The Quality of Assessment during Covid-19 Online Education in the Eyes of Students: Tishk International University Case

Hasan Gürbüz¹

¹Tishk International University, Erbil, Iraq
Correspondence: Hasan Gürbüz, Tishk, International University, Erbil, Iraq.
Email: hasan.gurbuz@tiu.edu.iq

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Abstract: Measurement and evaluation are an indispensable elements of educational processes. As a result of this, how learning takes place is revealed, and the question of what changes should be made in the future depends on the result of this. The criteria for measurement and evaluation were designed in accordance with face-to-face education. In the conditions of online education in the Covid-19 process, some problems arose regarding measurement and evaluation. With the Likert scale questionnaire, we applied to our students, it was investigated how healthy the teacher assessments were during the term. In this study, it was revealed that the students had problems with measurement, evaluation, and teacher assessment in this period.

Keywords: Measurement and Evaluation, Assessment, Covid 19, Online Education

1. Introduction

Online education applied in the conditions of Covid-19 brought some problems. Many of these problems have been discussed in depth in the literature. One of them is teachers' assessment criteria for students. The fact that the students could not be as successful as in face-to-face education in the harsh conditions brought by the process caused them to make different demands on teacher assessment (Celik et al., 2022a). In this period, students could not learn the subjects effectively and could not show the success they showed in face-to-face education. As a result, they did not get the results they expected from the exams. Therefore, they developed different judgments about measurement, evaluation, and teacher assessment. In this study, these judgments developed by the students were shed light.

2. Literature Review

2.1 Measurement

Measurement is an application that we do in every field in daily life. We express the weight, height and similar properties of the objects we are dealing with in numbers or scales according to certain measures. These number and scale ranges obtained are in a size that will give us an idea about that object. A similar...
situation exists in the application of measurement to the field of education. The grades given to the students in the exams and determining the success range for them are the measurement of how much the student has learned. First of all, the expression of how much the student has learned in numbers is a measurement and forms the basis for further evaluations (Lester et al., 2014).

There are other applications of measurement, the simplest definition of which can be made as above. For example, some scales have been developed to determine the reliability and validity of a survey. In addition, in social sciences, a number of tools have been developed to measure people's approaches and attitudes to a subject. For example, surveys, interviews, observations and tests, which social sciences frequently apply, are primary measurement tools. The first step to see what people's attitudes is asking them questions or observing them. At this point, the use of tools such as questionnaires and interviews are primarily for measurement purposes. Measurement is the most basic tool at some point and evaluations will be built on it (Henerson et al., 1987).

2.2 Evaluation

Evaluation is a process that comes after measurement and assessment. The data we have obtained by measurement is used to determine the success range of the students. This determination is considered as an assessment. In the last process, if the student is successful, why he is successful and the reasons that affect his success are discussed. Moreover, it can be handled as an evaluation to investigate why unsuccessful students are unsuccessful and the reasons behind their failure. Evaluation refers to the process after the determination of student success or failure as a result of the measurement. At this point, the process where the decision makers focus on the students' situation, how they will be better, and with which tools they will develop better is called evaluation. Evaluation is the process of evaluating the collected information and determining new tactics and strategies accordingly (Kizlik, 2012).

The key word hidden in the term evaluation is "value". In this case, making an evaluation is entering a process and determining the value of something, and going further, making some amendments. It is to make judgments about the content or future of the issue handled together with the data collected during this process. After collecting the necessary information, the objectives, goals, standards and procedures etc., which were determined before the process, are brought together to see the effectiveness and to decide whether it is necessary to make changes. It is the name given to the situation in which we evaluate how effectively these were implemented and what changes should be made in the new situation. In addition, it is also part of evaluation where issues such as the results obtained and their suitability, accuracy and validity are discussed (Kizlik, 2012).

In fact, evaluation is geared towards processes, curriculum and materials rather than student. The evaluation discussed here is not something that only the teacher can do. It is a situation where all stakeholders in education have a say to make judgements. All in all, as a qualitative process, evaluation comes after obtaining all results.

2.3 Assessment

Ulker and Yildiz (2021) argue that “to prepare students for their professional life through appropriate instruction and context, the most effective assessment types should be chosen to assess them” because
assessment plays a central role in the development of learners and systematic assessment influences the learning process. (Daskan & Yildiz, 2020; Tosun & Yildiz, 2015a). In addition, assessment, in its most general terms, is a focus on student learning. Assessment is a continuous systematic process and student success is monitored during this process. This emerges through the handling of data obtained by measurement. In this process, the teacher focuses on how effectively students learn. What is desired to be achieved with assessment is to see how successful students are, as well as to improve their teaching and learning processes. At this point, assessment is used to eliminate the inconsistency between the objectives set in the curriculum and the results obtained by the students (Celik, 2019a; Hancock, 1994).

Continuous control of how much the student has learned is possible with different tools. These can be the feedback given to the student during the process, as well as the exams used to measure the student's success in the process. At this point, the assessment process is divided into two different main branches.

2.4 Formative Assessment

The learning process that takes place in the classroom includes quite complex situations. The fact that some subjects are difficult for students, and they have learning difficulties emerge as situations that should be evaluated differently for the teacher. In addition, some students experience some ups and downs in their learning processes and their motivation decreases or increases. Therefore, it is difficult to motivate students in whole period of lesson time and some techniques are necessary to be followed (Tosun & Yildiz, 2015b). In addition, the course materials used for the subjects taught may sometimes not be suitable for students' learning. The evaluation of all these processes and the process of giving them feedback according to the situation of the students is called formative assessment. In this process, the teacher expresses to the students how they progress, how they can cope with the difficulties that arise, how they can adapt to the new situation, and what kind of needs they have. In the context, formative assessment is also called ongoing assessment, dynamic assessment and assessment for learning (Crooks, 2001).

Formative assessment, which will be done in any period without any time constraint in the learning processes, is indeed a living process. In this process, the support for the student can come from his classmates as well as from the teacher. The aim here is to inform the student about what he can learn more through taking into consideration the student's capacity and prior knowledge (Shepard, 2005).

Formative assessment provides important contributions to student success as it is done continuously in learning processes. In order to do this effectively, the teacher must keep the student under constant control and check how much the student has learned at certain intervals during the lesson. Thus, understanding how much the student has learned is not left to the exams at the end of the process. In this way, the teacher has the chance to intervene more quickly in the problems that arise (Fisher & Frey, 2007).

2.5 Summative Assessment

Unlike the previous assessment type, summative assessment is the exams administered at the end of a subject, unit, term or year. The results of this assessment are reported to students as grades, marks or levels. Thus, at the end of the process, it is evaluated how much the students have learned by administering the exam (Dixson & Worrell, 2016).
Summative assessment, together with the applied tests, is the measurement of student achievement according to certain standards. It is an evaluation that is necessary for the teacher to grade the student and to put the student's success in front of them at the end of the year. However, when compared with formative assessment, it is seen that different processes operate. Summative assessment is an indispensable tool for making a formal reporting within the institution (Driessen et al., 2007).

2.6 Comparison of These Assessment Types

These two assessment types differ from each other from some perspectives. We can come across various approaches of expressing the differences of these types. Fisher & Frey (2014) offer the table below to show the difference.

<table>
<thead>
<tr>
<th>Formative Assessment</th>
<th>Summative Assessment</th>
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<tbody>
<tr>
<td><strong>Purpose</strong></td>
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<tr>
<td>to make the instruction better and provide the student with useful feedback</td>
<td>to directly measure the student success by tests or exams</td>
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<tr>
<td><strong>Time of administering</strong></td>
<td></td>
</tr>
<tr>
<td>ongoing process throughout learning</td>
<td>at the end of a unit, course or year...etc.</td>
</tr>
<tr>
<td><strong>The use of the results by students</strong></td>
<td></td>
</tr>
<tr>
<td>Students check how well they understood.</td>
<td>Students see their grade and compare it to the predetermined benchmarks or thresholds.</td>
</tr>
<tr>
<td><strong>The use of results by teachers</strong></td>
<td></td>
</tr>
<tr>
<td>Teacher checks how well the students understood and provides more instruction or interferes where they see necessary.</td>
<td>Teacher uses it for official grading and reporting and also promoting the students.</td>
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</table>

From a different perspective, the difference between these two types were expressed with some dichotomous terms (McAlpine, 2002).

<table>
<thead>
<tr>
<th>Formative</th>
<th>Summative</th>
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<tbody>
<tr>
<td>Informal</td>
<td>Formal</td>
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<tr>
<td>Continuous</td>
<td>Final</td>
</tr>
<tr>
<td>Process</td>
<td>Product</td>
</tr>
<tr>
<td>Divergent</td>
<td>Convergent</td>
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</tbody>
</table>

Informal assessment is not intended for any grade but emerges in the form of informing the student's progress in the process. The student, on the other hand, can set new strategies and goals according to the feedback given by the teacher. On the other hand, formal assessment is directly aimed at giving grades to
students. In addition, the student's achievements are measured and how ready they are for the next stage is also shown (Ruiz-Primo & Furtak, 2007).

Formative assessment is a continuous assessment, and it comes out during the process of learning. The aim here is to reveal the strengths and weaknesses of the student and to ensure that they are better prepared for the later stages of the process. Thus, it is thought that the development processes will proceed in a healthier way. On the other hand, summative assessment is accepted as a final assessment. The aim is to grade the student according to his/her progress and to show him/her the degree to which he/she has reached the goals determined before the process (Perera-Diltz & Moe, 2014). As a process assessment, formative assessment is made to evaluate the student's changes in the process. Summative assessment, on the other hand, is a product assessment. The purpose is to show the result obtained (Taras, 2009).

Where divergent assessment is concerned, more than one solution is possible. Since the changes of the student in the process are evaluated, different solutions can be offered. Here, the student's condition is a determining factor, as well as other factors. At this point, it is more appropriate to measure the student's higher cognitive skills. Convergent assessment, on the other hand, is an assessment in which there is only one correct answer for the situation. The tests given to the students are an example of this, and the answers given by the students are the only criteria in the evaluation of their success (Celik, 2019b; McAlpine, 2002).

2.7 Assessment of Student Success during Online Education under Covid-19 Conditions

Online education that became compulsory under the conditions of Covid 19 brought some problems. Although there was an important literature about online education before the process of Covid 19, compulsory online education revealed some problems (Celik et al., 2022b). While it was boring for students to stay at home all the time, it also reduced their motivation for lessons. In addition, there was a significant decrease in the course success of students who had other problems. In addition, students complained about some aspects of online education. For example, they stated that they had learned better in traditional face-to-face education, and they complained that they did not understand with the same efficiency in online education (Dutta & Smita, 2020; Celik et al., 2022c).

The decrease in the success level of students in online education was due to many other factors. As a result of this, the assessment criteria that students expected from teachers also changed (Zhang et al., 2021). However, at this point, other problems arose for teachers. The teachers, who were in contact with the students only online, could not follow their learning effectively and could not determine what they needed (Batubara, 2021; Celik, 2021).

In addition, due to the fact that students were not in a healthy communication with their friends and teachers, there was a decrease in their course success. In this case, the students demanded that the evaluation criteria for themselves be changed (Daniels et al., 2021).

It has been reflected in the literature that students and teachers had positive thoughts about online education in the pre-Covid-19 period (Al-Fraihat et al., 2020). However, the extraordinary conditions brought by the Covid-19 period have revealed some problems, and both teachers and students have been reluctant towards online education. It is possible to point out different reasons for its emergence. First of all, it can be said...
that some people stay away from online education due to their personality traits. In addition, the lack of face-to-face communication in online education and the lack of trust it brings can be added as another reason. Moreover, while many factors such as facial expressions and tones of voice, in addition to the words people use in normal communication, contribute to the content of the message, people are deprived of this in online education. Therefore, problems such as boredom and insecurity due to remote communication have emerged over time (Bilgin et al., 2022; Rasheed et al., 2020).

Staying at home for a long time and the continuous prolongation of this process caused frustration on students and reduced their motivation for lessons (Wilcha, 2020). In addition, they had to face other problems brought by the process. For instance, financial problems arose in many families, and some were shaken by the deaths of very close relatives (Walsh, 2020). Furthermore, since it is very difficult for students of this age to be inactive for hours in front of the computer, this became a reason for their loss of motivation and boredom.

All these caused many students to lose their close interest in the lesson and not to understand the lesson over time. As a result, some students thought that the assessment criteria should be different. Since the students got education under difficult conditions, they thought that the assessment criteria that should have been applied in the normal period were not appropriate (Assunção Flores & Gago, 2020).

In addition, the activities and experiments that should be done especially in practical lessons could not be done in this process, which made it difficult for students to understand the subjects. Under these conditions, a significant part of the students complained that the tests that should have been done under normal conditions were applied to them during this period (Henaku, 2020).

Students have expressed many complaints about online education during the covid-19 outbreak. Among these complaints, it can be said that the assessment criteria remained in the shadow of the others. However, this study aims to shed light on this dimension as well as other dimensions of the problems brought about by online education.

3. Methodology

3.1 Research Model

In this study, 24 first- and second-year students studying at the faculty of education at Erbil Tishk International University were used. A survey was applied to the students in accordance with the Likert scale, and in this survey, first of all, the students were asked whether they had any problems in the online lessons during the covid-19 period. After obtaining the necessary data on this issue, we investigated if the assessment was appropriate in the form of exams and tests applied to them by the teachers in the other questions of the questionnaire. After the data were collected, the students' answers were put into statistics in the Microsoft Excel program and the data were evaluated using the descriptive statistics method.

3.2 Sampling

In this study, 1st and 2nd year students of Tishk International University education faculty were used. These students are 24 people in total. The reason why these students were selected for the survey was that
these students were 12th grade high school students when online education started in 2020. Since they were senior students, we can state that the university exams they targeted motivated these students more than all other students. Therefore, the conditions experienced by these students were different from the others. Especially in this country, the grades taken from the state exams held at the end of the year at university entrance are important, as well as the diploma grade of the students. Therefore, these students were more sensitive to assessment criteria.

3.3 Data Collection

In this study, data were collected by applying a questionnaire in accordance with the Likert scale. First of all, the students were asked about the difficulties they experienced in online education. Then, depending on these difficulties, it was asked how appropriate the assessment criteria were. The collected data were put into statistics and evaluated with the descriptive statistics method.

4. Findings

The difficulties experienced by the students during the online education period, which emerged under the conditions of Kovid-19, were examined with the survey questions. After revealing these difficulties, the suitability of the assessment criteria applied to the students was investigated. In this context, students were first asked about the difficulty level of the courses they took during the online education period compared to the courses they took in the previous face-to-face education period. As we encounter in the literature, students stated that online education is very difficult under the influence of many factors. The answers we received in the question we directed to our students are as follows.

![Bar Chart]

Figure 1: In the online education period, it was more difficult to understand the lessons than face-to-face education

14 out of 24 students (58%) stated that it is more difficult to understand the lessons in the online education period. 8 students (33%) expressed a negative opinion on this issue. As can be seen, the majority of the students stated that it is more difficult to understand the lessons in the online term.
One of the important problems of the students about the lessons in this period is that they missed some lessons. The reasons behind this may be different. For example, sometimes it can happen because they are bored with the lesson, and sometimes it can be because of internet connections. It can even be said that the internet causes problems even during the lesson. In this context, we got the following answer in the question we asked the students about the subject.

![Figure 2: I missed some classes during the online education period](image)

Eight students (33%) stated that they did not experience any problems in this regard. On the other hand, 12 students (50%) showed that they had some problems. As can be seen, a significant part of the students missed some classes under different conditions.

In the next question, students were asked whether they learned the lessons effectively during the online education. As seen in the answers above, the students had difficulties in the lessons and missed some lessons. In this case, this question gains more value in the face of the previous questions.

![Figure 3: I think that I learned the subjects efficiently in online education](image)
Only 8 (33%) of our students stated that effective learning took place during the online education period. On the other hand, 9 students (38%) stated that they could not learn effectively. 7 students (29%) remained neutral on this issue. It is remarkable that the students who declared neutral opinions on this question were so high. In fact, it can be considered as an indication that they may have experienced some problems as well.

Since these students were high school seniors at that time, they needed to learn all the subjects effectively because all the subjects they learned in the lessons had the potential to appear as questions in the university entrance exam. Therefore, the learning objectives set in the lessons were very important for these students. In this context, students were asked whether they could achieve the learning objectives effectively.

![Bar chart showing student responses to learning objectives in online education](image)

**Figure 4:** I think that I have effectively accomplished the learning objectives in online education

According to the results obtained, 6 of the students (25%) stated that they achieved the learning objectives effectively. On the other hand, 14 students (58%) expressed a negative opinion on this issue. The needs of these students to learn all the subjects completely and the tests they took at the end of the subjects gave them important ideas on this issue. It is seen here that they could not effectively achieve the learning objectives in online courses.

One of the main problems of students is that some courses are not entirely suitable for online education. For example, in courses such as Mathematics and Physics, which are quite difficult for them, needs emerged that online education could not meet. To test the accuracy of this assertion, we asked the students the next question.
14 of the students (58%) stated that some courses are not suitable for online education. On the other hand, 8 students (24%) think differently on this issue. The number of students who think that some courses are not suitable for online education is quite high. As it can be seen from here, the students also experienced some problems in this regard.

In the next question, we asked whether the students were learning effectively, depending on the above question.

As the statistics show, 10 (42%) of the students stated that they could not learn effectively due to the above reason, while 7 students (29%) stated that effective learning took place. Likewise, 7 other students remained neutral on this issue. Therefore, it is possible to talk about a confusion among these students.

While the questions so far have focused on determining how effectively students have learned, the next questions have focused on determining how well the exams they took at the end of these courses were
suitable for the extraordinary conditions in online education brought by Covid 19. In this context, the students were asked the next question. At this point, the problem that they could not get the results they expected from the exams came to the forefront because they did not understand the lessons well.

Figure 7: Since I did not understand the lessons well, I did not get the results I expected in the exams

15 of the students (63%) said that they did not get the grades they expected from the exams because they did not understand the lessons well. Only 5 students (21%) stated that they did not encounter such a problem. Therefore, it is seen that the majority of students have problems in this regard. It is also seen here that the exams given to the students during this process did not meet the needs of the process and were negatively received by the students. The same application of the exams designed for face-to-face education caused problems.

In this context, students were asked whether measurement and evaluation should be rearranged in accordance with online education conditions.

Figure 8: Measurement and evaluation should be rearranged in accordance with online education
18 students (75%) think that such an arrangement is necessary. We see that some shortcomings of online education in Covid-19 conditions, in terms of both technological inadequacies and curriculum and materials, have been revealed in the literature. Accordingly, it is seen that the measurement and evaluation are seen by the students as not being suitable for the conditions.

Regarding the subject, we asked whether online exams reflect the real success of students.

![Figure 9: I think that online exams do not reflect my real success](image)

15 students (63%) think that online exams do not reflect their real success. Therefore, it seems that exams, which are an important measurement and evaluation method, have some problems in online education.

Another problem with online exams is that students are very open to cheating. As it is possible to find the answers to some questions quickly by surfing the Internet, the reliability of the exam has emerged as an important problem. At this point, we asked the next question to determine what students think about this aspect of online exams.

![Figure 10: I think that online exams are abused by students](image)
13 students (54%) stated that online exams were abused by students. Therefore, it is seen that exams pose a problem in the online education period in terms of this dimension. Another remarkable point here is that 7 students (29%) declared neutral opinions. In fact, we can assume that they do not want to reveal some points on this issue.

5. Discussion

Compulsory online education during the Covid-19 process has brought some problems. Although the literature on online education has generally developed positively in the previous period, the experiences in this period have revealed many problems regarding online education in many aspects. While different studies underline the different aspects of these problems, the measurement and evaluation that should be done at the end of the education has not been emphasized much. Therefore, this study focuses on how the measurement and evaluation issue was realized from the eyes of the students in the online education process.

In order to understand all aspects of the issue, we first started by asking questions about online education to the content of the questionnaire we applied to the students. First of all, when we asked whether the courses in online education were more difficult than face-to-face education, a significant portion of the students stated that online courses were more difficult. In addition, during the process, it is seen that the students missed some classes as a result of both internet interruption problems and the boredom of the students. Accordingly, they complained that they could not learn some lessons effectively. In addition, there are some students who stated that they could not achieve the learning objectives effectively.

Another factor that negatively affected student success in this process was that some courses were not suitable for online education in terms of content. In the questionnaire we directed to the students, it is seen that the students think in parallel with this. Accordingly, the students stated that they could not learn some lessons well.

In the first part of the questionnaire, the issue of how effectively the students learned the online lessons was investigated, while in the next part, it was determined that they could not get the exam results they expected due to the problem of not being able to learn the lessons effectively. It should be noted that the exams administered to the students in this process did not meet the expectations of the students. The application of the exams prepared especially for face-to-face education caused problems. Accordingly, a significant portion of the students stated that online exams did not reflect their real success.

We asked the students a question that will be the summary of this study. In this question, it was asked how they approached the idea that measurement and evaluation should be rearranged according to online education. Most of the students believe that such an arrangement is necessary at this point. Thus, it was seen in this survey that the measurement and evaluation in the online education process were not welcomed by the students.

Finally, students were asked whether online exams were abused by students. The aim here was that students had a very high chance of cheating in online exams. Finding the answers to some questions with a short internet search damages the reliability of the exam. A significant portion of the students stated that these exams were abused by the students. Therefore, it is seen that measurement and evaluation in the
online education process poses a problem not only in terms of students' learning, but also in terms of exam reliability.

6. Conclusion

Many problems brought by online education in the Covid-19 process have been reflected in the literature. However, among these, the problems related to measurement and evaluation were not mentioned much. Despite the fact that online education has been discussed a lot in the last few decades, the problems related to the issue were clearly seen in the covid-19 process. As discussed in this study, measurement and evaluation is one of these problems. It has been shown in different aspects that the exams prepared under the conditions of face-to-face education are not very suitable for the conditions of online education.

This study was conducted only on students studying at a private university. Conducting the study in other groups may yield different results. These students had the concerns such as university entrance exams that require their motivation during that period, it is likely to give different results on students who do not have such a concern.

References


## Appendix - The Questionnaire

<table>
<thead>
<tr>
<th></th>
<th>totally agree</th>
<th>agree</th>
<th>neutral</th>
<th>disagree</th>
<th>totally disagree</th>
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<tbody>
<tr>
<td>1. In the online education period, it was more difficult to understand the lessons than face-to-face education.</td>
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<td>2. I missed some classes during the online education period.</td>
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<tr>
<td>3. I think that I learned the subjects efficiently in online education.</td>
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<td>4. I think that I have effectively accomplished the learning objectives in online education.</td>
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<tr>
<td>5. I think that some subjects are not suitable for online education.</td>
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<tr>
<td>6. That's why I think I didn't learn the lessons well.</td>
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<tr>
<td>7. Since I did not understand the lessons well, I did not get the results I expected in the exams.</td>
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<tr>
<td>8. Measurement and evaluation should be rearranged in accordance with online education.</td>
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<tr>
<td>9. I think that online exams do not reflect my real success.</td>
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<tr>
<td>10. I think that online exams are abused by students.</td>
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