



WP2

NATIONAL REPORT:

FIELD RESEARCH ABOUT SPECIFIC NEED OF THE PARTNERS

REGARDING ASSESSMENT.

THE CASE OF LITHUANIA

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CRITON - prediction of e-learners' progress and timely assessment of the achievement of learning outcomes in Lifelong Learning

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1 INTRODUCTION

Assessment is an ongoing process that involves planning, discussion, consensus building, reflection, measuring, analyzing and improving based on data and artifacts gathered about a learning objective. Any assessment is linked to critical questions, such as:

- *Why* do we measure?
- *What* do we are measuring?
- *How* do we measure it?
- *How much* do we need to measure?
- *When* do we measure it?

Assessment is in the core of the project CRITON (www.criton.eu). CRITON is a transnational cooperation project to enhance the learning process in distance education systems and e-learning, using assessment methods for predicting the progress of students and to improve evaluation methods leading to better learning outcomes and more personalized learning.

In the project participate seven partners from six different countries of Europe (Greece, Austria, Finland, Lithuania, Sweden, and Germany).

This National Report presents the findings of the survey about different assessment methods used in eLearning environment in order to define the most widely used assessment practices in Lithuania, which can provide accurate measure of student performance in eLearning.

The research questions of the study are:

- Which are the most widely used educational assessment methods in Lithuania and why?
- What are the particular features of assessment methods used in eLearning environments in Lithuania?
- Which assessment methods in eLearning environments have added value for students, staff, institutions and future employers?
- Which e-assessment formats just focus on testing the acquisition of declarative knowledge and which provide much deeper insights, for both the student and the teacher?
- How can feedback influence student achievement in eLearning?
- Which are the conditions under which assessment supports students' progress in an eLearning environment?

2. REVIEW OF THE LITERATURE

The following list shows the most relevant articles and reports about assessment in conventional education and in eLearning environments in Lithuania:

1. Gudauskas R., Simasius R. (2008). *The Development of eServices in an Enlarged EU: eLearning in Lithuania*. Luxembourg: Office for Official Publications of the European Communities EUR – Scientific and Technical Research series – ISSN 1018-5593. Retrieved from The Institute for Prospective Technological Studies (IPTS) website: <http://ftp.jrc.es/EURdoc/JRC47549.pdf>
2. Ciuzas R. (2011). Student assessment: Are we ready to shift from assessment of learning to assessment for learning? *Social Sciences*, 71(1), 73-79. doi: 10.5755/j01.ss.71.1.385
3. Vitienė N., Mičiulienė R. (2008). Application of criteria-referenced assessment and qualitative feedback to develop foreign language speaking skills in the context of e-teaching/learning. *Quality of Higher Education*, 5, 152-168, 170-171. Retrieved from http://skc.vdu.lt/downloads/zurnalo_arch/amk_5/qhe_2008_152_171.pdf
4. Kaklauskas A., Zavadskas E.K., Pruskus V., Vlasenko A., Seniut M., Kaklauskas G., Matuliauskaite A., Gribniak V. (2010). Biometric and intelligent self-assessment of student progress system. *Computers & Education*, 55, 821-833. Retrieved from <http://www.sciencedirect.com/science/journal/03601315/55/2>
5. Rimkuvienė S., Lepkova N., Krutinis M. (2010). Results of three research works on e-learning with a special emphasis on the change of economic conditions. *Modern Building Materials, Structures and Techniques*. Selected papers of the 10th International Conference (pp.506–511). Vilnius, Lithuania. Retrieved from http://dspace.vgtu.lt/bitstream/1/517/1/0506-0511_rimkuvienė_lepkova_et_al.pdf

The first paper from the above list, has been written by Gudauskas and Simasius (2008), based on a research by Institute for Prospective Technological Studies (IPTS). IPTS is one of the seven research institutes that make up the Joint Research Centre of the European Commission launched a project to support e-Government, e-Health and e-Learning policy. The research, which was carried out in 2005, focused on the three application areas in the ten New Member States (among them Lithuania) that joined the European Union in 2004, in order to build up a picture of their current status and developments in the field, the most important opportunities and challenges they face, the lessons other member states may learn from them, and the related policy options.

The specific report by Gudauskas and Simasius (2008) was produced by the Lithuanian Free Market Institute, the consortium member from Lithuania, and it presents the results of the research on eLearning in Lithuania. First, the report describes Lithuania's educational system and the role played by eLearning in it. Then, it describes the major technical, economic, political, ethical and socio-cultural factors of eLearning developments. These provide the basis for the identification and discussion of policy options to address the major challenges and to suggest research and development issues for facing the needs of the country.

Gudauskas and Simasius underline that the main thing lacking in Lithuania is the motivation to deliver eLearning services that create **added value** for users and learners. Main policy measures to foster eLearning to the optimal level should target the system of motivation of public education institutions, and of their personnel. The structure and motivation of public education institutions is a much broader aspect than just eLearning. However, this aspect is of primary importance to the prospect of eLearning and of integration of ICT into the conventional system of education. The traditional educational institutions should be encouraged to use more ICT in the study process and to apply the range of eLearning methods.

Based on this report, the most relevant eLearning-related issues of public debate and the challenges for the future in Lithuania are:

- Centralization vs. decentralization in eLearning developments;
- The question of open source vs. commercial software usage in public eLearning;

- Standardisation, integration and interoperability of different learning resources and services, at both national and EU levels;
- The involvement of the private sector to overcome the lack of knowledge/resources/speed in public education institutions;
- The creation of motivation for public education institutions to develop more ICT-based learning services, which are more efficient and user-friendly;
- ICT-based working methods face the challenge of ensuring personal effort and genuine work products, which serve learning, for each student;
- Maintenance and renewal of ICT in educational and public institutions.

The second paper, from the above list, is an article by Ciuzas (2011), which focus mainly on assessment in conventional education. More specifically, the article aims to answer the following questions:

- Why is assessment for learning important for learning in the modern educational process?
- What are the attitudes of the teachers of Lithuanian comprehensive schools to apply assessment for learning in educational process?

The problem is addressed in three parts of the article: the first part analyses the concepts of assessment of learning and assessment for learning and reveals the importance of assessment for learning; the second part presents the methodology of the research on teachers' attitudes when assessing students' achievement to apply assessment for learning; the third part presents the results of performed research, which are:

1. Both assessment of learning and assessment for learning are important in the educational process. Assessment of learning can be used to identify the level of students' achievements by comparing it to the settled standard; however, assessment for learning is a much more powerful assessment tool if it is intended to encourage pupil's learning, improve their self-confidence.
2. In their practice, teachers organize assessment of students' achievements themselves more frequently, rather than allow students to choose ways and forms of assessment.
3. Teachers understand the importance of assessment for learning and do not have negative attitudes related to the change of assessment process; however, the concept of

assessment for learning is not yet the practice of teachers of Lithuanian comprehensive schools.

The third paper from the above list, written by Vitienė and Mičiulienė (2008), is an article about how may a qualitative responsive information, in other words feedback, help study foreign languages more effectively when choosing eLearning course.

The article proposes a hypothesis that the clarity and precision of qualitative feedback, a systematic and individual presentation of the information as well as evaluation criteria, introduced to the students of e-Course in advance is an effective means to improve their foreign language skills.

Quasi-experiment conducted in Alytus College in 2008 revealed that the criteria defined and discussed in advance and well-timed and disciplined provision of feedback helped the majority of students improve their achievements in French continuous oral expression.

Research results have validated the hypothesis that clarity and precision in qualitative feedback criteria as well as systematic and individual provision of the information is an effective means to improve students' foreign language expression skills and to form the abilities of continuous verbal expression. It is important for students to receive feedback information individually.

More specifically, **feedback** is of good quality and effective in case it:

- is focused on a particular task properly and on a regular basis;
- helps to persuade students that they have chosen the right way, induces them to correct mistakes and fulfill tasks better;
- is useful when providing students with particular help he/she needs to develop skills;
- provides a possibility for a student to foresee alternative solutions and is not limited by repeated teacher's explanations;
- helps a student acquire necessary competence.

Consequently, individual feedback presented in a qualitative way is an effective means that helps to reach for an adequate level of communication competence in the French language and simultaneously meet the students need for the most intense development of foreign language expression skills. Based on these results, feedback is of good quality and effective in case it:

- is focused on a particular task properly and on a regular basis;
- helps to persuade students that they have chosen the right way, induces them to correct mistakes and fulfill tasks better;
- is useful when providing students with particular help he/she needs to develop skills;
- provides a possibility for a student to foresee alternative solutions and is not limited by repeated teacher's explanations;
- helps a student acquire necessary competence.

Kaklauskas et al. (2010) present the fourth article of the above list. Based on them, all distance learning participants (students, professors, instructors, mentors, tutors and the rest) would like to know how well the students have assimilated the study materials being taught. The analysis and assessment of the knowledge students have acquired over a semester are an integral part of the independent studies process at the most advanced universities worldwide. A formal test or exam during the semester would cause needless stress for students.

To resolve this problem, the authors of this article have developed a Biometric and Intelligent Self-Assessment of Student Progress (BISASP) System. The obtained research results are comparable with the results from other similar studies. This article ends with two case studies to demonstrate practical operation of the BISASP System.

The first case study analyses the interdependencies between micro tremors, stress and student marks. The second case study compares the marks assigned to students during the e-self-assessment, prior to the e-test and during the e-test. The dependence, determined in the second case study, between the student marks scored for the real examination and the marks based on their self-evaluation is statistically significant (the significance $>0.99\%$).

The original contribution of this article, compared to the research results published earlier, is as follows: the BISASP System developed by the authors is superior to the traditional self-assessment systems, due to the use of voice stress analysis and a special algorithm, which permits a more detailed analysis of the knowledge attained by a student.

Finally, the fifth paper compares the results of three research works carried out by the Rimkuvienė, Lepkova and Krutinis (2010). The paper focuses on the change of economic conditions after Lithuania's accession to the EU and economical recession.

The first research was carried out in 2003—before the EU accession. The research was based on a questionnaire. The second research was completed in 2006 – after the EU accession. The third research was completed in 2009 – the economic recession was occurred. The results of three research works were compared on the basis of general indices of the economic level.

The main purpose of the comparison was to show the differences of students' opinion and the development of e-learning in the Civil Engineering Faculty of Vilnius Gediminas Technical University.

3. METHODOLOGICAL APPROACH

Questionnaires for all levels of education are collected through the website SurveyMonkey [<https://www.surveymonkey.com/>] and data are obtained in a form suitable for statistical processing, either through the statistical package SPSS or Microsoft Excel software. According to the type of data, descriptive statistic conducted through frequency tables and graphs for all variables and comments were made on the results. Further statistical analysis was performed through contingency tables and statistical test X^2 in order to detect and comment the characteristics that affect the choices and preferences of survey respondents. Finally, the results from the different levels of education are combined in the final conclusion of CRITON research.

Notes:

- Particular attention was paid to the variables which have multiple responses [for example, in SPSS there is a distinct option in Analyze menu for these variables].
- Consistency tests of Chi Square are possible only when the sample is large enough and enough combinations of variables categories [i.e. cells in crosstab tables] have several entries. If this doesn't hold, the results can be interpreted as simple indications of the correlations between variables.

4. RESEARCH RESULTS

In this chapter presents the results of the survey. The first section presents the opinions of tutors, the second section presents the opinions of learners in Higher and Adult education, and the third section the opinions of learners in primary and secondary education. The final fourth section presents the findings from learners in Vocational Education and Training (VET).

4.1 OPINIONS OF TEACHERS AND TUTORS

In the research 89 teachers and tutors have taken part. Most of them are teachers and tutors in higher education (82%) as Table 1 shows.

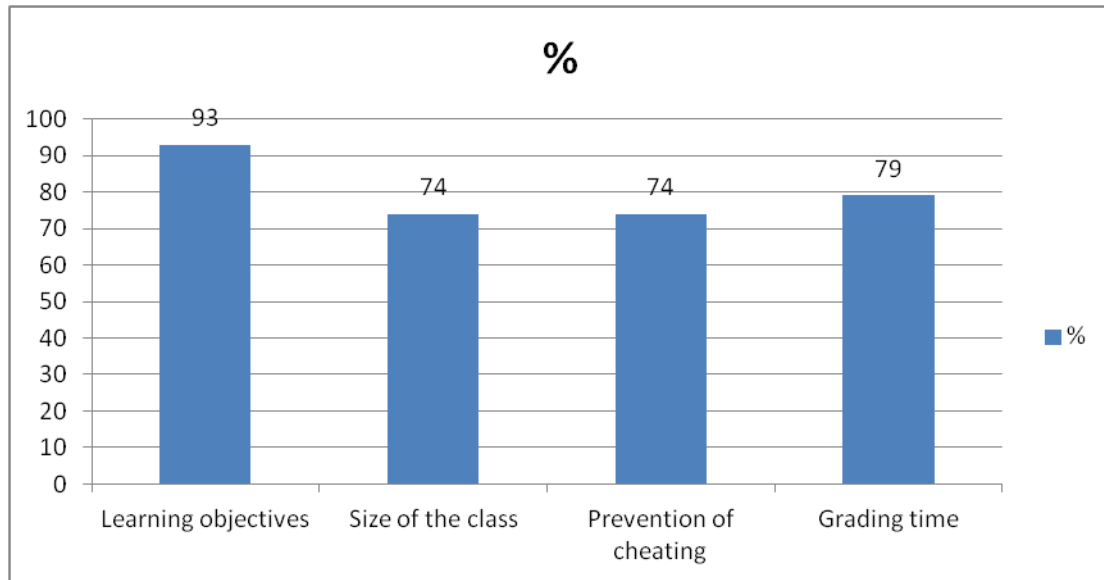
TUTORS' LEVEL OF EDUCATION	Total Number	Percentage (%)
Primary Education	3	3
Secondary Education	5	6
VET	6	7
Higher Education	73	82
Adult Education	2	2
Total	89	100

Table 1. Number of Teacher and Tutor Participants

Almost all the tutors consider that e-assessment method should encourage technology (90%), e-Learning (81%) and then rethinking of curriculum (78%). On the other hand, most tutors - regardless the level of education they work for - consider that an assessment method in eLearning environment supports Higher order thinking (68%), 52% believe that an assessment method supports social skills and only 24% agree that it support group work.

In order to enhance the learning experience through assessment, the surveyed teachers and tutors would take into account mainly the subject objectives (96%), but also the needs, characteristics and situation of the learners (89%). 88% will take into account their time and effort to design tasks.

The vast majority of respondents (93%) expressed their opinion that the type of e-assessment format depends on learning objectives, 79% - on grading time, and 74% on prevention of cheating and the size of the class, as we can see on Graph 1.

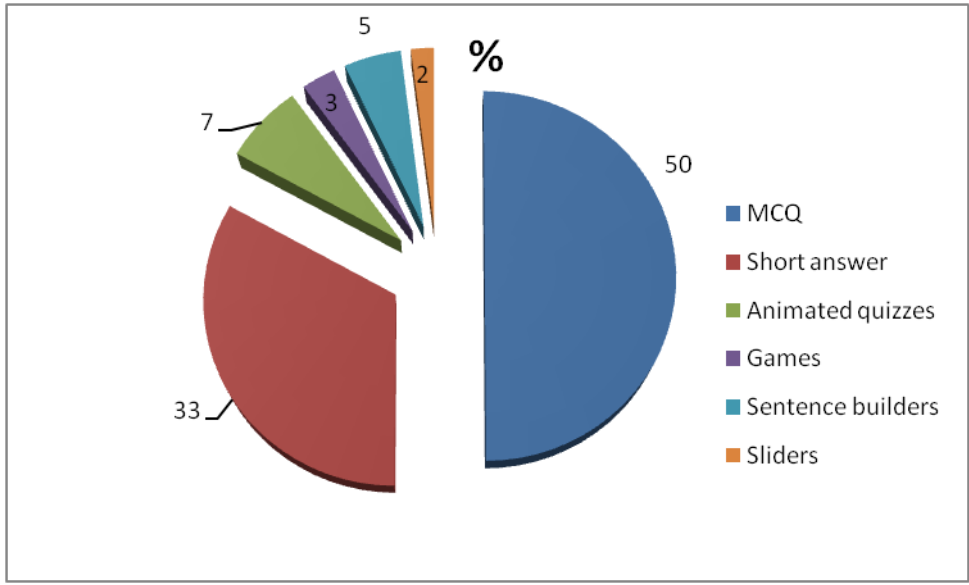


Graph 1: Factors in Selection of Assessment Format

The predominant assessment format in eLearning environment is Multiple Choice Question (MCQ) (50%), while the next format is the Short answer question type (33%). All the other assessment formats gather very low preference percentage.

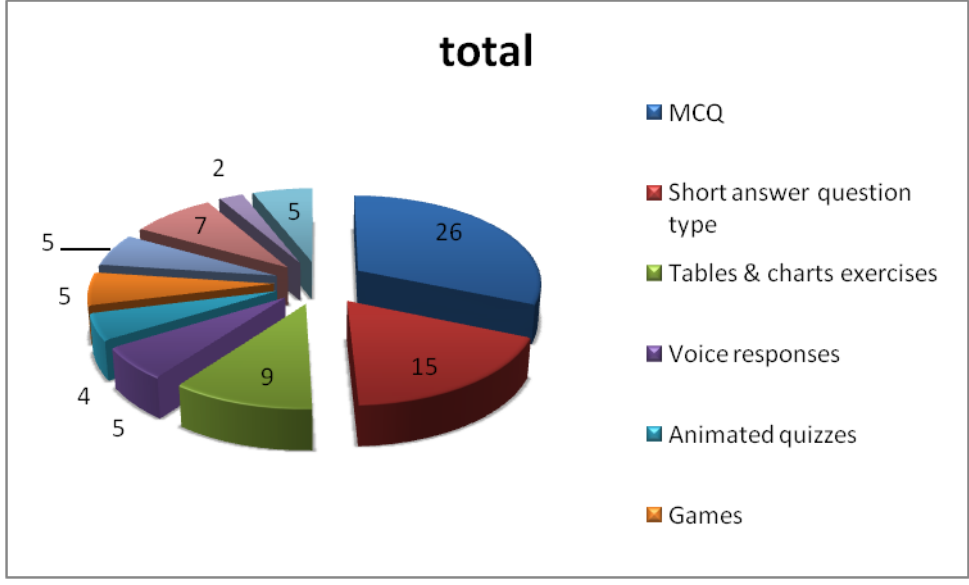
Assessment Format	Percentage (%)
Multiple Choice Question (MCQ)	50
Short answer question type	33
Animated quizzes	7
Sentence builders	5
Games	3
Sliders	2

Table 2: The predominant assessment format in eLearning environment



Graph 2: The predominant assessment format in eLearning environment

By eliminating the preferable type of assessment to four, results doesn't change significantly, but increases the percentage of respondents who like to construct tables and charts exercises for assessment.



Graph 3: Preference classification of assessment format in eLearning

Tutors explain why they use those types of assessment and how they think they could be used more effectively:

- MCQ is very effective assessment technique and suits well for both exact sciences and humanities. It often require less time to administer for a given amount of material than

would tests requiring written responses. MCQs do not require a teacher to interpret answers. Majority of respondents consider MCQ to be one of the strongest predictors of overall student performance compared with other forms of evaluation. The most serious disadvantage of MCQ according to the respondents is the limitedness in types of knowledge that can be assessed by using it and a probability of guessing the right answer.

- Short answer question type is good to assess the basic knowledge and understanding of a topic before more in-depth assessment. Unlike MCQs, there is no guessing on answers, an answer must be provided. Short Answer Questions are also relatively easy to set compared to many assessment methods. However Short Answer Questions are typically used for assessing knowledge only, not a deeper learning.
- Tables and charts can be useful tools for helping learners make decisions through the visualization of data. However, learners need to know how to interpret the data and the way it is presented.
- Games have high potential to serve as assessment tools. Game-based assessment can help teachers to personalize learning, to better motivate students, and to instill conceptual understanding and knowledge transfer. Moreover games are attractive and appealing to young learners.

Most of the respondents (62%) measure contribution of the learners to discussion groups, and use the results for formative and supplementary purposes.

Results are more divided for the use of e-portfolio, as evidence of work undertaken, as seen on Table 3, while its use is divided between formal assessment (55%) and other formative and supplementary purposes (45%).

Do you use e-portfolios, as evidence of work undertaken?	Percentage (%)
Yes	51
No	49

Table 3: Measurement usage of e-portfolios

With respect to the tutor's use of different assessment types in eLearning environment, the results show:

- Diagnostic assessment, which means assessment of learner's knowledge and skills at the outset of a course, seldom conduct 57% of the tutors, while 43% of the respondents perform such method of assessment often or always.
- Formative assessment, which provides gradual feedback to learner about his or her progress during lessons. It is applied (usually or always) by 59% of tutors.
- Summative assessment, which takes place at the end of a large chunk of learning, tends to be used by 76% of respondents.
- 13% of respondents indicated using peer-assessment.

4.2 OPINIONS OF LEARNERS FROM HIGHER AND ADULT EDUCATION

The vast majority (96%) of learners who have completed the research questionnaire are students from different Lithuanian universities and colleges, while only 7% attend an Adult Education program.

The majority of the learners (86%) are aged less than 25 years old.

Age	Percentage (%)
Under 25	86
25-29	4
30-39	5
40-49	1
50-59	3
60+	1

Table 4: Participants Learners' Age

91% of the respondents are women, a fact that should be further researched as about relevance with other variables. It could be related to the fact that the share of females in tertiary education now exceeds 58% in Lithuania. Another reason could be that female students are more dutiful and persevering in their studies, more self-disciplined, thus more actively participated in the survey.

71% of respondents stated that their financial condition is about the average, 21% - below average, and 7% reported their income as high.

48% of respondents are not working, and 52% work and study at the same time. 25% of all working respondents are in full-time jobs, while the rest 75% are part-time or seasonal workers.

Only 9% of all respondents reported about being not comfortable with computer based assignments.

The MCQ and Short answer question types were recognized by the surveyed students as the predominant assessment type in their eLearning environment. This information more or less correlates with the data obtained from the tutors' responses.

Assessment format	Application (%)	Preference (%)
Multiple choice question (MCQ)	42	31
Short answer question type	27	30
Sentence builders	6	4
Tables and charts exercises	11	11
Sliders	8	1
Drag and drop	0	0
Animated quizzes	2	11
Word match	4	1
Voice responses	0	4
Games	0	7

Table 5: Predominant Assessment format

19% of surveyed students reported that e-portfolios are used in the respective higher education institutions. All respondents using this tool reported that the use of e-portfolio help them to learn.

Generally, peer-assessment is not a common assessment method, since it is never used by 69% of the respondents. Still 47% of all respondents are of the opinion that this method helps them to learn very much and quite a lot.

22% of respondents reported that they have access to tools enabling them to make judgments about their learning or performance level.

When asked about the use of a feedback in e-learning environment 64% of respondents confirmed that read it carefully regardless of the feedback results. The vast majority of respondents (85%) believe that the feedback is a valuable tool to support learning.

4.3 OPINIONS OF STUDENTS IN PRIMARY AND SECONDARY EDUCATION

19 students participated in the research, 11 girls and 8 boys. Majority of them (68%) are students in secondary education (13-15 years old), 10% are students in primary education (under 12 years old) and 22% - in high school studies (16-18 years old).

Age	Percentage (%)	
Under 12	10	
13-15	68	
16-18	22	
Gender	Total Number	Percentage (%)
Girl	11	58
Boy	8	42
Parents educational level	Mother (%)	Father (%)
No studies	0	0
Primary education	0	0
Secondary education	1	38
High school studies	0	0
Undergraduate studies	44	0
Graduate studies	50	50
Doctoral degree	0	12

Table 6: Descriptive Data of Primary and Secondary Students

The majority of students' parents have graduate studies.

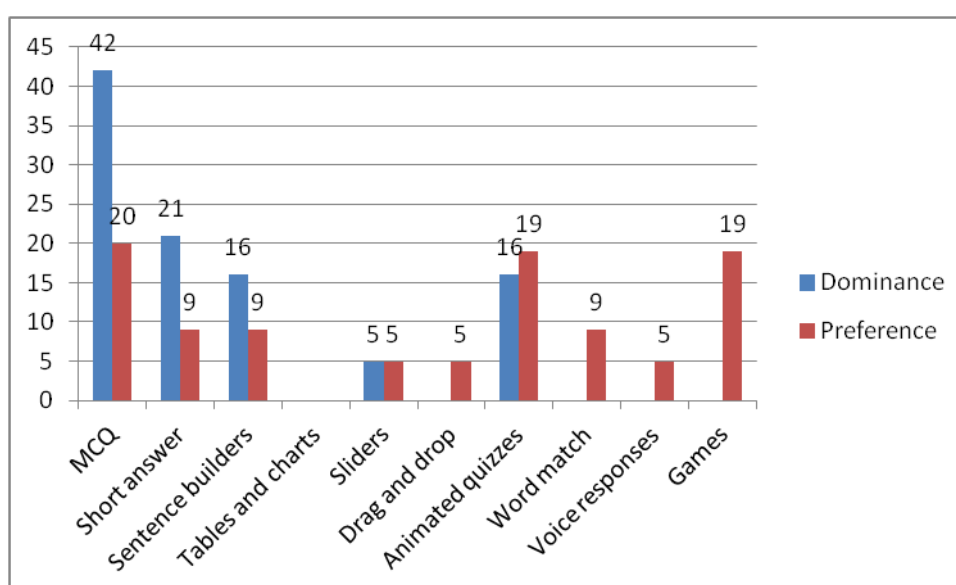
All respondents have no problems with computer based assignments.

Students recognize as the predominant assessment type in eLearning environment MCQ, short answers, and sentence builders.

Assessment format	Application (%)	Preference (%)
Multiple choice question (MCQ)	42	20
Short answer question type	21	9
Sentence builders	16	9

Tables and charts exercises	0	0
Sliders	5	5
Drag and drop	0	5
Animated quizzes	16	19
Word match	0	9
Voice responses	0	5
Games	0	19

Table 7: Predominant Assessment format



Graph 4: Comparison of preferred and dominating assessment formats in eLearning

As we can see in Table 8 only 1/5 of the students use e-portfolio and none of them believe that its use doesn't provide any help to them at all.

e-portfolio use	Percentage (%)
Yes	21
No	79
e-portfolio usefulness	Percentage (%)
Not much	0
A bit	25
Quite a lot	50
Very much	25

Table 8: Measurement usage of e-portfolios

Although peer-assessment is not very popular method, still 80% of students reported that sometimes they do assess the learning of their peers, while for 20% of respondents it is a usual procedure, and only 16% believes that it is useless.

Peer assessment frequency	Percentage (%)
Never	0
Rarely	80
Usually	20
Always	0
Peer assessment usefulness	Percentage (%)
Not much	16
A bit	21
Quite a lot	58
Very much	5

Table 9: Measurement of peer-assessment

The percentage of students who doesn't pay attention on feedback is very low (5%). Almost half of them (47%) read feedback carefully in the case of a good and of a bad mark as well, while 42% of respondents pay more attention to a negative feedback.

4.4 OPINIONS OF STUDENTS IN VOCATIONAL EDUCATION AND TRAINING

In the research 24 students in Vocational Education and Training (VET) have taken part. Almost all of them are under 29 years old, 37% are women and only 37% of them are currently working. 58% are having an incomplete secondary education, and 59% state that their socioeconomic status is about the average, as we can see on Table 10.

The vast majority of participants (87%) are comfortable with computer based assignments.

AGE	PERCENTAGE (%)
Under 25	96
30-39	4
40-49	0
GENDER	PERCENTAGE (%)
Woman	37
Man	63
EDUCATIONAL LEVEL	PERCENTAGE (%)
No formal education	4
Some elementary education	4
Some secondary education	58
Secondary school completed	30
Other than university degree	4
SOCIOECONOMIC STATUS	PERCENTAGE (%)
High	19
Middle	59
Low	22
EMPLOYMENT	PERCENTAGE (%)
Yes	39
No	61

Table 10: Descriptive Data of Students in VET

Are you comfortable with computer based assignments?	PERCENTAGE (%)
Yes	87
No	13

Table 10: Descriptive Data of Students in VET

The predominant assessment format in eLearning environment is Multiple Choice Question (MCQ) (30%), while the next formats are the Tables and charts exercises, the Short answer questions and the Games.

ASSESSMENT FORMAT	Predominant Assessment format (%)	Preferable assessment format (%)
Multiple choice question (MCQ)	30	14
Short answer question type	14	21
Drag and drop	4	11
Tables and charts exercises	22	6
Games	14	9
Word match	4	8
Animated quizzes	4	8
Sentence builders	4	5
Sliders	4	9
Voice responses	0	9

Table 11: Predominant and Preference classification of assessment format in eLearning

Student's responses, as presented on Table 12, about the use of the learner's e-portfolio are relevant. 30% of respondents use this medium of personal learning recording, while the 75% believes that its use doesn't provide much help.

Peer-assessment is not a common method, since it has never been used by the 52% of the participants, while another 43% responded that they rarely used it.

Half of the surveyed students responded as having access to tools that enable them to make judgments about their own learning or performance level.

e-portfolio use	PERCENTAGE (%)
Yes	30
No	70

e-portfolio usefulness	PERCENTAGE (%)
Not much	25
A bit	50
Quite a lot	17
Very much	8
Peer assessment frequency	PERCENTAGE (%)
Never	52
Rarely	43
Usually	5
Always	0
Peer-assessment usefulness	PERCENTAGE (%)
Not much	52
A bit	24
Quite a lot	24
Very much	0
Access to tools that enable them to make judgments about their own learning or performance level	PERCENTAGE (%)
Yes	50
No	50

Table 12: e-portfolio, peer-assessment, and access to self -assessment judgement tools

With respect to the student's in VET data, the vast majority during assignments on computer are concentrated on both understanding the subject, and on passing the exam.

During assignments on computer:	PERCENTAGE (%)
You concentrate on passing the exam	50
You concentrate on understanding the subject	50
How carefully do you read feedback in elearning environment?	PERCENTAGE (%)
A bit	11
Quite a lot	32

Very much	57
You read feedback more carefully in the case of:	PERCENTAGE (%)
A good mark	36
A bad mark	23
Both cases	38
In what extent feedback helps you to understand and learn in elearning environment?	PERCENTAGE (%)
A bit	15
Quite a lot	35
Very much	50
How frequently feedback prompts discussion with your tutor in elearning environment?	PERCENTAGE (%)
Rarely	90
Usually	10

Table 13: Feedback

5. FINAL CONCLUSIONS AND RECOMMENDATIONS

The first and main research question of this study was to *define and interpret the most widely used educational assessment methods in distance and e-learning in Lithuania*. Table 14 shows the predominant and preferable assessment format for tutors, learners in higher & adult education, VET, primary and secondary education.

Predominant Assessment Format	Tutors	Learners in Higher & Adult Education	VET	Learners in Secondary Education
Multiple choice question (MCQ)	50	42	30	42
Short answer question type	33	27	14	21
Sentence builders	5	6	4	16
Tables and charts exercises	0	11	22	0
Sliders	2	8	4	5
Drag and drop	0	0	4	0
Animated quizzes	7	2	4	16
Word match	0	4	4	0
Voice responses	0	0	0	0
Games	3	0	14	0
Preferable Assessment Format	Tutors	Learners in Higher & Adult Education	VET	Learners in Secondary Education
Multiple choice question (MCQ)	26	31	14	20
Short answer question type	15	30	21	9
Sentence builders	10	4	5	9
Tables and charts exercises	9	11	6	0
Sliders	6	1	6	5
Drag and drop	5	0	4	5
Animated quizzes	10	11	8	19
Word match	9	1	8	5
Voice responses	5	4	8	5
Games	5	7	9	19

Table 14: Predominant and Preferable assessment format

There are many similarities among the answers of tutors, learners and students. In general, the format that students in primary and secondary education prefer to use comes in agreement with

the predominant type of assessment, although students emphasize more on the use of games and animated quizzes as an assessment tool.

The results also gave answer to the research question about the particular features of assessment methods used in eLearning environments in Lithuania, and about those assessment methods in eLearning environments, which have added value.

Multiple choice answer still remains one of the most commonly used assessment formats, as according to the opinion of surveyed teachers and tutors it is a very flexible assessment format that can be used to measure knowledge, skills, abilities, values, thinking skills, etc.

Tutors explain why they use those types of assessment and how they think they could be used more effectively:

- MCQ is very effective assessment technique and suits well for both exact sciences and humanities. It often require less time to administer for a given amount of material than would tests requiring written responses. MCQs do not require a teacher to interpret answers. Majority of respondents consider MCQ to be one of the strongest predictors of overall student performance compared with other forms of evaluation. The most serious disadvantage of MCQ according to the respondents is the limitedness in types of knowledge that can be assessed by using it and a probability of guessing the right answer.
- Short answer question type is good to assess the basic knowledge and understanding of a topic before more in-depth assessment. Unlike MCQs, there is no guessing on answers, an answer must be provided. Short Answer Questions are also relatively easy to set compared to many assessment methods. However Short Answer Questions are typically used for assessing knowledge only, not a deeper learning.
- Tables and charts can be useful tools for helping learners make decisions through the visualization of data. However, learners need to know how to interpret the data and the way it is presented.
- Games have high potential to serve as assessment tools. Game-based assessment can help teachers to personalize learning, to better motivate students, and to instill conceptual understanding and knowledge transfer. Moreover games are attractive and appealing to young learners.

Most of the respondents measure contribution of the learners to discussion groups, and use the results for formative and supplementary purposes.

Although E-portfolios are still not widely used in Lithuania, they are already getting popularity in schools, higher education and vocational training. Today more and more teachers are using this tool, and the results of the survey show it: 51% of surveyed teachers and tutors reported using it. Many universities and schools are currently working to make sure that students are gaining practice and experience with electronic portfolios so that they are able to use them to the best of their ability.

Peer assessment is seen as quite useful by most teachers and learners, but 70% say never or rarely using it.

Providing feedback to students in all class formats is important. In distance learning classes and e-learning, it can be even more challenging than in the classroom. Providing quality feedback to distance and e-learning students is particularly important because students have fewer opportunities to ask their teachers for clarification on assignments or for comments about their assignments. Distance learning students often feel a bit disconnected by the technology and are left wondering on how they are doing in the class. The surveyed teachers and tutors agree that by providing quality feedback they help their students learn.

As an overall conclusion we should clearly say that there is a positive attitude towards assessment in eLearning environment and this is going to be more popular in the future provided that there will be the necessary infrastructure.

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