



## Job Ethics in Distance Education: Teachers' Responsibilities and Contributions

*Research Article*

Cemal Tatlı<sup>1</sup>

### Abstract

The rigorous consideration of ethical principles at every stage of educational practice is an important factor determining the quality of learning. Ethical approach in education contributes positively to students' character development. It enables students to grow up as honest and respectful individuals. In this context, the study aimed to determine the ethical principles that a teacher should consider in the stages of planning the teaching, preparing course content, teaching the course and testing situations in the distance education process. In the study, phenomenology, one of the qualitative research method designs, was used. In this direction, interviews were conducted with 12 teachers working in different schools and having experience in teaching distance education courses. The interview data were analyzed by content analysis method. In this framework, principles were determined, and categories were created from similar codes. In the analysis process, 4 themes were created based on the interview questions. Under the theme of instructional planning, three main categories were identified: planning, communication and students. Under the theme of course content development, two main categories were created: scientificity and intellectual property rights. Under the theme of course teaching, two main categories were identified: teacher roles and teacher qualifications. In the theme of exam situations, the categories of feedback, timeliness, student readiness, reliability and validity were formed. The results of this research will be an important guide to improve the quality of distance education by determining in which areas teachers should be careful in order to create an educational environment based on ethical values.

**Keywords:** Ethics, Ethical principles, Distance education, Distance learning, Phenomenology

### INTRODUCTION

The recent worldwide pandemic has affected our lives in many ways, shaking habits, ways of working and, most importantly, education systems. The COVID-19 pandemic, which started in 2020 and rapidly spread globally, has put educational institutions in a tough test. With the closure of schools, students, teachers and parents quickly turned to distance education to continue education (Dağlar, 2023). Distance education has become quite widespread with today's technological developments. However, its origins go back to the method of teaching by

---

<sup>1</sup> Department of Educational Sciences, Education Faculty, Mus Alparslan University, Mus, Turkey, [cml.ttl30@gmail.com](mailto:cml.ttl30@gmail.com) <https://orcid.org/0000-0002-3261-394X>

\* This study was presented as an oral presentation at the 4th International Ethics Congress held in Ankara on October 9, 2023.

letter. This method was realized by sending course materials to students by mail when information technologies were just beginning to develop (Simonson et al., 2006).

With the rapid development of information technologies, the use of digital tools in education has increased and this has led to transformations in educational environments. Factors such as the digitalization of teaching materials and the creation of interactive learning platforms have made distance education more effective and accessible. This evolution has gained momentum, especially with the pandemic that started in China at the end of 2019. The pandemic has radically changed education and training processes and this new education model has become an important agenda (Tatlı & Şimşek, 2022). Students have had the opportunity to continue their education in their own homes, while teachers have been able to reach their students through digital platforms. Distance education has undergone a great evolution since the days of correspondence education and has gained an important place in the field of education with the opportunities provided by technological possibilities.

The pandemic, which has affected the world in general, has brought along a period that deeply affected education systems. Role of distance education was important in continuing the education systems (Dağlar, 2023). However, difficulties experienced in the process manifested themselves in various dimensions. Especially the problems related to technological infrastructure came to the fore (Can & Sezer, 2023). Students who did not have access to stable internet connection and technological equipment such as computers or tablets experienced serious difficulties in the distance education process. Another important issue in distance education was the loss of motivation. Studying at home made students to lose motivation due to the lack of a classroom environment (Jiang, 2023). This made it difficult to attend classes regularly and complete assignments on time. In addition, student-teacher and student-student interaction has been limited in distance education. Interactions occurring naturally in the physical classroom environment was a challenging issue in the virtual classroom environment (Garcia, 2020). Participation in interactive learning activities such as asking questions, getting individual help and participating in discussions has been limited.

While the rules and discipline of the school in face-to-face education made students to attend classes regularly, problems aroused and experienced with the weak control mechanism in the distance education process (Aktaş & Çabar, 2023). Distraction has also come to the fore as a problem frequently encountered in the distance education process (Lee, 2021). While studying at home, various external factors (family members, household chores, etc.) made it difficult for students to concentrate on the lessons. Another problem experienced in this process was social isolation. While students can come together and have social interactions in a physical classroom environment (Choi, 2020), such interactions were limited in distance education, which caused students to have the feeling of social isolation.

During the pandemic period, with the widespread use of distance education, many new measurement and evaluation methods were adopted, and in this process, learning and performance-oriented evaluation methods were tried to be preferred rather than an exam-based approach (Onay & Seren Intepeler, 2023). On the other hand, various difficulties in measurement and evaluation processes were experienced in distance education (İlgaz, & Afacan Adanır, 2020). In distance education, ensuring reliability and validity in measurement and evaluation has been a challenging issue for instructors (Lawler, 2000).

In the distance education process, teachers' ethical responsibilities in the planning and implementation stages are of great importance. In order to provide the best educational experience for students, teachers need to exhibit a conscious and fair approach. It is very important to design the course content scientifically, to create it according to instructional design principles, to be transparent in the measurement and evaluation process, and to respect the different needs and past experiences of students. It is important that teachers pay attention to ethical values when designing courses, organizing content and determining teaching methods. Students can adopt these values by observing their teachers' honesty, respect and fairness. Teachers' avoidance of unethical behaviors will positively affect students' educational experience. In this context, determining ethical principles in distance education is of great importance in terms of improving teacher experiences. The main purpose of this study is to identify ethical principles that are important for distance education planners and practitioners.

## METHOD

This section includes information on the research model, study group, data collection process and data analysis.

### Research Design

In this study, phenomenological research design, one of the qualitative research methods, was used. This design represents a research approach in which the experiences of phenomena are examined and analyzed in detail (Patton, 2014). In this context, teachers were interviewed about their views on their distance education professional experiences in order to obtain in-depth information on the subject. The main purpose of the interviews with the participants was to identify job ethic principles to be used in distance education.

### Study Group

The study group of the research consists of 12 teachers in different branches working in public high schools affiliated to the Ministry of National Education in Muş province in the 1st semester of the 2022-2023 academic year. The participants participated in the study voluntarily. Snowball sampling method, one of the purposive sampling methods, was used in the study. Participants were reached through two teachers who had experience in teaching courses through distance education. The demographic characteristics of the study group are presented in Table 1.

**Table 1.** *Data on demographic characteristics of the study group*

Demographic Characteristics	f	%
Gender	Male	7 58,33
	Female	5 41,66
Education status	License	10 83,33
	Postgraduate	2 16,66
Branches	Mathematics	1 8,33
	Turkish Language and Literature	1 8,33
	History	1 8,33

	Physics	1	8,33
	Chemistry	1	8,33
	Biology	1	8,33
	Geography	1	8,33
	Philosophy	1	8,33
	Arabic	1	8,33
	Guidance	1	8,33
	Music	1	8,33
	English Language and Literature	1	8,33
Professional experience	0-5 years	4	33,33
	6-10 years	3	25
	11-15 years	3	25
	16 years and above	2	16,66
Total		12	100

### Data Collection Process

In this study, a semi-structured interview form developed by Tatlı and Koca (2023) was used as data collection tool. This form consisted of four open-ended questions and was developed by the researchers based on expert opinions. This form was preferred to be applied to teachers with distance education experience. The necessary permissions for the use of the form were obtained from the researchers. After permission, preserving the structure of the form, necessary changes were made to the statements so that the participants could understand them (For example, the term “teacher” was used instead of “instructor”). A pilot interview was conducted with a teacher to test the interview questions. As a result of the pilot interview, it was decided that the form was suitable for the purpose of the research, and it was decided to use it. The questions in the semi-structured interview form are given in Table 2.

**Table 2.** *Teacher interview form*

1. What are the ethical principles that a teacher should take into consideration when planning the teaching of a course to be conducted by distance education?
2. What are the ethical principles that a teacher should consider when developing the course content of a distance education course?
3. What are the ethical principles that a teacher should pay attention to in the process of teaching a distance education course?
4. What are the ethical principles that a teacher should pay attention to in the process of evaluating students' achievement in a distance education course?

Some of the interviews were conducted face-to-face, while others were conducted via video conference. This method was preferred to provide flexibility according to the preferences and accessibility of the participants. In this way, the data within the scope of the research was collected both face-to-face and virtually, aiming to provide a broader perspective. Prior to the interviews, participants were given detailed explanations about the purpose and content of the

research. The interviews were generally completed between 15-20 minutes on average. The interview recordings were transcribed into written text on computer.

### **Data Analysis**

The data of the interviews with the participants were tabulated in Microsoft Excel program. These data were subjected to a detailed analysis in accordance with the content analysis process. The answers given to each question in the interview form were collected and organized under the relevant question. In the research, each interview question was evaluated as a theme in order to categorize the obtained data into more meaningful and unique categories. The main themes were labeled as instructional planning, course content development, course teaching, and exam situations. This approach aims to present the main findings of the study in a more systematic way.

The answers given to the questions were read and the meaningful items from the data were identified and coded. Categories were formed from the common aspects of these codes. Two weeks after this analysis, the researcher carefully reviewed the codes and categories. The coded statements were meticulously examined and reorganized by considering their similarities and differences. In addition, statements that were not relevant to the subject area were carefully eliminated. In order to ensure internal validity in this study, expert opinion was sought for the interview questions and methodology. After the data were reported, the interview recordings were sent to the participants via e-mail and their confirmations were obtained.

## **RESULTS**

After the interviews, obtained data from the teacher participants were analyzed. In the research, each interview question was evaluated as a theme. These themes were named as instructional planning, course content development, course teaching and exam situations. As a result of the analysis, certain codes were defined. On the basis of these codes, categories were created under themes.

### **Instructional Planning**

Under the theme of instructional planning, the data of the interviews with teachers were analyzed. Based on the codes three main categories were identified: planning, communication and students. In the planning category, the main points taken into consideration by the teachers are as follows: Clear and explicit identification of lesson objectives, taking into account the level, interests and learning needs of the participants, identifying teaching methods that would ensure effective delivery of the content, organizing the topics in a logical sequence, planning effective learning activities that would encourage students' active participation, and carefully selecting and using visual, audio or written materials.

In the communication category, it was suggested to encourage activities such as asking questions and participating in discussions to encourage students' active participation. It was also suggested that students should be divided into small groups to increase their interaction, organize discussion panels and encourage students to share their ideas. In addition, encouraging students to collaborate and work on a project was also an important suggestion.

In the student category, providing equal opportunities, ensuring that the course is interesting and encourages learning, designing an environment suitable for different learning styles and

speeds, and ensuring student satisfaction came to the fore. Categories and codes related to the theme of instructional planning are presented in Table 3.

**Table 3.** *Instructional planning*

Theme	Category	Codes
Instructional Planning	Planning	Identify the objectives of the course clearly and distinctly
		Taking into account the prior knowledge, interest and learning needs of the participants
		Identify teaching methods that will ensure the most effective delivery of the content
		Organize topics in a logical order
		Planning effective learning activities to actively engage students
		Careful selection and use of visual, audio or written materials
	Communication	Encouraging students to actively participate in the lesson
		Encourage activities such as asking questions, participating in discussions
		Increase student interaction by dividing students into small groups
	Student	Encourage students to share their ideas by creating discussion panels
		Encouraging students to collaborate and work on a project
		Providing equal opportunities for students
Ensuring that the course is interesting for students and encourages them to learn		
		Designing a learning environment suitable for students' different learning styles and speeds
		Consideration of student satisfaction

### Course Content Development

As a result of the data analysis two main categories, namely scientificity and copyright, were identified on the basis of the determined codes. In the category of scientificity, it was emphasized that original sources should be taken into consideration, content developed for educational and research purposes should be used, and presented information should be scientific. In the category of intellectual property rights, opinions such as specifying the sources of the materials used, preferring licensed materials and using self-created content came to the fore. Categories and codes related to the theme of course content development are given in Table 4.

**Table 4.** *Course content development*

Theme	Category	Codes
Course Content Development	Scientificity	Consider original sources
		Use content developed for educational and research purposes
		Ensuring that the information provided is scientific
	Intellectual property rights	Indicating the sources of the materials used
		Use licensed materials
		Using self-created content

### Course Teaching

As a result of the data analysis two main categories, teacher roles and teacher qualities were identified. In the category of teacher roles, the following issues were identified: supporting teaching by using appropriate technological tools effectively, providing students with a variety of learning experiences by using different teaching techniques, providing interactive learning

experiences by giving different roles to students, and giving students the opportunity to ask and answer questions.

In the category of teacher quality, the following elements were emphasized: empathizing with students, having clear and effective communication skills, having up-to-date knowledge in the field, being able to solve technical or pedagogical problems, creating an effective learning environment, and creating fair assessment processes. The categories and codes related to the theme of course teaching is given in Table 5.

**Table 5.** *Course description*

Theme	Category	Codes
Course Description	Teacher roles	Support teaching by effectively using appropriate technological tools Provide students with a variety of learning experiences using different teaching techniques Providing interactive learning experiences by giving students different roles Providing students with the opportunity to ask and answer questions
	Teacher qualification	Empathize with students Communicate clearly and effectively To be able to master current information and content in the field Solve technical or pedagogical problems encountered Creating an effective learning environment Create fair and transparent evaluation processes

### **Exam Situations**

Under the theme of exam situations, the categories of feedback, timeliness, relevance to students, reliability and validity were formed within the framework of the codes obtained from the participants. In the feedback category, the views of providing continuous feedback to students, encouraging them to have an idea about their own learning, and providing clear and effective feedback became evident. In the timeliness category, the views of using up-to-date alternative assessment and evaluation methods, regularly updating assessment tools, and evaluating the impact of the course and making improvements, if necessary, came to the fore.

In the category of student readiness, the necessity of considering students' basic computer usage skills, using assessment and evaluation tools appropriate to students' levels, and preparing assessment and evaluation activities taking into account the workload of students were emphasized. In the category of reliability and validity, important opinions emerged such as conducting validity and reliability checks of the assessment tool, ensuring diversity and scope, finding different solutions to prevent cheating or representing someone else in the exam, carefully designing questions or tasks, and preparing an assessment tool that includes various concepts and skills. Categories and codes related to the theme of testing situations are given in Table 6.

**Table 6. Exam situations**

Theme	Category	Codes
Exam Situations	Feedback	Provide continuous feedback to students
		Students' ideas about their own learning ensuring that they have
		Provide clear and concise feedback to students
	Timeliness	Current alternative assessment and evaluation using methods
		Regularly update assessment tools
		Evaluate the impact of the course and if necessary, making improvements
	Student readiness	Considering students' basic computer usage skills
		Measurement and assessment appropriate to the level of students use assessment tools
		Measurement taking into account the workload of students and preparing evaluation activities
	Reliability and validity	Validity and validity of the measurement tool making reliability checks
Ensuring diversity and scope in assessment and evaluation		
Cheating on an exam or using someone else as your own finding different solutions to prevent taking exams instead		
Carefully design questions or tasks		
		A concept that encompasses different concepts and skills measurement tool preparation

## CONCLUSION and DISCUSSION

Planning instruction is one of the key stages of the educational process. It is important to ensure that students learn effectively. In the study, planning, communication and student are the categories identified under the instructional planning theme. These categories represent the basic steps to create an effective teaching environment. In the planning category, it was emphasized that the objectives of the lesson should be clearly and distinctly defined and learning activities should be designed by taking into account the prior knowledge, interest and learning needs of the students. One of the basic principles of instructional design is to set clear and explicit course objectives (Gronlund & Waugh, 2009). These objectives should clearly state what students should learn. In addition, content should be created by taking into account the prior knowledges, interests and learning needs of the participants (Smith & Ragan, 2005).

Appropriate teaching methods should be chosen to deliver the content in the most effective way. This may include tools such as interactive group work, discussions or online platforms (Clark & Mayer, 2016). It is also important to present topics in a logical sequence. Basic concepts should be introduced first, and then more complex topics should be added on top of this basic knowledge (Gagné et al., 2004). Effective learning activities should be planned to ensure students' active participation. This can mean giving students interactive tasks, organizing discussions or encouraging them to do projects (Bonwell & Eison, 1991). Finally, visual, audio or written materials should be carefully selected and used. These materials should



be chosen taking into account students' different learning styles and preferences (Mayer, 2009). These principles form the basis of an effective educational program and ensure that students learn in the best way possible.

In the communication category, the emphasis was on encouraging students' active participation in course activities, increasing their interaction, encouraging activities such as asking questions, participating in discussions and sharing ideas, as well as supporting collaboration. These interactions enrich students' learning experiences. In particular, interaction between students supports learning through group work and discussions (Tenenbaum et al., 2020). Encouraging students to actively participate in class is the foundation of an effective educational environment. To this end, students should be provided with opportunities to be actively involved in activities such as asking questions and participating in discussions (Bonwell & Eison, 1991). In addition, students should be encouraged to be divided into small groups to increase their interaction. In this way, students can have closer contact with each other and communicate more (Johnson & Johnson, 2009). By creating discussion panels, students should be given the opportunity to share their ideas and develop their critical thinking skills (Brookfield & Preskill, 2005). Furthermore, encouraging students to work collaboratively on a project emphasizes the importance of group work and develops teamwork skills (Barkley et al., 2014). These methods encourage students' active participation and provide a more effective learning experience.

The student category focused on important student-oriented issues such as providing equal opportunities for students, ensuring that the course is interesting and stimulating a learning environment suitable for different learning styles and speeds, and taking account into student satisfaction. One of the main goals in education is to provide equal opportunities for students (Gronlund & Waugh, 2009). This is important for each student to maximize their potential. It is also critical to ensure that the course is engaging and stimulating for students (Bonwell & Eison, 1991). In this way, students are expected to be more engaged with the course content and keep their motivation high. It is also important to design a learning environment that is appropriate for students' different learning styles and speeds. This allows each student to learn in the most effective way (Smith & Ragan, 2005). At the same time, organizing course content in a way that considers student satisfaction positively affects students' educational experience (Clark & Mayer, 2016). In this framework, guiding the educational process by considering the individual needs and potentials of students play a critical role.

In the research, scientificity and intellectual property rights are the categories identified under the theme of course content development. In the process of course content development, citing original sources is of great importance (Tatlı & Koca, 2023). These sources should generally be produced by authors who are experts in their fields or reliable institutions. Content produced especially for educational and research purposes is based on solid foundations by providing an in-depth review. Such content usually meets academic standards and provides reliable information on the topic (Reshetnikova, 2021). In addition, it is critical that the information presented is scientifically grounded. Scientific knowledge is based on data from the academic literature, backed by empirical evidence. Therefore, referring to sources such as scientific articles, academic journals and expert opinions when creating content ensures that the content is well-grounded and provides readers with accurate, reliable information.

Using instructional materials in accordance with intellectual property rights is an important principle of copyright (Koçak & Akbulut, 2018). Indicating the sources of educational materials increases transparency and reliability in the teaching process. Therefore, it is important to use licensed materials because their use is legal and permitted. In addition, instructors can provide students with an authentic learning experience by using their own created content. In this way, the educational process becomes more effective and personalized. These principles increase the quality and reliability of education and provide students with a better learning experience (Gronlund & Waugh, 2009; Smith & Brown, 2017).

In the study, teacher roles and teacher quality are the categories created under the theme of lesson instruction. How teachers direct the lesson and guide students plays a critical role in the effective teaching of the lesson. Using technological tools effectively in education, providing students with a variety of learning experiences and creating interactive learning environments are important factors that enrich the learning process (Johnson & Johnson, 2009). These methods encourage students' active participation and make learning more effective. In addition, providing students with interactive learning experiences such as discussions and responses by giving them different roles supports students' in-depth understanding (Barkley, Cross & Major, 2014). These principles enrich the learning process and enable students to acquire knowledge more effectively (Brookfield & Preskill, 2005).

Teachers need to have a number of important qualifications to be successful. First, teachers need to be able to empathize with students. This means understanding students' needs and organizing lesson content with their perspective in mind (Smith & Brown, 2017). Furthermore, clear and effective communication skills are also critical for teachers to communicate effectively with students and understand them (Gronlund & Waugh, 2009). It is also important to be up to date in their field. This enables teachers to keep abreast of the latest scientific developments and keep course content up to date (Clark & Mayer, 2016). Also another critical point is the ability of solving technical or pedagogical problems. This enables teachers to overcome challenges and provide effective learning experiences (Bonwell & Eison, 1991).

It is also important to ensure that students are in an effective learning environment. This means providing appropriate materials and activities (Brookfield & Preskill, 2005). Studies have shown that various teaching techniques increase student motivation, improve learning outcomes and increase learning retention (Hattie, 2012). It is also critical that teachers establish fair and transparent assessment processes. This ensures fair assessment and feedback on students' performance (Johnson & Johnson, 2009). The combination of these skills enables teachers to create an effective educational environment, act ethically and ensure students' success in the distance education process.

Measuring and evaluating success is one of the important factors affecting the success of distance education (Dağlar, 2023). The COVID-19 pandemic has necessitated a review of all used testing situations (Gaffney, Chargualaf, & Ghosh, 2021). In the study, test cases were addressed. In this theme, the categories of feedback, timeliness, student readiness, reliability and validity were identified. Teachers should support students' learning process by using effective assessment and evaluation methods. This means providing continuous feedback and enabling students to gain insight into their own learning (Popham, 2021). Moreover, clear and explicit feedback helps students understand their performance (Gronlund & Waugh, 2009).

Using up-to-date alternative assessment and evaluation methods is also critical. This allows teachers to assess students' different skills and abilities better (Freeman et al., 2014).

Regular updating of assessment tools ensures that students are assessed with up-to-date information (Gagné et al., 2004). Assessing the impact of the lesson and making improvements if necessary is important for teachers to increase student achievement (Clark & Mayer, 2016). Taking into account students' basic computer skills enables effective use of online assessment tools (Smith & Ragan, 2005). Using assessment and evaluation tools appropriate to the level of students allows each student to show his/her true potential (Johnson & Johnson, 2009). Checking the validity and reliability of the assessment tool ensures that the assessment is accurate and reliable (Mayer, 2009). Finally, preparing an assessment tool that covers different concepts and skills allows for a wide range of students to be assessed (Gronlund & Waugh, 2009). These considerations support effective assessment and evaluation processes and increase student success.

A distance education process that takes ethical principles into account can inspire students to model ethical behavior, guide the creation of an effective educational environment, and enhance students' learning experiences. In this context, the results of this research will be an important guide for teachers to determine in which areas they should be careful in order to create a distance education environment based on ethical values and to improve the quality of education.

### **Suggestions**

Based on the results of the research, the following recommendations were developed:

- Educational institutions should create training programs for teachers to adopt and implement job ethical values. These programs should cover all stages from instructional planning to lesson content preparation to examination processes.
- Researchers and practitioners can improve the quality of education by considering these principles.
- Student opinions can also be used to determine ethical principles in distance education.

### **Limitations**

This study is limited to interviews with 12 teachers working in public high schools affiliated to the Ministry of National Education in Mus province.

**Author Conflict of Interest Information:** There was no conflict of interest in this study.

## **REFERENCES**

- Aktaş, G & Çabar, S, (2023). The main problems of distance education concerning equal opportunity during the pandemic process: The case of private and public schools, *Faculty of Letters Journal of Social Sciences*, 47 (1): 11-27  
<https://web.s.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=0&sid=77423e53-6cc5-4127-b7d2-f1095d8268ca%40redis>
- Barkley, E. F., Cross, K. P., & Major, C. H. (2014). *Collaborative learning techniques: A handbook for college faculty*. John Wiley & Sons. <https://10.1002/9781118763630>

- Bonwell, C. C. & Eison, J. A. (1991). *Active learning: Creating excitement in the classroom (ASHE-ERIC Higher Education Report No. 1)*. Washington, DC: The George Washington University, School of Education and Human Development.
- Brookfield, S. D. & Preskill, S. (2005). *Discussion as a way of teaching: Tools and techniques for democratic classrooms*. Jossey-Bass.
- Can, E. & Sezer, Ş. (2023). Management of teaching in distance education regarding teachers' views: A case study. *Journal of Education for Life*, 37 (3), 902-924. <https://10.33308/26674874.2023373>
- Choi, E. (2020). Effects of Social Isolation on Education. *Journal of Social Sciences Research*, 15 (3), 89-102.
- Clark, R. C., & Mayer, R. E. (2016). *E-learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning*. John Wiley & Sons. <https://10.1002/9781119235292>
- Dağlar, N. (2023). The Impact Of Covid-19 Pandemic process on distance education methods: National literature review. *Journal of Digital Technologies and Education*, 2 (1), 16-37. <https://10.5281/zenodo.8097509>
- Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., & Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. *Proceedings of the National Academy of Sciences*, 111 (23), 8410-8415. <https://10.1073/pnas.1319030111>
- Gaffney, M. K., Chargualaf, K. A., & Ghosh, S. (2021). Covid-19 disruption of nursing education and the effects on students' academic and professional confidence. *Nurse Educator*, 46(2), 76- 81. <https://10.1097/nne.0000000000000986>
- Gagné, R. M., Wager, W. W., Golas, K. C., & Keller, J. M. (2004). *Principles of instructional design*. Wadsworth/Thomson Learning.
- Garcia, C. (2020). *Student-Teacher Interaction in distance education: Issues and solutions*. Proceedings of the Educational Technologies Conference, 25-30.
- Gronlund, N. E., & Waugh, C. K. (2009). *Assessment of student achievement*. Pearson.
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81-112. <https://10.3102/003465430298487>
- Johnson, D. W., & Johnson, F. P. (2009). *Joining together: Group theory and group skills*. Allyn & Bacon. <https://psycnet.apa.org/record/1991-97576-000>
- Jiang, P., Namaziandost, E., Azizi, Z., & Razmi, M. H. (2023). Exploring the effects of online learning on EFL learners' motivation, anxiety, and attitudes during the COVID-19 pandemic: A focus on Iran. *Current Psychology*, 42(3), 2310-2324. <https://10.1016/j.compedu.2022.104663>
- Koçak, U., & Akbulut, Y. (2018). A review of research on instructional design and e-learning in Turkish higher education. *Journal of Educational Technology & Society*, 21(2), 133-146. <https://10.1109/ICLA46493.2021.9465188>
- Lawler, P. A. (2000). Ethical issues in continuing professional education. V. Mott & B. Daley (Ed.), *New directions for adult and continuing education*. San Francisco: Jossey-Bass Publishers.
- Lee, D. (2021). Attention distraction in distance education: Causes and solutions. *Journal of Educational Psychology*, 29(2), 211-225.

- Mayer, R. E. (2009). *Multimedia learning* (2<sup>nd</sup> ed.). Cambridge University Press.
- Onay, T., & Seren İntepeler, Ş. (2023). Homework and Performance Evaluation with Rubric: Continuous Improvement Example, *University of Health Sciences Journal of Nursing*, 5 (1). <https://10.48071/sbuhemsirelik.1148282>
- Patton M. Q. (2014). *Qualitative Research & Evaluation Methods. Utilization-Focused Evaluation*. Saint Paul, MN
- Popham, W. J. (2021). *Classroom assessment: What teachers need to know*. Pearson. California-Los Angeles.
- Simonson, M., Smaldino, S., Albright, M. & Zvacek, S. (2006). *Teaching and learning at a distance: Foundations of distance education* (3<sup>rd</sup> Edition). New Jersey: Pearson Education.
- Reshetnikova, O. (2021). *Effective learning tools in e-learning*. In Proceedings of the 20th European Conference on e-Learning (387-393). [https://books.google.com.tr/books?hl=tr&lr=&id=XStQEAAAQBAJ&oi=fnd&pg=PA387&dq=Effective+use+of+academic+sources+in+teaching+materials&ots=FVHxOcnjtV&sig=n4nccz4vKBbmwl0x6n9qJCtmKWc&redir\\_esc=y#v=onepage&q=Effective%20use%20of%20academic%20sources%20in%20teaching%20materials&f=false](https://books.google.com.tr/books?hl=tr&lr=&id=XStQEAAAQBAJ&oi=fnd&pg=PA387&dq=Effective+use+of+academic+sources+in+teaching+materials&ots=FVHxOcnjtV&sig=n4nccz4vKBbmwl0x6n9qJCtmKWc&redir_esc=y#v=onepage&q=Effective%20use%20of%20academic%20sources%20in%20teaching%20materials&f=false)
- Smith, M. K., & Brown, S. S. (2017). *Validity Evidence*. In *Encyclopedia of Educational Philosophy and Theory* (pp. 1-5). Springer, Singapore. [https://10.1007/978-981-287-532-7\\_191-1](https://10.1007/978-981-287-532-7_191-1).
- Smith, P. L., & Ragan, T. J. (2005). *Instructional design* (3<sup>rd</sup> ed.). John Wiley & Sons.
- İlgaz, H., & Afacan Adanır, G. (2020). Providing online exams for online learners: Does it really matter for them? *Education and Information Technologies*, 25(2), 1255-1269. <https://doi.org/10.1007/s10639-019-10020-6>
- Tatlı, C. & Koca, B. U. (2023). Ethical codes in distance education. *Journal of Social Sciences Of Mus Alparslan University* , 11 (1) , 199-214 . <https://10.18506/anemon.1227621>
- Tatlı, C., & Şimşek, N. (2022). *Uzaktan eğitimde etkileşim tasarımı [Interaction design in distance education]*. Nobel Akademik Yayıncılık, Ankara.
- Tenenbaum, H. R., Winstone, N. E., Leman, P. J., & Avery, R. E. (2020). How effective is peer interaction in facilitating learning? A meta-analysis. *Journal of Educational Psychology*, 112(7), 1303. <https://doi.org/10.1037/edu0000436>