their understanding of the material, whether they adjust their learning strategies when necessary, and how they manage their effort over time. These skills are essential in distance education, where students often have to take greater responsibility for managing their learning environment and schedule.

One of the core strengths of the MSLQ, as noted by Pintrich and de Groot (1990), is that it combines multiple instruments and theories into a cohesive measure that evaluates various aspects of student motivation and learning strategies. The MSLQ provides valuable insights into student motivation, which is crucial for understanding how to support learners in educational settings. It also assesses how students use both cognitive and metacognitive strategies to process and organize information. By capturing these dimensions, the questionnaire offers a multifaceted view of how students approach their studies and how their motivation and strategies impact their learning outcomes.

Furthermore, the MSLQ's ability to evaluate the management of effort is particularly important, as students who effectively manage their time, energy, and resources are more likely to succeed in demanding academic environments. This is especially relevant for distance education, where students often need to be highly disciplined and organized in order to keep up with coursework without the traditional structure of in-person classes. The MSLQ allows researchers to determine if students have the "will" to engage with the material and the "skill" to succeed in their studies, which is vital for identifying students who may need additional support or intervention.

Overall, the Motivated Strategies for Learning Questionnaire (MSLQ) is a powerful tool for evaluating student motivation, learning strategies, and academic performance. It is particularly valuable in online or distance learning environments, where self-regulation and intrinsic motivation play a key role in success. The questionnaire provides educators with critical data that can help inform teaching practices and course design, ultimately leading to more effective learning experiences for students. By assessing both the motivation and strategies that students use to approach their learning, the MSLQ helps create a comprehensive understanding of the factors that contribute to academic achievement.

ONLINE SELF-REGULATED LEARNING QUESTIONNAIRE (OSLQ)

In this section, we will provide an in-depth analysis of the **Online Self-Regulated Learning Questionnaire (OSLQ)**, developed by **Barnard et al. (2009)**. According to the authors, distance education (DE) places significant emphasis on the autonomy of students, as they are responsible for determining *when*, *what*, and *how* they study. This autonomy necessitates the development of strong self-regulation skills, which are crucial for academic success in an online learning environment. Carolina Torres Escobar (2021) emphasizes the fact that in the shift to distance education, students need to enhance self-regulation and metacognition and be the leaders of their educational process and results. In addition, teachers must help students recognize what it means to learn online compared to the classroom and teach students self-regulatory strategies.

The OSLQ was designed to measure self-regulation specifically within the context of distance education, as students in online learning environments face unique challenges. One of the central ideas emphasized by Barnard et al. (2009) is that without proper self-regulation skills, students are likely to struggle with completing tasks and effectively learning. This can ultimately lead to a failure to progress in their educational journey. Given this, the authors argue that cultivating self-regulatory skills in distance learners should be a central focus of instructional design and support. In fact, they found that existing tools, such as the **Motivated Strategies for Learning Questionnaire (MSLQ)**, which was initially designed for traditional classroom settings, did not adequately capture the nuances of self-regulation in virtual classrooms. This realization led to the development of the OSLQ, which is more specifically tailored to online and distance education environments.

The **Online Self-Regulated Learning Questionnaire (OSLQ)** is a **25-item** instrument that uses a **5-point Likert scale** for responses, with values ranging from **1 (never)** to **5 (always)**. The questionnaire is divided into **six distinct subfields**, each of which addresses a critical aspect of self-regulation in online learning. These subfields include **Goal Setting, Environment Structuring, Task Strategies, Time Management, Help-Seeking, and Self-Evaluation**. The responses from students are aggregated to form a self-regulation score, with higher scores indicating greater use of self-regulation strategies and stronger abilities in managing their learning autonomously.

The **Goal Setting** subfield examines whether students set clear, achievable objectives for their assignments and how they plan to allocate time to complete their tasks. This subfield is crucial in understanding the degree to which students can focus their efforts on specific learning outcomes, set milestones for their work, and monitor their progress over time. Research has shown that goal-setting is directly linked to better academic performance because it helps students stay organized and motivated. This part of the OSLQ evaluates how well students structure their learning to ensure they meet deadlines and achieve their academic goals.

The **Environment Structuring** subfield assesses the extent to which students create an optimal environment for studying online. This includes evaluating whether students are able to identify and eliminate potential distractions in their learning space, as well as the overall comfort of the environment. Students are asked to consider factors such as whether they have a quiet place to study, whether their physical setup facilitates focus, and whether they are able to maintain an environment conducive to learning. This subfield is particularly important in online education, where students may not have the same level of supervision or environmental control as they would in traditional classroom settings. Research suggests that a well-structured environment can significantly enhance a student's ability to engage with and retain information, especially in an online or distance learning context.

The **Task Strategies** subfield explores the specific techniques and methods that students use to engage with their course material. This includes assessing their ability to employ strategies such as note-taking,

summarizing, highlighting key concepts, reading instructional material aloud, or preparing questions for discussion forums. Effective task strategies allow students to process and retain information more efficiently, which is especially important in online learning, where students often work independently and may not have immediate access to a teacher or peers for support. By evaluating how well students apply these strategies, the OSLQ helps identify whether learners are using best practices for studying and whether they are able to engage meaningfully with the course content.

The **Time Management** subfield assesses how well students manage their study time, both in terms of allocating extra hours for studying and sticking to a consistent daily schedule. Time management is a critical aspect of self-regulated learning, particularly in the context of online education, where students are often responsible for creating their own schedules. This subfield explores whether students are able to balance their academic responsibilities with personal and professional commitments, and how they prioritize their tasks to ensure that they meet deadlines. Effective time management skills are essential for distance learners, as they are more likely to succeed when they can allocate adequate time for studying, assignments, and review. Zhao & Ye (2020) research shows that learners in distance education have to be effective in managing their own learning. In order to take full advantage of the online programme, students work on their own and they need high level of metacognitive skills.

The **Help-Seeking** subfield evaluates how often students reach out for assistance when they encounter difficulties during their online studies. This includes seeking help from peers, instructors, or other knowledgeable individuals in the course. Help-seeking behaviors are an essential part of the self-regulation process, as they demonstrate a student's awareness of when they need support and their willingness to engage with others for problem-solving. This subfield is particularly important in online education, where students may feel isolated or disconnected from their peers and instructors. Encouraging students to actively seek help can improve their understanding of the material and prevent frustration from impeding their learning progress.

Finally, the **Self-Evaluation** subfield assesses how students reflect on their own understanding of the material and compare their knowledge with that of their peers. Students are asked to evaluate their progress and identify areas where they might need improvement. Self-evaluation is a crucial component of self-regulated learning because it enables students to assess their strengths and weaknesses, make adjustments to their learning strategies, and take responsibility for their educational development. This subfield measures the degree to which students engage in metacognitive practices that support continuous improvement and deeper learning. By reflecting on their understanding and learning outcomes, students can better tailor their efforts to enhance their academic performance.

In summary, the **Online Self-Regulated Learning Questionnaire (OSLQ)** is a well-structured and thoughtfully designed tool for assessing students' self-regulation in online and distance learning environments. By focusing on six key subfields—Goal Setting, Environment Structuring, Task Strategies, Time Management, Help-Seeking, and Self-Evaluation—the OSLQ provides a comprehensive view of how students manage their learning autonomously in virtual educational contexts. The questionnaire's 5-point Likert scale allows for detailed responses that help identify the strengths and weaknesses of students' self-regulation strategies. With its ability to capture a wide range of behaviors and attitudes related to self-regulation, the OSLQ is a valuable instrument for research in distance education, helping to identify students who may need additional support in developing their self-regulatory skills and improving their learning outcomes.

CONCLUSION

In conclusion, the evaluation of distance education plays an essential role in ensuring its effectiveness and addressing the challenges it presents. As distance education continues to grow and evolve, it becomes increasingly important for educators, administrators, and researchers to utilize a combination of both qualitative and quantitative evaluation methods to measure the success and impact of various technological tools, course designs, and teaching strategies. With the rapid advancement of technology, the landscape of education has shifted, making it crucial to assess how well these new modes of learning are meeting the needs of students.

Joosten's framework provides a valuable starting point for this evaluation, as it emphasizes the need for clear and focused research questions, along with the identification of key variables that influence the overall student experience and academic performance. By isolating and analyzing variables such as social presence, student engagement, satisfaction, and performance outcomes, researchers can gain a clearer understanding of what is working in distance education and where improvements may be needed. This framework also highlights the importance of conducting evaluations throughout the course or semester, ensuring that real-time data can be collected to make adjustments and optimize the learning experience before it's too late.

Moreover, the inclusion of tools such as the Motivated Strategies for Learning Questionnaire (MSLQ) and the Online Self-Regulated Learning Questionnaire (OSLQ) allows researchers to dig deeper into the psychological and behavioral factors that influence students' success in distance education. These tools provide valuable insights into students' motivation, their use of learning strategies, and their self-regulatory abilities, which are all critical components of academic success, especially in online learning environments. By measuring factors like intrinsic motivation, self-efficacy, time management, and the ability to seek help, these inventories help create a comprehensive picture of student engagement and achievement.

Furthermore, by adapting these tools to specific learning contexts, such as differentiating between synchronous and asynchronous learning formats, researchers are better able to understand the nuances of how different learning environments impact student outcomes. This distinction allows for a more accurate assessment of which teaching methods, technologies, and strategies are most effective in various contexts. It also provides valuable information for educators looking to improve the delivery and support mechanisms of distance education, ensuring that they are fostering environments that maximize student success.

Ultimately, the importance of a comprehensive, ongoing evaluation process cannot be overstated. Continuous evaluation not only helps identify what works and what does not, but it also drives innovation and improvement in distance education. By regularly assessing the effectiveness of teaching strategies, technological tools, and course structures, educational institutions can make informed decisions about future developments and adaptations. This commitment to evaluation will ensure that distance education continues to grow and improve, ultimately providing more equitable access to high-quality learning experiences for a diverse range of learners. As the field continues to expand, rigorous and thoughtful evaluation will be key in maintaining the quality and impact of distance education in an increasingly digital world.

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