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European Training Foundation

DIGITAL COMPETENCES OF TEACHERS REPUBLIC OF MOLDOVA

Pilot of the Digital Needs Analysis Tool for Teachers (DNATT) 2020

THE EU AGENCY SUPPORTING COUNTRIES TO DEVELOP THROUGH LEARNING

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INTRODUCTION

This national report is part of a project to develop and test a self-assessment process to identify and analyse the digital competences of teachers in five countries[1], to analyse relevant current CPD provision and to identify CPD needs. It builds upon the European Digital Competence Framework for Educators (DigCompEdu)[2] that defines 22 digital competences organised in 6 Areas[3]. The focus of the DigCompEdu framework is not on technologies, but rather on how educators can use digital technologies to enhance all parts of teaching and learning.

The first phase of this research, led by ERI SEE,[4] was concerned to describe, analyse and evaluate the processes for needs analysis with respect to in-service teacher training in South East Europe. The current phase of the research is concerned to develop a Digital Needs Analysis Tool for Teachers (DNATT) that makes it possible to assess the adequacy of the CPD offer in relation to teachers' digital competence needs and to help schools, countries and donors to improve quantity and quality of training for educators.

The survey questionnaire incorporates the EU's Joint Research Council's 'Check-In' self-assessment tool[5] to map the digital competences of a sample of teachers and to audit provision of digital competences for teachers. In addition, this survey includes other questions – with the intention of helping actors at school, national and regional levels to analyse and exploit the data collected.

This report sets out the findings and conclusions for Republic of Moldova. As part of the pilot, two schools received detailed analysis that broke down the findings for their own staff. The other national reports together with a cross country report that explores the findings across the five countries and also a report that evaluates the methodology can be found at https://openspace.etf.europa.eu/resources/pilot-needs-analysis-tool-digital-competences-2020.

The importance of teacher' training is recognised by the Moldova Government as a priority (the strategy Education 2020, National Campaigns on attracting the best students in teaching profession, normative framework on CPD, accredited in-service training programs).

Equipping teachers with digital skills they need to succeed in the classroom is crucial, especially now, during Covid-19 lockdown. Teachers need subject matter, pedagogic knowledge, as well as digital skills and lots of teaching practice in order to be successful in the classroom and within distance learning. In order to ensure qualitative and efficient development of teachers' skills, including digital ones, several actions have been made both at policy level and at operational level.

Thus, in 2015 Digital competence standards for teaching in general education were approved by the MoE (through the Directive 862/2015). Although the Standards are dedicated to teachers in general

[1] Albania, Montenegro, Moldova, North Macedonia and Serbia

[2] https://ec.europa.eu/jrc/en/digcompedu

[3] A new version of the DigCompEdu's self-reflection tool called SELFIE for teachers is under development as a key initiative of the new European Commission's Digital Education Action Plan 2021-27. The new version will preserve principles, aims and structure (3 axis, 6 areas, 22 competences), incorporating revised items based on the emerging pedagogical need and challenges for blended learning. The new version is being piloted (11/20 – 2/21) with its launch planned in September/October 2021.

[4] https://openspace.etf.europa.eu/wikis/network-school-based-cpd-coordinators

[5] https://ec.europa.eu/jrc/en/digcompedu/self-assessment

education, they provide that the target group to which they are addressed is made up of teachers in the pre-university system, which also applies to teachers in technical vocational education. Standards provides and evaluate 7 digital competence areas, each separated into three levels - basic, intermediate, advanced. Areas of competence include both teaching-learning-evaluating and educational management aspects, namely: 1. Digital communication, 2. Information management, 3. elaborate digital educational content, 4. Implement management applications schooling, 5. Educational content management systems (SGCE), 6. Use of digital equipment in education, 7. Comply with ethic and legal norms in the digital space. Standards are designed to cover both general digital competences and digital competences required for practical application of ICT in the Teaching-Learning-Evaluating process. The standards stipulate that the established levels of skills will serve as an indicator in the employment of teachers, but also in attributing qualification degrees to teachers.

One other important document is The Standards of Professional Competences of Teaches in General Education which have been developed and approved in 2016 (Order 623/2016). The weak points are:

- The Teacher Digital Standards are not linked to the Standards of Professional Competences of Teaches in General Education, which do not stipulate standards for the use of ICT in the education process.
- The Teacher Digital Standards and to the Standards of Professional Competences of Teachers in General Education are not widely used for planning in CPD[6].

According to the Regulations for teachers' Continuing Education and the new Regulations for teachers' attestation (Order 1091/2020), every single teacher or principal must follow a 20-ECTS (150 hours) program every three years. Unfortunately, the Regulation on Teacher Evaluation/Attestation approved by MoECR in 2020 does not provide any specifications regarding the obligation to comply with digital competence standards.

The Code of Education stipulates that teachers' performance is evaluated once in five years through the so called attestation process. Teachers who aspire to confirm or to obtain a higher didactic rank are required to participate in professional development activities and accumulate professional credits. In order to participate in the attestation process, each applicant for a teaching degree plans his/her own path of professional development over five years. The credits can be accumulated by mandatory professional internship courses, workshops, trainings at the national and local level. In order to confer / confirm teaching degrees, teachers must accumulate the following professional credits: - 50 credits - for conferring / confirming the second didactic degree; - 60 credits - for conferring / confirming the didactic degree one; - 80 credits - for conferring / confirming the higher didactic degree.

The accredited programs are presented on the MoECR web page. https://cutt.ly/bk3XC9n

The teachers training needs in Moldova are identified through the process of self-evaluation (individual and at school level) and external evaluation (individual, at school and regional l level), as well as, through conducting international surveys and research at different levels and needs assessment by the in-service training providers and other stakeholders. At individual and school level, teachers are expected to continuously identify their own training needs in the light of their performance. They have their portfolio and personal professional development plan, which they develop, with support of the school principal/vice principal/mentor, who performs teacher performance evaluation at school level. Every educational institution/school has its own plan of Continuing Professional Development for Teachers elaborated by the management board of the institutions and approved by the principal.

[6] Study on teacher education and training (CPD) needs analysis systems in South Eastern Europe (ERI SEE), ETF, 2020

Main institutions for regulation of education and CPD are: The Ministry of Education, Culture and Research (with a Lifelong Learning Department) and The National Agency for Quality Assurance in Education and Research (ANACEC).

The quality of in-service trainings is evaluated externally by National Agency for Quality Assurance in Education and Research and at some point, by the Life Long Learning department form the MoECR.

METHODOLOGY

Questionnaire

The questionnaire was based upon the European Digital Competence Framework for Educators (DigCompEdu)[7] and incorporates the CheckInself-assessment tool[8] to map the digital competences of a sample of teachers and to audit a provision of digital competences for teachers. DigCompEdu details 22 competences organised in six Areas. Each of the 22 competences is addressed by one question. An additional 15 questions were designed to explore the use of digital technologies and continuous professional development of teachers in the time of COVID-19 lockdown.

The questionnaire includes three main sections:

Section A. What are my Digital Competences? In this section teachers assessed their own digital competences as a teacher within 6 different areas of their work: Professional Engagement (4 items), Digital Resources (3 items), Teaching and Learning (4 items), Assessment (3 items), Empowering learners (3 items), Facilitating Learners' Digital Competence (5 items).

Area 1: Professional Engagement

The focus in this Area is on teachers' digital competence expressed in their ability to use digital technologies not only to enhance teaching, but also for their professional interactions with colleagues, students, parents and other interested parties, for their individual professional development and for the collective good and continuous innovation in the organisation and the teaching profession.

Area 2: Digital Resources

One of the key competences any teacher needs to develop is to identify good educational resources, and to modify, create and share digital resources that fit their learning objectives, student group and teaching style. At the same time they need to be aware of how to responsibly use and manage digital content, respecting copyright rules and protecting personal data. These issues are in the focus of this Area.

Area 3: Teaching and Learning

The most fundamental competence of the whole DigCompEdu framework is to design, plan and implement the use of digital technologies in the different stages of the teaching and learning process. However, when doing this, the aim must be to shift the focus of the lesson from teacher-led to student-centred processes. This is the real power of digital technologies and the focus of Area 3.

Area 4: Assessment

[7] https://ec.europa.eu/jrc/en/digcompedu
[8] https://ec.europa.eu/jrc/en/digcompedu/self-assessment

Digital technologies can enhance existing assessment strategies and give rise to new and better assessment methods. Additionally, by analysing the wealth of (digital) data available on individual student's (inter-)actions, teachers can offer more targeted feedback and support. Area 4 addresses this shift in assessment strategies.

Area 5: Empowering learners

One of the key strengths of digital technologies in education is their potential for boosting the active involvement of students in the learning process and their ownership of it. Digital technologies can furthermore be used to offer learning activities adapted to each individual student's level of competence, their interests and learning needs. At the same time, however, care must be taken not to exacerbate existing inequalities (e.g. in access to digital technologies) and to ensure accessibility for all students, including those with special learning needs. Area 5 tackles these issues.

Area 6: Facilitating Learners' Digital Competence

The ability to facilitate students' digital competence is an integral part of teachers' digital competence and at the heart of Area 6.

Section B: Personal Information. This section helped to understand teachers' background (age, teaching experience, taught subjects). This data was used for the purposes of research and are not published.

Section C: Continuing Professional Development (CPD). This section explored what CPD teachers had in the last 12 months that developed their digital competences and what impacted upon teachers' work.

Section A was designed by EU's Joint Research Council and has already been tried and tested as the 'CheckIn' self-reflection tool[9]. The rest of the questionnaire was designed by ETF. The questionnaire was translated into Romanian and tested. Four teachers filled the questionnaire to provide the researcher with feedback about the quality of the translation, comprehensibility of questions and the duration of the questionnaire. Corrections of the translation were carried out based on the teachers' feedback.

Sample

According to the survey methodology a school-based sampling approach was adopted. A random sample of 12 general and 12 vocational schools was drawn from a complete list of all public sector secondary schools in Moldova. The institutions were selected according to size (small - less than 40 teachers and large – more than 40 teachers)).

When creating the random school-based sample per educational sector, a list of random replacement schools was also created according to the same criteria (size). For each criterion, a list of 9 schools was assigned (3 selected schools + 6 replacement schools). This means each sampled school was assigned two replacement schools. The school sample was consulted with Ministry of Education, Culture and Research representative.

No selected school was replaced during the survey done in Moldova.

[9] https://ec.europa.eu/jrc/en/digcompedu/self-assessment

The questionnaire was administered to 425 teachers both from general education (209 teachers) and VET education (216 teachers). Response rate for teachers from both types of schools was 46%, while response rate in relation to workforce were 1.8% and 4.7% respectively (for more details see Table 1).

Two schools (one VET school and one general school) were chosen for further discussions of the survey results at the school and national level, Two school level reports were prepared and a discussion session for the result was made with each of them. The rationale behind choosing these schools was to provide more detailed guidance to these schools but also to explore the differecnces amonge them.

Survey

The survey was carried out over 2 weeks from November 9 to November 22. The sampled schools were invited to participate through a letter addressed to their principals, consulted and approved by MoECR representative. The questionnaire was offered on-line using the EU Survey Tool. Schools were contacted directly by telephone and by email to encourage them to participate. The national researcher explained the goals, duration and the procedure of the research. The principals were also asked to state whether they would like their school to participate in the research and to inform the researcher of their decision. In the letter, the researcher asked the principals to forward the questionnaire to all the teachers in the school and to motivate them to participate in the research. The researcher emphasised that teachers could receive individual feedback. Those schools which did not reply before the stated deadline were additionally contacted by telephone.

Challenges

The main challenge faced during the survey implementation was lack of time and motivation of some teachers to participate in this survey, because of their existing workload and because many of them had participated in various other surveys over the previous months. This fact was confirmed by principals.

One other challenge was the workload upon principals and the teachers due to the situation caused by the COVID-19 virus (most schools in Moldova employed a so-called combined method of teaching which involved both direct and online teaching during a week), which slowed down and lowered their participation in the research.

FINDINGS

Composition of Sample

The sample included 425 teachers from 12 general education institutions and 12 from VET education institutions (209 teachers from general education and 216 teachers from VET education), 201 teachers from large schools and 224 teachers from small schools.

According to the data, the majority of the respondents were the middle-aged teachers, only 2% of survey participants are up to 25 years old and 9% are over 60 years old.

The teaching experience of the respondents is also various. 10% of the respondents have 1-3 years of teaching experience. More than one third of the respondents have over 20 years of teaching experience, 19% of teachers have been working in the school for the last 10-14 years. For more details regarding the sample characteristics see Table 1.

Table 1. Moldovan sample.

Country	Moldova
Number of teachers	425
Age range (years)	
Under 25	8
25-29	36
30-39	148
40-49	105
50-59	84
60 or more	37
Prefer not to say	7
Teaching experience	
1-3	44
4-5	25
6-9	51
10-14	79
15-19	66
20 or more	150
Prefer not to say	10
Type of subject mainly taught	
General academic	271
Vocational or professional	129
Other	25
Teacher of computer science, information technology or programming	34

Proficiency Score

The DigCompEdu framework distinguishes 6 different, progressively advancing, competence levels - Newcomers (A1), Explorers (A2), Integrators (B1), Experts (B2), Leaders (C1) and Pioneers (C2). Within the framework these levels are designed to describe typical stages and roles educators pass through when integrating digital technologies into their professional practices.

Table 2: Codes Key for competence levels

	CODES KEY
Newcomers - A1	Teachers have not yet really started using digital technologies in teaching.
Explorers - A2	Teachers are aware of the potential of digital technologies and are interested in exploring them to enhance pedagogical and professional practice. They started using digital technologies in some areas but without a comprehensive approach or consistent practice.
Integrators - B1	Teachers experiment with digital technologies in a variety of contexts and for a range of purposes, integrate them into many of their practices, creatively use them to enhance diverse aspects of their professional engagement and are eager to expand the repertoire of practices. However, at this level teachers are still working on understanding which tools work best in which situations, and on fitting digital technologies to pedagogic strategies and methods.
Expert - B2	Teachers use a range of digital technologies confidently, creatively and critically to enhance their professional activities; purposefully select digital technologies for particular situations, and try to understand the benefits and drawbacks of different digital strategies and are curious and open to new ideas, etc
Leaders - C1	Teachers have a consistent and comprehensive approach to using digital technologies to enhance pedagogic and professional practices, rely on a broad repertoire of digital strategies from which they know how to choose the most appropriate one for any given situation, continuously reflect on and further develop their practices, keep up-to-date on new developments and ideas by exchanging with peers and help their colleagues to seize the potential of digital technologies for enhancing teaching and learning.
Pioneers - C2	At this level, teachers question the adequacy of contemporary digital and pedagogical practice and are concerned about the constraints and drawbacks of these practices. They are driven by the impulse to innovate education and to lead innovation. Teachers experiment with highly innovative and complex digital technologies and/or develop novel pedagogical approaches

Proficiency score, based on self-evaluation tool, provides a general picture which can facilitate to draw conclusions about the level of development of digital skills of teachers in the Republic of Moldova. Comparing the results with the regional ones, we notice that it is lower than the average for the region, even if the Ministry of Education has taken some strategic and operational steps towards building the digital competences of teachers and students, developing the policy framework in this area, and in the last months many training activities have been provided, both for general and VET education teachers.

However, it is important to mention that more than 60 percent of respondents have B1 and B2 levels. Thus, 31.7% (B1) of teachers participating in the survey experiment with digital technologies in a variety of contexts and for various purposes, harmoniously integrating them into many educational activities. They can use them creatively to strengthen various aspects of their professional activity and are motivated to expand their repertoire of didactical practices. At the same time, 31.1% (B2) of respondents use a range of digital technologies with full, creative and critical confidence to improve their professional activities. They can effectively select digital technologies for specific situations and analyze the advantages and disadvantages of different digital strategies.

One moment that needs to be emphasized refers to the number of teachers who have reached level C1 - Leader in the development of their digital competences. Almost 15% of teachers believe that they are in level C1 with a consistent and comprehensive approach to use digital technologies to enhance

pedagogic and professional practices; relies on a broad repertoire of digital strategies from which they know how to choose the most appropriate one for any given situation; continuously reflect on and further develop their practices. Furthermore, teachers at C1 level keep up-to-date on new developments and ideas by exchanging with peers and help their colleagues to seize the potential of digital technologies for enhancing teaching and learning.

16.9% of teachers in Republic of Moldova are in the A2 – Explorer level. These teachers are aware of the potential of digital technologies and are interested in exploring them to enhance pedagogical and professional practice. They started using digital technologies in some areas but they will benefit from more consistent practice.

We have a very small number of teachers who registered values of over 80 points, with a level of C1, only 1.8%. It is important to increase the number of teachers with this level of competences because, especially now, we need leader teachers to inspire and mobilize other teachers to develop their digital skills.

The Average proficiency score for teachers in Moldova is 48 (see Figure 1).

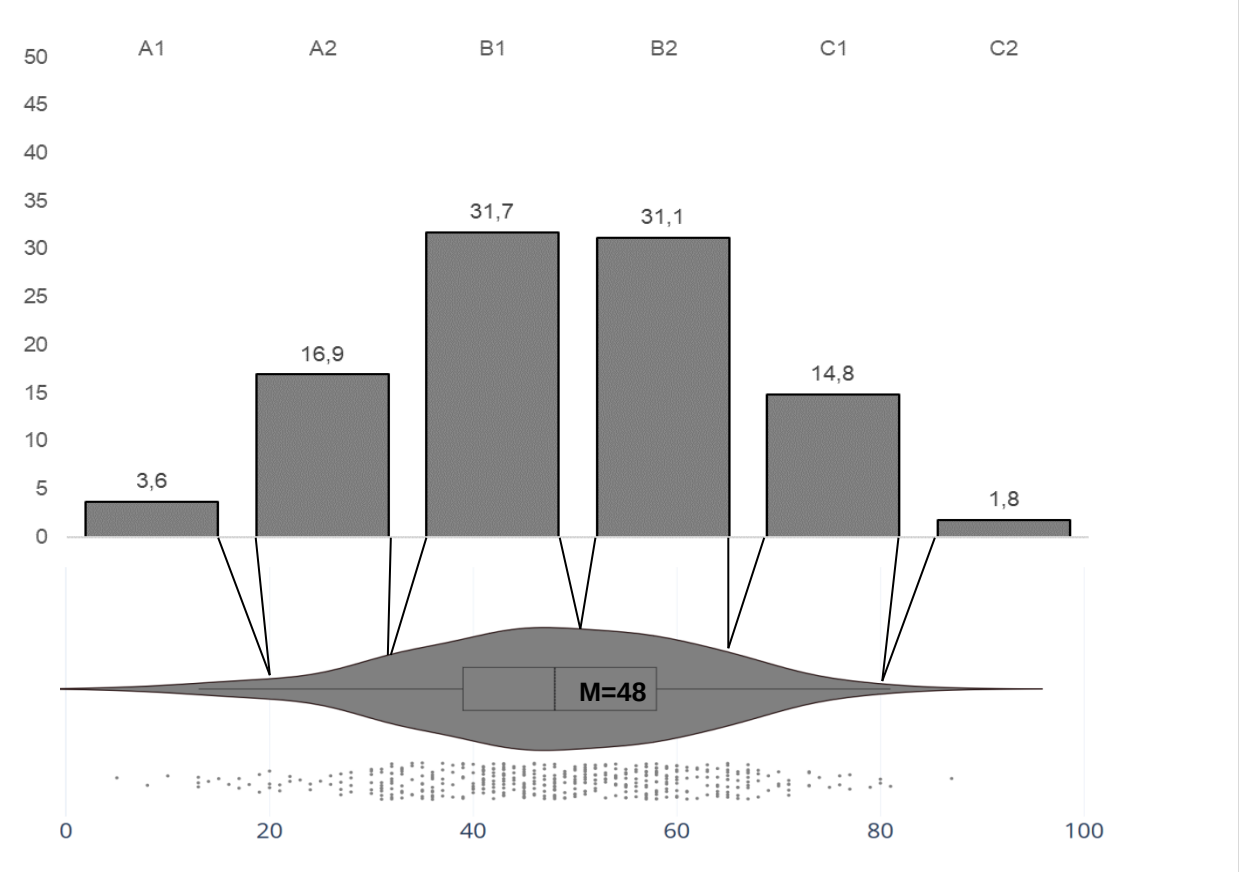


Figure 1. Top graph: Percentage of Moldovan teachers in each proficiency level; Bottom graph: Violin plot with distribution and mean of scores.

Analyzing the differences between vocational and general schools we noted that in general VET institutions teachers have a slightly better score. Figure 2 shows that 79% of the VET teachers and 69.3% general education teachers have B proficiency level. General teachers are more likely than VET teachers to be at Level B. We know that there has been a great deal of training for both general and VET teachers over the last year, in response to the COVID19 lockdown. However, this difference in competency score may, in part, by due to the fact that and additional online training programme based on European Digital Competence Framework for Educators, developed and provided by EC PRO DIDACTICA, was targeted at VET teachers only. This programme was attended by at least one teacher from each VET institution, who afterwards organised trainings for all teachers in their own institutions[10].

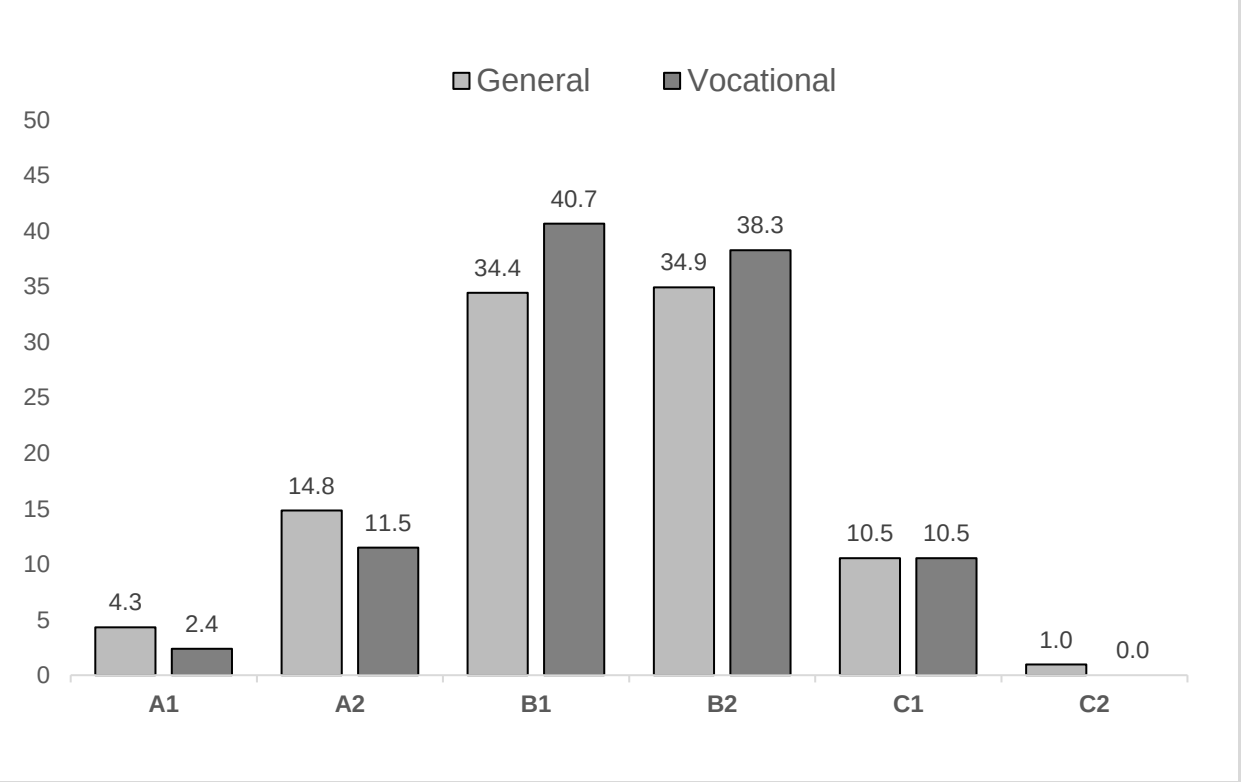


Figure 2. Percentage of Moldovan teachers in each proficiency level by educational sector.

[10] These sessions were recorded and are available for all interested teachers. https://cutt.ly/5k3BhXD

In Moldova it is generally recognized that large schools are better funded and have a better performance. One of the factors which influence this situation is per capita funding formula, which disadvantages small institutions. Thus, in large schools 76.3% of the respondents have the level B1 and B2, in small schools only 64.8% of teachers have these scores. However, this pattern is not repeated at the highest levels of competence: 26.5% of the participants from small schools have C and only 17% respondents from large schools.

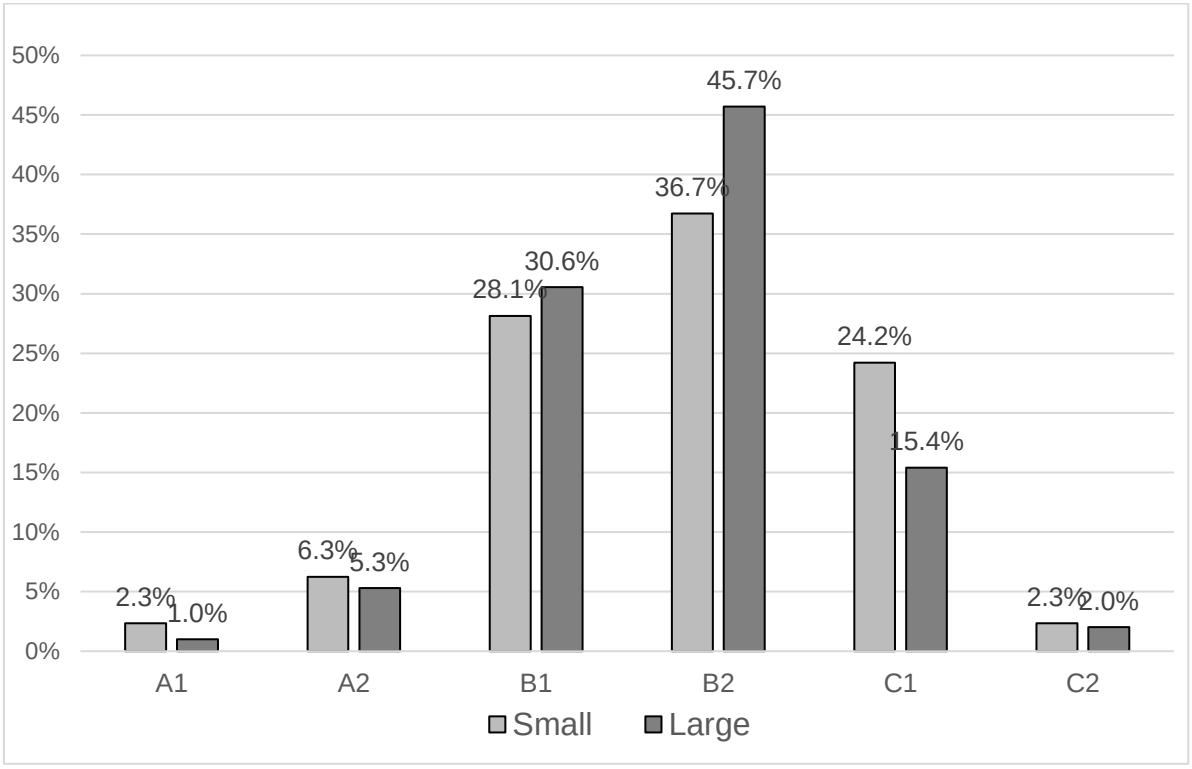


Figure 3. Percentage of Moldovan teachers in each proficiency level by school size

Proficiency Levels

Digital skills are very important and necessary for assuring an efficient and qualitative teaching process. The DigCompEdu framework distinguishes 6 competence areas in which teachers can reach different proficiency levels.

Area 1: *Professional Engagement* expresses teachers' ability to use digital technologies not only to enhance teaching, but also for their professional interactions with colleagues, students, parents, the scientific community and other interested parties. This area of competence is important both for individual professional development and for the collective good in terms of continuous innovation in the organisation and the teaching profession. The results obtained from the Moldovan sample show that in Area 1 (Professional Engagement) the largest number of teachers reaches level B1 - Integrators (33.6%) and level B2 - Expert (31.1%). 9,6% of teachers are at levels C1 - Leaders and C2 – Pioneers, and a quite big number of respondents – more than one quarter (25.7%) are at level A 1 and A2.

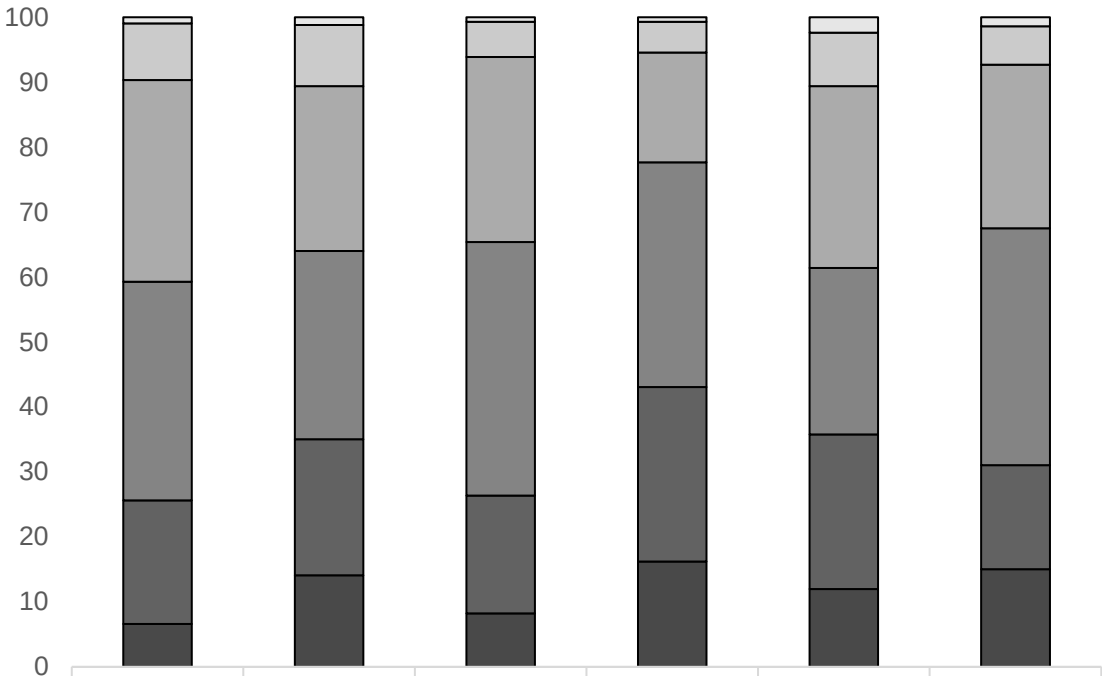
Area 2: *Digital Resources* refers to teachers' competence to identify good educational resources and to modify, create and share digital resources that fit their learning objectives, teaching style and students' needs, In this area, according to teachers perception, every 10th teacher are in level C1 and C2. In the same time it is important to emphasize that more than one third (35%) are in levels A1 (Newcomers) and A2 (Explorers).

Area 3: Teaching and Learning demonstrates teachers' competence to design, plan and implement the use of digital technologies in different stages of the teaching and learning process. In this area the results are 67.6% of teachers are at level B and 6.1% are at level C.

Area 4: Assessment addresses the shift from existing, traditional assessment strategies to assessment strategies based on digital technologies (e.g. analysing the amount of (digital) data available for each student in order to provide more targeted feedback and support). Relatively weaker is this Area - 51.5% are at level B and only 5.2% are at level C. In the same time more than 40% are at level A and need inputs for developing their digital competencies.

Area 5: Empowering learners refers to teachers' capability to use the potential of digital technologies in education for boosting the active involvement of students in the learning process and their ownership of it, as well as to offer learning activities adapted to the students' level of competence, their interests and learning needs. The results show that in this area the same number of teachers (25,6%) identify at levels B1 – Integrators and B2 - Experts, followed by A2 – Explorers (23.8%) and A1- Newcomers (12%).

The ability to foster students' digital competence is an integral part of teachers' digital competence. In Area 6 - Facilitating learner digital competence, the largest percent of Moldovan teachers belongs to levels B1 – Integrators and B2 - Experts (36,5% and 25,2% respectively), and with more than 30% of teachers in level A (Newcomers and Explorers).



	Area 1: Professional Engagement	Area 2: Digital Resources	Area 3: Teaching and Learning	Area 4: Assessment	Area 5: Empowering learners	Area 6: Facilitating Learners' Digital Competence
C2	0.9	1.2	0.7	0.7	2.4	1.4
C1	8.7	9.4	5.4	4.7	8.2	5.9
B2	31.1	25.4	28.5	16.9	28.0	25.2
B1	33.6	28.9	39.1	34.6	25.6	36.5
A2	19.1	20.9	18.1	26.8	23.8	16.0
A1	6.6	14.1	8.2	16.2	12.0	15.1

Figure 4. Percentage of Moldovan teachers by proficiency level and competence area

If we focus on areas with relatively weak (A) Performance, it is noticeable that a quite high numbers of teachers believes their competences are at these levels (A1 and A2) – more than 25% for all areas, the higher percentage being in Area 4 - Assessment (43%).

Focusing on areas with strong performance (B2 upward), we can conclude that the highest percent of teachers reaches level B2 - Experts in Area 1 (31,1%), followed by Areas 3 and 5 (28,5% and 28% respectively) while the lowest percentage of teachers reach level B2 in Area 4 (16,9%). Additionally, the C1- Leaders level is reached by the highest number of teachers in Area 2 (9.4%), the lowest in Area 4 (4.7%), while the percentages for the other areas vary between 5.4 and 8,7%. Very few teachers reach level C2 – Pioneers, with the highest number being in Area 5 (2,4%), lowest in Area 3 and 4 (0,7%) while the other areas vary between 0,9 and 1,4%.

Analyzing the results on each area we can conclude that there are only some small differences between them, with a few percentages of respondents in C level and with around 50% and more in B level.

However, as shown in Figure 4 there are two relatively strong areas *Professional engagement* (1) and *Teaching and learning* (3). For Area 1 - 64.7% are at level B, and 9.6% at level C. The same situation is related to Teaching and learning - 67.6% of teachers are at level B and 6.1% are at level C.

Teachers assessed themselves as relatively poorly in terms of their capacity to facilitate learners own digital learning: 75% of teachers were at level B1 or below.

Use of different digital tools/activities during the CoVid lockdown

This section explores the degree to which different digital tools/activities were used during the COVID19 lockdown in the five countries. Respondents were asked to indicate to what extent they used various digital tools classified in following categories (see Table 4). The possible answers included the options: never, once a week, three times a week and every day. For the purpose of the analysis these answer-categories were reduced to three categories – 'Frequently used' (three times a week plus every day), 'practised to some extent (once a week) and 'not practised'' (never).

Table 3: Codes key of digital tools and activities

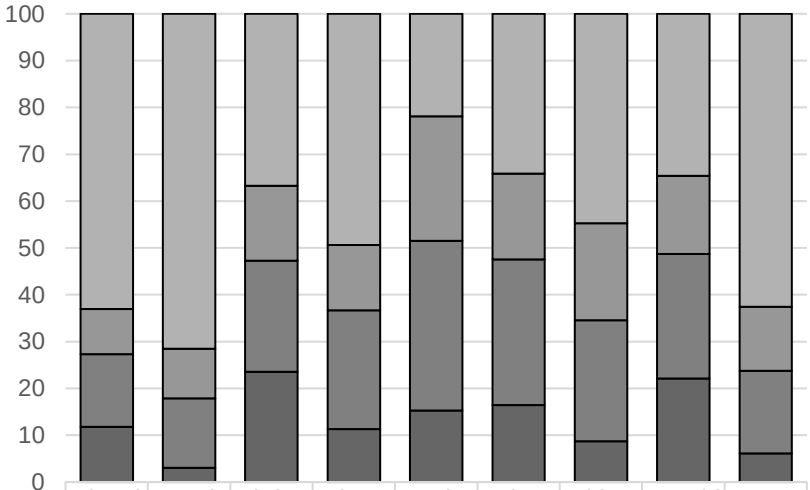
	Codes Key
Virtual	Virtual classroom software (e.g. Ms Teams, Google Classroom, Moodle)
Synch	Synchronous video-communication tools (e.g. Zoom, Skype, WhatsApp, Facebook live
Shdoc	Sharing and exchanging of documents ("cloud services" e.g. Basecamp Dropbox, Google Drive, online editors for collaborative artefacts)
Shscr	Sharing your (the teacher's) screen (screen casting), for example, to make presentations or set tasks
Brain	Brainstorming, quizzes or polls (e.g. mind-map, multiple-choice questionnaires for (self-assessment)
Plan	Planning and organisational tools (e.g. Mail and Calendar, education management systems to communicate with schools, pupils and parents)
Video	Watching instructional videos and/or audios (e.g. online library)
CreVid	Creating and broadcasting videos and/or audios (e.g. YouTube)
Txt	Sharing and exchanging of documents and text messages, for example, by email or websites or social media (e.g. Facebook, Whatsapp)

On 11 March 2020, Moldovan authorities closed all schools in response to the COVID-19 outbreak. According to National Bureau of Statistics approximately 434,000 students in all education institutions at all levels were asked to stay at home, and schools were mandated to provide distance learning opportunities. The use of Information and Communication Technologies (ICTs) to ensure continuity of distance learning became the main priority of the education system in Moldova. The models of teaching process organization differ from institution to institution depending on the digital skills of teachers and students, the number of students, the digital infrastructure of the educational institution, students' access to digital devices, and the capacity of digital communication channels. At the central and regional level, recommendations have been developed for the proper conduct of teaching process. The creation of libraries (platforms) of digital educational resources for providing distance learning activities has begun.

According to the current survey data, most teachers know and use digital tools / activities. Figure 5 shows that *Synchronous video-communication tools (e.g. Zoom, Skype, WhatsApp, Facebook live)* are most commonly used. Only 3.1% of teachers have never used it, while 96.9% use it at least once a week, 71.5% use it every day. The next most commonly used type of tools are *Sharing and exchanging documents and text messages, for example, by email or websites or social media (eg Facebook, Whatsapp)* - 93.9% use this practice at least once a week, and 62.6% every day. We also have a similar situation in the case of *Virtual classroom software (e.g. Ms Teams, Google Classroom, Moodle)*, only 11.8% have never used these tools/activities, while 63.1% of teachers use them every day.

Interactive distant learning has been most effective where it routinely includes synchronous video communication and virtual classrooms[11]. The data suggest that some 60-70% of Moldovan teachers are practising digital distance learning using these technologies daily.

Sharing and exchanging of documents ("cloud services" e.g. Basecamp Dropbox, Google Drive, online editors for collaborative artefacts) and *Creating and broadcasting videos and / or audios (e.g. YouTube)* are less frequently applied and used. In both cases, more than 20% of respondents have never used this practice and only a third of teachers use these tools on a daily basis.



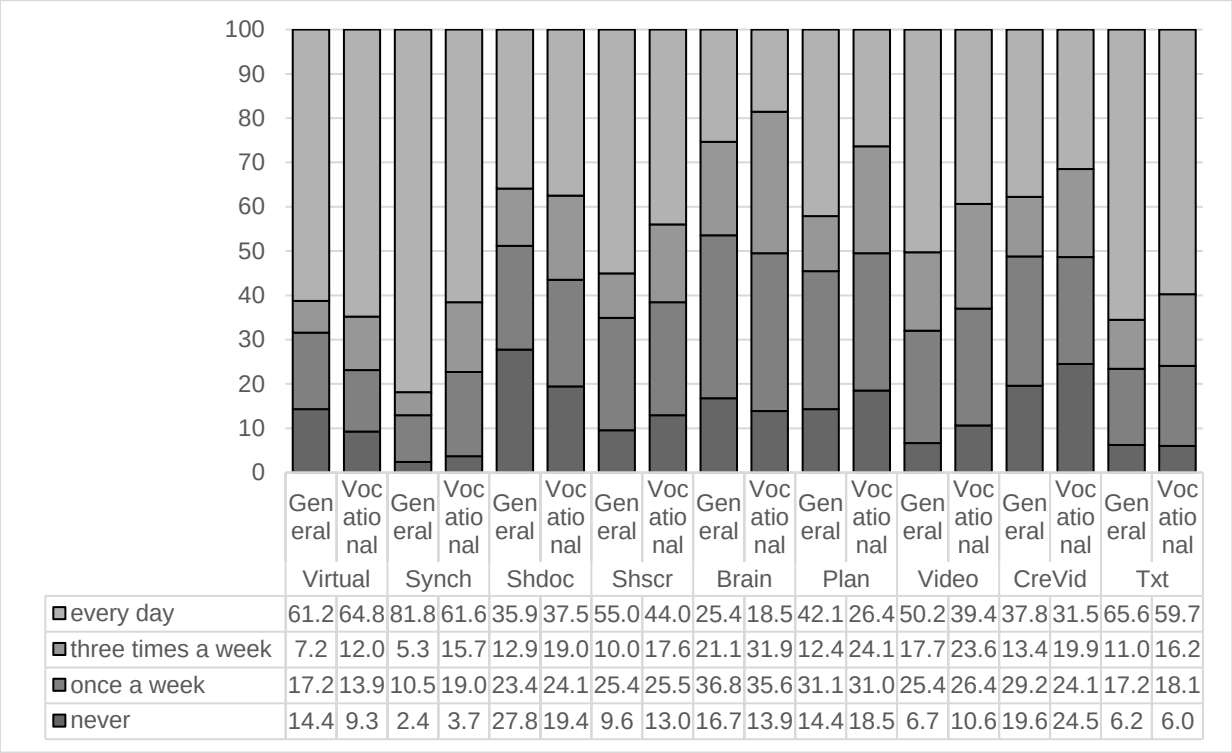
	Virtual	Synch	Shdoc	Shscr	Brain	Plan	Video	CreVid	Txt
every day	63.1	71.5	36.7	49.4	21.9	34.1	44.7	34.6	62.6
three times a week	9.6	10.6	16.0	13.9	26.6	18.4	20.7	16.7	13.6
once a week	15.5	14.8	23.8	25.4	36.2	31.1	25.9	26.6	17.6
never	11.8	3.1	23.5	11.3	15.3	16.5	8.7	22.1	6.1

Figure 5. Frequency of use of different digital tools/activities during the COVID19 lockdown by the total Moldovan sample.

In general there are not great differences between the use of digital technologies in vocational rather than general schools. However, *Synchronous video-communication tools* are used by 81.8% teachers from general schools every day, and only 61.6% of teachers in VET schools. The same situation is on *Watching instructional videos and / or audios* (e.g. online library). This suggests that although in

[11] Mapping COVID-19: Digital distance learning: https://www.etf.europa.eu/sites/default/files/2020-07/mapping_covid_ddl_050620.pdf

general teachers in vocational schools have higher digital competences, they may lack them in particular technologies.



	Virtual		Synch		Shdoc		Shscr		Brain		Plan		Video		CreVid		Txt	
	General	Vocational	General	Vocational	General	Vocational	General	Vocational	General	Vocational	General	Vocational	General	Vocational	General	Vocational	General	Vocational
every day	61.2	64.8	81.8	61.6	35.9	37.5	55.0	44.0	25.4	18.5	42.1	26.4	50.2	39.4	37.8	31.5	65.6	59.7
three times a week	7.2	12.0	5.3	15.7	12.9	19.0	10.0	17.6	21.1	31.9	12.4	24.1	17.7	23.6	13.4	19.9	11.0	16.2
once a week	17.2	13.9	10.5	19.0	23.4	24.1	25.4	25.5	36.8	35.6	31.1	31.0	25.4	26.4	29.2	24.1	17.2	18.1
never	14.4	9.3	2.4	3.7	27.8	19.4	9.6	13.0	16.7	13.9	14.4	18.5	6.7	10.6	19.6	24.5	6.2	6.0

Figure 6. Frequency of use of different digital tools/activities during the COVID19 lockdown by educational sector in Moldova.

Provision of CPD over last 12 months

The development of teachers' digital skills has been and is a priority for the Moldova education system, confirmed by policy documents and national education strategies. With the transition to distance learning, this has become an urgent need, which has mobilized the entire system to identify solutions.

Starting with March, in the pandemic context, several initiatives were put in place regarding the digitalization of the education by the public and private sectors. For instance, with the support of Orange Moldova, Ministry of Education, Culture and Reasearch/MECR launched the campaign 'Connecting Teachers'. Some private companies, in cooperation with MECR provided free internet to teachers for two months. Furthermore, www.educatieonline.md under the leadership of the Mayoralty of Chisinau and https://invat.online under the leadership of the Association of ICT Companies are two examples of education content digitization to facilitate the distance teaching process for general education. The https://studii.md platform, developed prior to the pandemic in 2019 by the private company Simpals, and with the support of the UN and the Association of ICT Companies, provides a

solution not only for organizing the distance learning but also serves as an instrument for education process management, serving as an example for the digitization of governance in education.[12]

Many training activities have been organised and implemented for teachers from general and VET education by Ministry of Education, Culture and Research, E.C. PRO DIDACTICA, Future Classroom Lab, Teckwill etc. on using various tools and platforms: Moodle, Office 365, Google Classroom, SKYPE, ZOOM, VIBER, Messenger etc.

This section provides information on the CPD (see Codes Key) teachers had in the last 12 months that developed their digital competences.

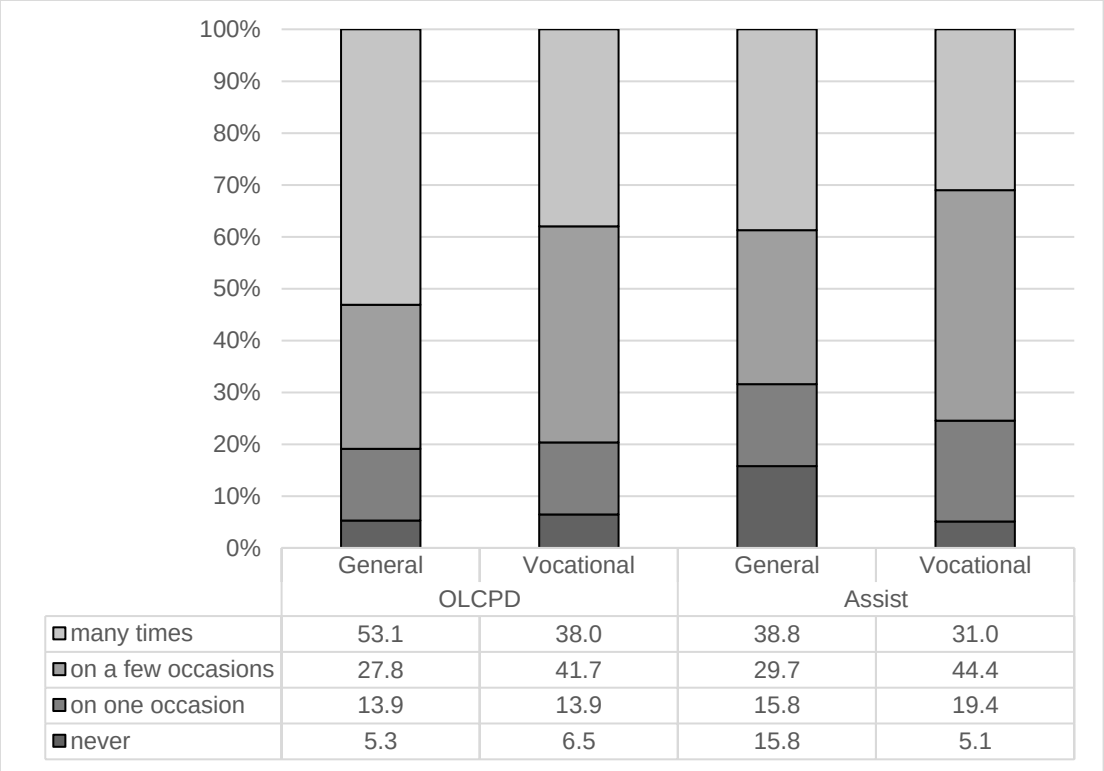
Table 4: Codes Key for CPD provisions

	Codes Key
OLCPD	Over the last 12 months, I have participated in online CPD to develop my digital competences.
Assist	Over the last 12 months, I have been assisted by other teachers or advisors in my school to develop my digital competences.

According to survey data, as shown in Figure 7, 80% of the teachers participated in CPD in the last 12 months, at least on a few occasions, and only 5.3 % of teachers from general education institutions and 6.5% o f teachers from VET institutions didn't participate at all. The survey investigated peer support as well as training because it is known that this can be as important as training in developing digital competence[13]. 38.8% of teachers in general schools are assisted by other teachers every day, but around 30% received support only once or not all. In VET schools 94.9% of teachers have been assisted by other teachers at least on one occasion and about 25% received support only once or not at all. Here is important to mention that in Moldova the mentorship program is included in policy documents and there are some initiatives for institutionalising this process in schools, both in general and vocational schools. Mentorship could be a tool for supporting those teachers that are missing out on peer support.

[12] Education and COVID-19 in the Republic of Moldova, COVID report, UN, august 2020

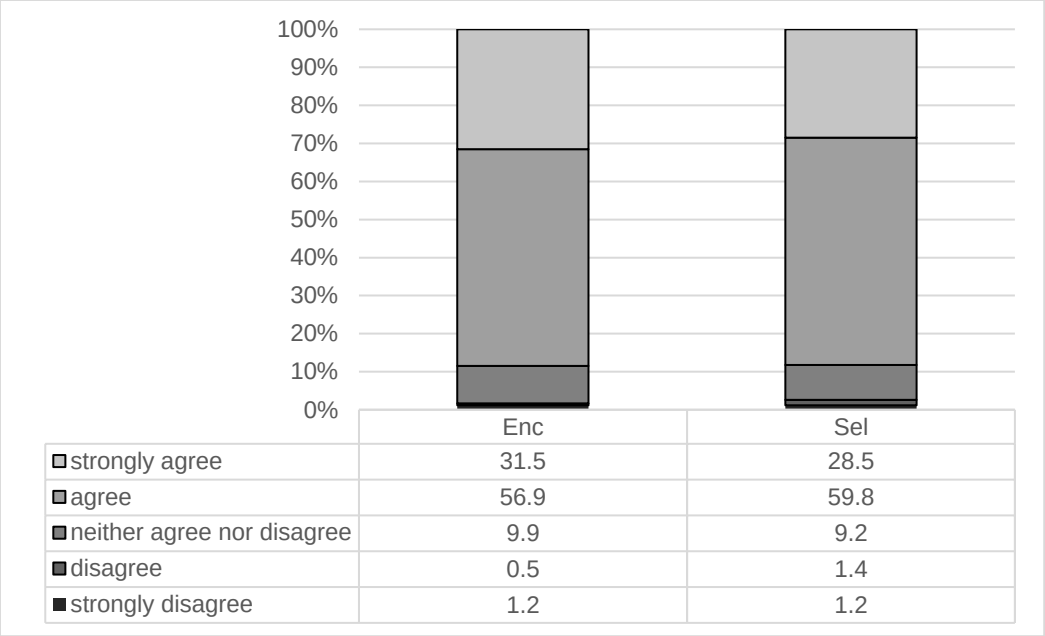
[13] Mapping COVID-19: Digital distance learning: https://www.etf.europa.eu/sites/default/files/2020-07/mapping_covid_ddl_050620.pdf



	General	Vocational	General	Vocational
	OLCPD		Assist	
many times	53.1	38.0	38.8	31.0
on a few occasions	27.8	41.7	29.7	44.4
on one occasion	13.9	13.9	15.8	19.4
never	5.3	6.5	15.8	5.1

Figure 7. Participation in CPD in the past 12 months by educational sector in Moldova.

As mentioned above, a lot of training activities have been implemented during 2020: at national, regional and school level. Some of them were compulsory for each teacher, some of them, were optional. Some training activities were provided by MECR, some of them were organised by NGOs and professional networks/associations. Figure 8 reveals that 88.4% of teachers agree or strongly agree that their schools supported and encouraged them to obtain CPD. Furthermore, 88.3% judge that they were able to select CPD based on their personal needs and received CPD appropriate to their needs. The results confirm that teachers are motivated to participate in CPD both intrinsically and extrinsically. Of course we can suppose that the COVID 19 crises have influenced their motivation. The digital competence became inherent both for teachers and students.There are no significant differences in the responses of teachers at general and vocational education or between small and large schools – which suggests that teachers in these groups do not perceive that they have been treated differently.



	Enc	Sel
strongly agree	31.5	28.5
agree	56.9	59.8
neither agree nor disagree	9.9	9.2
disagree	0.5	1.4
strongly disagree	1.2	1.2

Figure 8. Perception of the experience of the CPD undertaken in the past 12 months by the total Moldovan sample

Training Needs

This section presents how Moldovan teachers evaluate their need for CPD (see Codes below) that address various kinds of digital competence based on their actual level of digital competence, as well as, previous experience over the last 6 months. The teachers were asked to express the degree of their need for CPD based on each kind of digital competence on the following scale: No need; Low need; High need; Very high need.

Table 5: Codes key for digital competences

	CODES – TRAINING NEEDS
N1	Communicating digitally with students and parents
N2	Collaborating digitally with colleagues
N3	Finding, adapting and creating digital resources that serve different learning tasks and different learners
N4	Managing and protecting sensitive data and content
N5	Making greater and more effective use of different digital technologies
N6	Enabling students to use digital technologies for group work
N7	Making use of digital technologies to assess student work and to provide them with feedback
N8	Making use of digital technologies to monitor and analyse students' digital activity

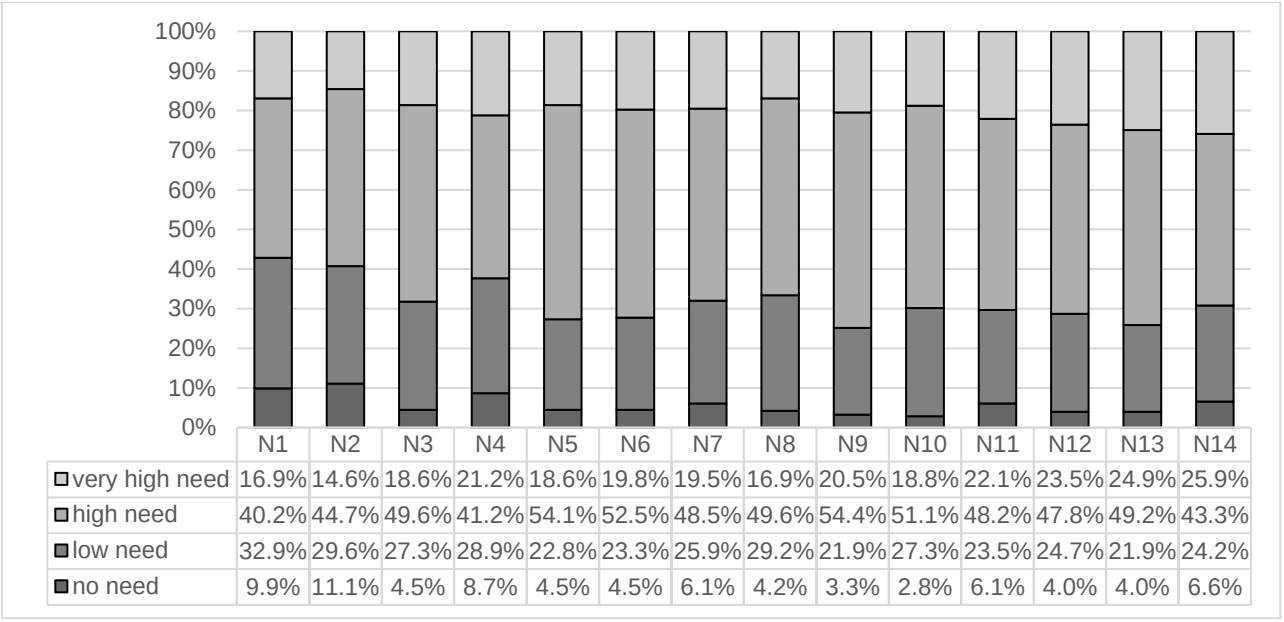
N9	Making use digital technologies to engage students actively in learning
N10	Making use of digital technologies to address individual learning needs
N11	Planning digital learning that will overcome potential digital problems, e.g. lack of access to devices or data
N12	Teaching students how to work and learn digitally
N13	Teaching students to make responsible and critical use of digital technologies
N14	Teaching and assessing at a distance during a COVID19 lockdown

It is possible to analyse responses to identify which training needs are most widespread and which are most intense. Even after the extensive training provided in Moldova, over 50% of all teachers reported that they had high or very high training needs for all of the types of training listed in the questionnaire. Figure 8 shows which training needs are most intense for most teachers. Making use of digital technologies to engage students actively in learning was mentioned as a high or very high need by 74.9% of respondents. Only 3.3% mentioned that they do not need training in this regard. Teachers expressed high or very high training needs for the following kinds of training, in descending order:

- Teaching students to make responsible and critical use of digital technologies - 74.1%
- Making greater and more effective use of different digital technologies - 72.7%
- Enabling students to use digital technologies for group work - 72,3 %
- Teaching students how to work and learn digitally - 71.3%
- Planning digital learning that will overcome potential digital problems, e.g. lack of access to devices or data – 70.3%
- Making use of digital technologies to address individual learning needs – 69.9%

Teachers were invited to self-assess their need for training that directly addressed teaching at distance during a COVID19 lockdown. About 30% reported that they had low or no training needs – which is probably an indication of the effectiveness of training already provided. On the other hand, around 26% reported a very high need and a further 43% reported a high need. Evidently further training and support is required to build competence.

On the other hand, 42.8% of teachers report low or no training need for *Communicating digitally with students and parents*.



	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12	N13	N14
very high need	16.9%	14.6%	18.6%	21.2%	18.6%	19.8%	19.5%	16.9%	20.5%	18.8%	22.1%	23.5%	24.9%	25.9%
high need	40.2%	44.7%	49.6%	41.2%	54.1%	52.5%	48.5%	49.6%	54.4%	51.1%	48.2%	47.8%	49.2%	43.3%
low need	32.9%	29.6%	27.3%	28.9%	22.8%	23.3%	25.9%	29.2%	21.9%	27.3%	23.5%	24.7%	21.9%	24.2%
no need	9.9%	11.1%	4.5%	8.7%	4.5%	4.5%	6.1%	4.2%	3.3%	2.8%	6.1%	4.0%	4.0%	6.6%

Figure 9. Perception of needs for CPD that addresses digital competences by the total Moldovan sample.

Analysis reveals that there were no significant differences in teachers needs according to whether they taught in vocational or general schools. However, if we analyse according to what subject they taught, whatever the school, we have that teachers who teach vocational subjects expressed a greater need for training than those who teach general subjects (Figure 10).

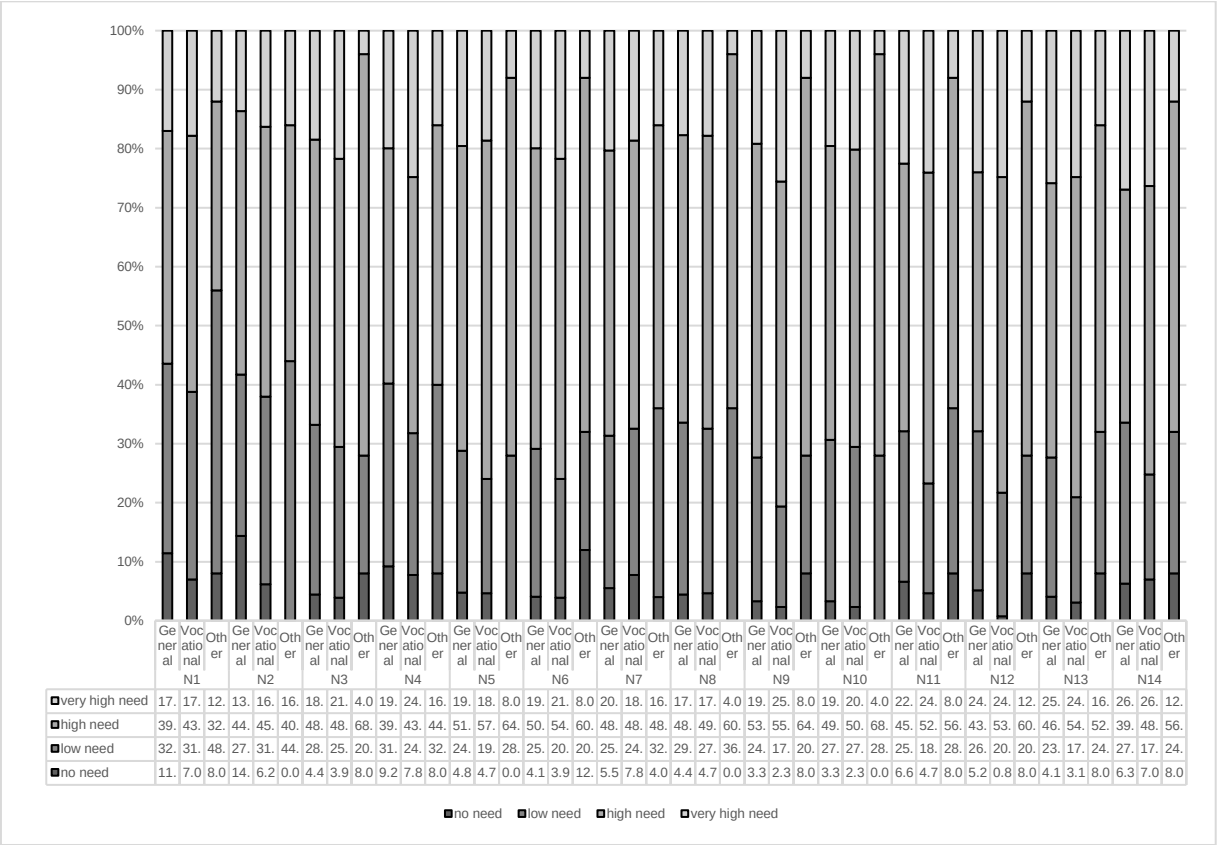
VET subjects teachers signalled the following priorities for further training and support:

- *Managing and protecting sensitive data and content* (24.8% very high need and 43.4% high need)
- *Making use of digital technologies to engage students actively in learning* (25.6 very high need, 55% - high need)
- *Planning digital learning that will overcome potential digital problems*, e.g. lack of access to devices or data 24% and 52.7%

Both general and vocational have high need for training addressing *Teaching and assessing at a distance during a COVID19 lockdown.*

Teachers who are classified as teaching neither vocational nor academic subjects, for example those teaching physical exercise and music, reported lower training needs. This may be because it is believed that these subjects are not suitable for distance teaching at all.

Moldova



	N1			N2			N3			N4			N5			N6			N7			N8			N9			N10			N11			N12			N13			N14		
	General	Vocational	Other	General	Vocational	Other	General	Vocational	Other	General	Vocational	Other	General	Vocational	Other	General	Vocational	Other	General	Vocational	Other	General	Vocational	Other	General	Vocational	Other	General	Vocational	Other	General	Vocational	Other	General	Vocational	Other	General	Vocational	Other	General	Vocational	Other
very high need	17.	17.	12.	13.	16.	16.	18.	21.	4.0	19.	24.	16.	19.	18.	8.0	19.	21.	8.0	20.	18.	16.	17.	17.	4.0	19.	25.	8.0	19.	20.	4.0	22.	24.	8.0	24.	24.	12.	25.	24.	16.	26.	26.	12.
high need	39.	43.	32.	44.	45.	40.	48.	48.	68.	39.	43.	44.	51.	57.	64.	50.	54.	60.	48.	48.	48.	48.	49.	60.	53.	55.	64.	49.	50.	68.	45.	52.	56.	43.	53.	60.	46.	54.	52.	39.	48.	56.
low need	32.	31.	48.	27.	31.	44.	28.	25.	20.	31.	24.	32.	24.	19.	28.	25.	20.	20.	25.	24.	32.	29.	27.	36.	24.	17.	20.	27.	27.	28.	25.	18.	28.	26.	20.	20.	23.	17.	24.	27.	17.	24.
no need	11.	7.0	8.0	14.	6.2	0.0	4.4	3.9	8.0	9.2	7.8	8.0	4.8	4.7	0.0	4.1	3.9	12.	5.5	7.8	4.0	4.4	4.7	0.0	3.3	2.3	8.0	3.3	2.3	0.0	6.6	4.7	8.0	5.2	0.8	8.0	4.1	3.1	8.0	6.3	7.0	8.0

Figure 10. Perception on needs for CPD that addresses digital competences by type of subject in Moldova.

Impact of CPD

The survey also reveals which kinds of training (see Codes below) are thought to have had greatest impact. Possible answers to each of the statements range from strongly disagree to strongly agree (answers options: strongly disagree; disagree; neither agree, nor disagree; agree; strongly agree).

Table 6: Codes Key for impact of CPD on various digital competences

	CODES – IMPACT OF CPD
I1	The CPD has helped me to communicate digitally with students and parents
I2	The CPD has helped me to collaborate digitally with colleagues
I3	The CPD has helped me to find, adapt and create digital resources that serve different learning tasks and different learners
I4	The CPD has helped me to manage and protect sensitive data and content
I5	The CPD helped me to make greater and more effective use of different digital technologies

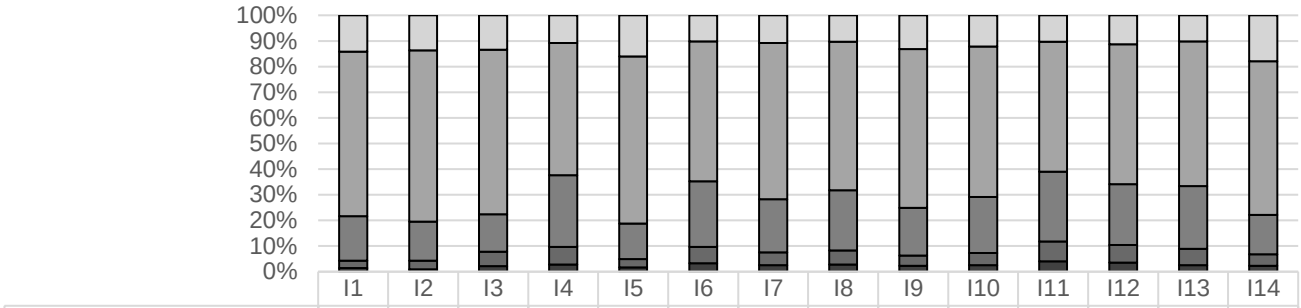
I6	The CPD has helped me to enable students to use digital technologies for group work
I7	The CPD has helped me to make use of digital technologies to assess student work and to provide them with feedback
I8	The CPD has helped me to make use of digital technologies to monitor and analyse students' digital activity
I9	The CPD has helped me to use digital technologies to engage students actively in learning
I10	The CPD has helped me to use digital technologies to address individual learning needs
I11	The CPD has helped me to plan digital learning that will overcome potential digital problems, e.g. lack of access to devices or data
I12	The CPD has helped me to teach students how to work and learn digitally
I13	The CPD has helped me to teach students to make responsible and critical use of digital technologies
I14	The CPD has helped me to teach and assess remotely during the COVID19 lockdown

Training addressing the following needs was judged to have greatest impact:

		Strongly agree / Agree %
1.	The CPD helped me to make greater and more effective use of different digital technologies	81.2
2.	The CPD has helped me to collaborate digitally with colleagues	80.4
3.	The CPD has helped me to communicate digitally with students and parents	78.3
4.	The CPD has helped me to teach and assess remotely during the COVID19 lockdown	77.9
5.	The CPD has helped me to find, adapt and create digital resources that serve different learning tasks and different learners	77.6

On the other hand, CPD addressing the follow needs was most likely to be judged with low or no impact:

		Disagree/Strongly disagree %
1.	The CPD has helped me to plan digital learning that will overcome potential digital problems, e.g. lack of access to devices or data	11.8
2.	The CPD has helped me to teach students how to work and learn digitally	10.3
3.	The CPD has helped me to enable students to use digital technologies for group work	9.7
4.	The CPD has helped me to manage and protect sensitive data and content	9.6
5.	The CPD has helped me to teach students to make responsible and critical use of digital technologies	9



	I1	I2	I3	I4	I5	I6	I7	I8	I9	I10	I11	I12	I13	I14
strongly agree	14.1%	13.6%	13.4%	10.8%	16.0%	10.1%	10.8%	10.4%	13.2%	12.2%	10.4%	11.3%	10.1%	17.9%
agree	64.2%	66.8%	64.2%	51.5%	65.2%	54.6%	60.9%	57.9%	61.9%	58.6%	50.6%	54.6%	56.5%	60.0%
neither agree nor disagree	17.4%	15.3%	14.6%	28.0%	13.9%	25.6%	20.7%	23.5%	18.6%	21.9%	27.3%	23.8%	24.5%	15.3%
disagree	2.8%	3.3%	5.6%	6.8%	3.3%	6.4%	4.9%	5.4%	4.0%	4.7%	7.8%	6.8%	6.4%	4.5%
strongly disagree	1.4%	0.9%	2.1%	2.8%	1.6%	3.3%	2.6%	2.8%	2.4%	2.6%	4.0%	3.5%	2.6%	2.4%

Figure 11. Perception of the impact of CPD by the total Moldovan sample.

What are the preferred modes for CPD?

CPD in Moldova has, until recently, mainly been delivered in face to face seminars. Obviously, given the COVID lockdown, CPD had to go online. It was not an easy experience, but it seems that for many teachers it has raised their competences. However, this survey suggests that impact has varied depending on the type of digital competence addressed and that a minority of teachers judge that there has been little impact.

In the survey, teachers were asked to express their preferences regarding four modes of CPD for digital competences (see Codes below): (1) participation in CPD face to face workshops led by trainers; (2) online CPD; (3) help by other teachers or advisors in their schools and (4) CPD that blends together face-to-face and on-line methods. For each mode of CPD, teachers had the following answer options: Strongly disagree; Disagree; Neither agree nor disagree; Agree; Strongly agree.

Table 7. Preferences for mode of CPD

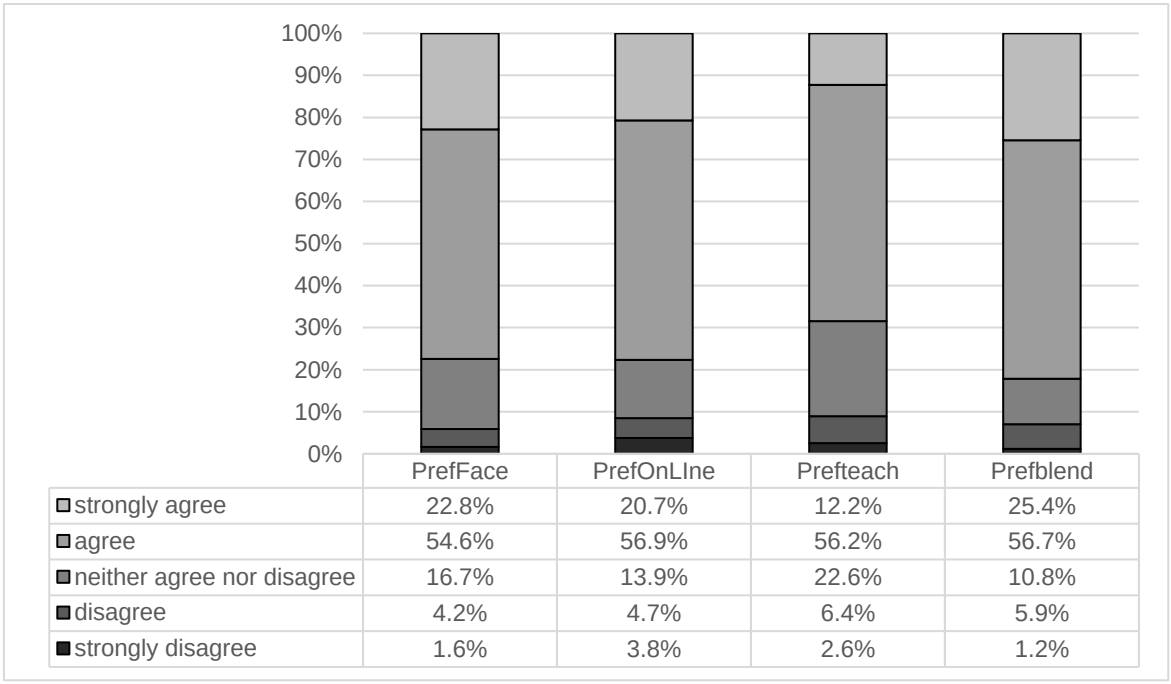
	CODES – PREFERENCES FOR MODE OF CPD
PrefFace	I would like to participate in CPD face to face workshops led by trainers to develop my digital competences
PrefOnline	I would like to participate in online CPD to develop my digital competences
PrefTeach	I would like to be helped by other teachers or advisors in my school to develop my digital competences
PrefBlend	I would like to participate in CPD that blends together face-to-face and on-line methods

According to survey data for more than 77% of teachers the CPD has helped them to teach and assess remotely during the COVID 19 lockdown. Only for 6,9% of teachers the training provided on this did not have impact and wasn't helpful.

Although the educational system of the Republic of Moldova was not expecting a sudden and massive transition to CPD through distance learning, the general level of digital infrastructure in educational

institutions and urgency of the need permitted this transformation. Online training solutions were developed for teacher trainers who have insufficient digital skills and educational resources have been created for teachers.

The survey shows that, by the end of 2020, teachers in Moldova favour a blended mode of CPD when it comes to developing their digital competences. As shown in Figure 12, 82% of teachers said that they would participate in blended CPD. Only 1.2% of respondents strongly reject this mode of CPD. Meanwhile, 77.4% of teachers would participate in CPD in the form of face to face workshops and 77.6% in online CPD training.



	PrefFace	PrefOnLIne	Prefteach	Prefblend
strongly agree	22.8%	20.7%	12.2%	25.4%
agree	54.6%	56.9%	56.2%	56.7%
neither agree nor disagree	16.7%	13.9%	22.6%	10.8%
disagree	4.2%	4.7%	6.4%	5.9%
strongly disagree	1.6%	3.8%	2.6%	1.2%

Figure 12. Preferred modes of CPD by the total Moldovan sample.

CONCLUSIONS

Learning

The development of teachers' digital skills has been and is a priority for the Moldova education system, confirmed by policy documents and national education strategies.

In the last years the Ministry of Education and other stakeholders have taken important steps towards improving the digital competences of teachers and students, in terms of policy documents, CPD, ICT infrastructure etc. However, there is a lot yet to be done to use the opportunity that technologies can bring to education.

Before COVID lockdown among the measures undertaken by the Ministry of Education the following can be mentioned: the minimum standards of school endowment with IT was approved by Minister's Order in June 2015; an action plan for the informatization of general education was approved by Minister's Order in June 2016 (including measures of certification of digital competences of teachers); standards for digital competences in education were approved by the Ministry of Education in September 2015; the methodology for the organization and implementation of the digital competences of teachers and students' evaluation was approved by the Minister's Order in May 2016.

Despite some progresses at policy level (digital standards for general education teachers, strategies), investments in infrastructure, teacher training and curriculum development, the development of teachers' digital competences is still an important need. This fact is confirmed by the current survey findings:

Digital competences of teachers

- Comparing the proficiency score with the regional ones, we notice that it is lower than the average for the region, even if in the last months many training activities have been provided, both for general and VET education teachers. There was a very small number of teachers who registered values of over 80 points, with a level of C1, corresponding to only 1.8%. However, it is important to mention that more than 60 percent of respondents have B1 and B2 levels. Thus, 31.7% (B1) of teachers participating in the survey experiment with digital technologies in a variety of contexts and for various purposes, harmoniously integrating them into many educational activities. They can use them creatively to strengthen various aspects of their professional activity and are motivated to expand their repertoire of didactical practices. At the same time, 31.1% (B2) of respondents use a range of digital technologies with full, creative and critical confidence to improve their professional activities.

- The survey reveals that more than 20% of Moldovan teachers, according to their own evaluation, are at the early stages of developing their digital competence. These are the teachers on A1 and A2 level of proficiency (3.6% and 16.9% respectively). Teachers on the A1 level are "newcomers" and need additional incentives to start using digital technologies for communication with students, parents and other colleagues form schools, as well as, in their educational practice.

- Analyzing the differences between vocational and general schools we noted that in general VET institutions teachers have a better score.

- Digital skills in all 6 areas are very important and necessary for assuring an efficient and qualitative teaching process. Focusing on areas with strong performance (B2 upward), we can conclude that the highest percent of teachers reaches level B2 - Experts in Area 1/ *Professional Engagement* , followed by Areas 3/*Teaching and Learning* and Area 5 *Empowering learners*. Additionally, the C1- Leaders level is reached by the highest number of teachers in Area 2 / *Digital resources*, the lowest in Area 4/Assessment. Very few teachers reach level C2 – Pioneers, with the highest number being in Area 5 (2,4%),

- Relatively weaker is the Area 4 / *Assessment* - in this area only 51.5% are at level B and only 5.2% are at level C. In the same time more than 40% are at level A and need inputs for developing their digital competencies.

Technologies and practices used during CoVid

- According to the survey data, teachers know and use digital tools / activities in teaching process. The data suggest that some 60-70% of Moldovan teachers are practising digital distance learning using these technologies daily.

- Sharing and exchanging of documents and Creating and broadcasting videos and / or audios are less frequently applied and used.

CPD experiences and effectiveness

- The development of teachers' digital skills has been and is a priority for the Moldova education system, confirmed by policy documents and national education strategies. With the transition to distance learning, this has become an urgent need, which has mobilized the entire system to identify solutions.

- Starting with March, in the pandemic context, many initiatives were put in place regarding the digitalization of the education by the public and private sectors.

- According to survey data, more than 80% of the teachers participated in CPD in the last 12 months at least on a few occasions and only 5.9 % didn’t participate at all.

- The great majority of teachers (88.4%) confirms that the school supported them, the situation is similar in the case of autonomous selection of CPD - 88.3% stated that they selected their CPD according to their own training needs.

Training Needs

- Analyzing the training needs, we can notice that in all cases over 50% of respondents confirmed all listed needs for training (high and very high needs). Every forth teacher in Moldova has very high need for training on *Teaching and assessing at a distance during a COVID19 lockdown (25,9%),* on *Teaching students to make responsible and critical use of digital technologies (24,9%),* and on *Teaching students how to work and learn digitally (23.5%).* Evidently further training and support is required to build these competences.

- It is important to mention that in the same time about 30% of teachers believe that they had low or no training needs for training that directly addressed teaching at distance during a COVID19 lockdown – which is probably an indication of the effectiveness of training already provided.

- Priorities are quite similar if we combine those teachers that report a very high and a high need for training: Making use of digital technologies to engage students actively in learning (74.9%); Teaching students to make responsible and critical use of digital technologies (74.1%); Making greater and more effective use of different digital technologies (72.7%); Enabling students to use digital technologies for group work (72,3%); Teaching students how to work and learn digitally (71,3%); Planning digital learning that will overcome potential digital problems, e.g. lack of access to devices or data (70.3%); Making use of digital technologies to address individual learning needs (69.9%); Teaching and assessing at a distance during the COVID19 lockdown (69,2%).

- Analysis reveals that there were no significant differences in teachers needs according to whether they taught in vocational or general schools. However, if we analyse according to what subject they taught, whatever the school, we have that teachers who teach vocational subjects expressed a greater need for training than those who teach general subjects.

- Teachers recognize the importance and need for training programs, as well as the impact of the CPD activities. Analyzing the study data shows a certain prioritization of their impact on skills development. The highest score for strongly agree and agree took: The CPD helped me to make greater and more effective use of different digital technologies; The CPD has helped me to collaborate digitally with colleagues; The CPD has helped me to communicate digitally with students and parents;The CPD has helped me to teach and assess remotely during the COVID19 lockdown.

- From teachers' point of view lower impact of CPD is on planning digital learning that will overcome potential digital problems; on to how to teach students how to work and learn digitally, on how to enable students to use digital technologies for group work; and on managing and protects sensitive data and content.

- The survey shows that, by the end of 2020, teachers in Moldova favor a blended mode of CPD when it comes to developing their digital competences. Only 1.2% of respondents strongly reject this mode of CPD. Meanwhile, 77.4% of teachers would participate in CPD in the form of face to face workshops and 77.6% in online CPD training.

Recommendations

- In the context of COVID 19 lockdown to plan teacher's in-service training based on research results with focus on teachers who have low results and are at level A.

- To revise/up-date Standards of teachers' digital competences, approved by the Ministry of Education in September 2015 based on European Digital Competence Framework for Educators (DigCompEdu).

- To synchronize the legal framework on CPD: Regulations for attestation – Standards for professional development of teachers – Standards for teachers' digital competence in order to facilitate an efficient planning of CPD on digital skills.
- To develop a national program focused on developing teacher digital competences in all 6 areas both for general and VET teachers, based on the European Digital Competence Framework for Educators (DigCompEdu).
- To deliver teacher' trainings based on teachers real needs and on their level of digital competences (the self-evaluation tool is recommended). The most stringent needs are on Making use of digital technologies to engage students actively in learning; Teaching students to make responsible and critical use of digital technologies; Making greater and more effective use of different digital technologies; Enabling students to use digital technologies for group work; Teaching students how to work and learn digitally; Planning digital learning that will overcome potential digital problems, e.g. lack of access to devices or data; Making use of digital technologies to address individual learning needs (69.9%);
- To strengthen schools capacity for launching and implementing trainings at school level, based on current training needs.
- To promote teacher leaders and to promote collaborative work, mentorship and networks at school level. It is important to increase the number of teachers with C level of competences which can inspire and mobilize other teachers to develop their digital skills

Possible additional analysis and future use?

It will be very useful to do some qualitative research based on these data.

How the Needs Analysis might be used?

This analysis can be used in developing policy documents and in designing training programs.

Contribution ID: e648dc15-130f-45e5-b70a-0e7a1bc60d73
Date: 10/02/2021 15:19:17

Analiza de necesități în baza instrumentului DigCompEdu / Moldova

Câmpurile marcate cu * sunt obligatorii.

Introducere

Necesitatea cadrelor didactice de a-și dezvolta competențe digitale suplimentare este în continuă creștere, fapt care solicită autorităților/agențiilor naționale să cunoască care sunt aceste competențe și ce tipuri de programe de formare continuă trebuie să fie planificate.

Acest sondaj vă va ajuta să vă evaluați propriile competențe digitale și va oferi date instituțiilor de învățământ, dar și autorităților din domeniu să planifice programe de dezvoltare profesională a cadrelor didactice în baza necesităților profesionale ale acestora.

Informațiile Dvs. cu caracter personal și răspunsurile Dvs. nu vor fi publicate. Datele vor fi utilizate în scopuri de cercetare și planificare.

După completarea chestionarului, veți primi un feedback detaliat cu sfaturi utile pentru a vă îmbunătăți competențele digitale. Dacă doriți, puteți alege să primiți un raport privind rezultatele cercetării în viitor.

Vă mulțumim anticipat pentru timpul acordat și pentru interesul Dvs. Răspunsul Dvs. va contribui la îmbunătățirea calității evoluției profesionale a Dvs. și a altor cadre didactice. Pentru a răspunde la întrebările sondajului e nevoie de aproximativ 30 de minute.

Dacă aveți întrebări sau dificultăți în aplicarea chestionarului, vă rugăm să ne contactați: [Rima Bezede rbezede@prodidactica.md]

Chestionarul are trei secțiuni: Competențe digitale, Date personale, Dezvoltarea profesională.

* 1 **Selectați școala/instituția în care predați.**

- Ș.P. Bubuieci, Chişinău
- Ș.P. nr.1, Cahul
- Colegiul de Medicina, Ungheni

- CESPA, Bălți
- Colegiul de ecologie din Chisinau
- Ș.P. nr.6, Chișinău
- CEHTA, Țaul
- Ș.P. Leova
- Ș.P. Florești
- Colegiul Agroindustrial din Rîșcani
- Ș.P. Căușeni
- Colegiul de Medicină Veterinară și Economie Agrară din Brătușeni
- LT „Mircea cel Bătrîn”, Chişinău
- Gimnaziul „Alexandru Ioan Cuza”, Bălți
- IP Scoala primară "Spiridon Vangheli", Ungheni
- IP LT „M. Eminescu”, Balti
- LT ”M. Eminescu”, Cahul
- IP LT „M. Eliade”, Chişinău
- LT ”Emil Nicula”, Mereni, Anenii Noi
- LT Larga, Briceni
- IP LT "Nicolae Mihai", Ciobalaccia, Cantemir
- IP Liceul Teoretic Lăpuşna
- LT „M. Eminescu”, Leova
- IP LT Ruseştii Noi, Ialoveni

Competențele mele digitale

În această secțiune vă veți evalua competențele Dvs. digitale în calitate de cadru didactic. Vă rugăm să luați în considerație cele 6 zone/domenii diferite ale activității Dvs.

Zona/Domeniul 1: Angajament profesional

Competențele digitale ale cadrelor didactice sunt exprimate în capacitatea lor de a utiliza tehnologiile digitale nu numai pentru a îmbunătăți predarea, ci și pentru interacțiune profesională cu colegii, elevii, părinții și alte părți interesate; pentru dezvoltarea profesională individuală; pentru promovarea eficientă și continuă a inovațiilor la nivel de instituție și în profesia de cadru didactic. Acesta este punctul central al zonei 1.
Opțiunile de răspuns sunt listate în ordinea crescătoare a nivelului de implicare și angajament în utilizarea tehnologiilor digitale. Vă rugăm să alegeți opțiunea care reflectă cel mai bine activitatea Dvs. actuală.

* 1 **Utilizez în mod sistematic diferite modalități/canale digitale pentru a îmbunătăți comunicarea cu elevii, părinții și colegii**

de ex., e-mailuri, bloguri, site-ul instituției, aplicații/Apps

- **Rareori** utilizez canalele de comunicare digitală
- Utilizez modalități/canale digitale de comunicare de **bază**, de ex., e-mailul
- Pot **combina** diferite modalități/canale de comunicare, de ex., e-mailul, blogul clasei sau site-ul școlii
- Selectez în **mod sistematic**, ajustez și combin diferite soluții digitale pentru a **comunica** eficient
- **Reflectez, analizez** și **elaborez, în mod proactiv,** strategiile mele de comunicare digitală

* 2 **Utilizez tehnologiile digitale pentru a lucra împreună cu colegii din cadrul și din afara școlii/instituției**

de ex., e-mail, Moodle, Facebook,...

- **Rar** am posibilitatea de a **colabora** în mod digital cu alți profesori
- **Uneori** fac schimb de materiale cu colegi, de ex., prin e-mail
- Împreună **cu colegii** lucrăm în medii de **colaborare sau** utilizăm aplicații/platforme comune, de ex., Moodle, MS Teams

- [x] Fac schimb de idei și de materiale, inclusiv cu profesori din **afara școlii/instituției mele**, de ex., în cadrul unei rețele de profesori online, pe Facebook
- [ ] **Creez** materiale într-o rețea online **împreună** cu alți profesori

* 3 Îmi **dezvolt în mod activ competențele mele profesionale digitale**

- [ ] **Rareori** am timp să lucrez asupra dezvoltării competențelor mele digitale
- [ ] Îmi îmbunătățesc competențele prin **reflecție** și **experimentare**
- [ ] Utilizez o **gamă largă de resurse** pentru dezvoltarea competențelor mele profesionale digitale
- [x] **Discut cu colegii** despre utilizarea tehnologiilor digitale în vederea inovării și îmbunătățirii activității didactice
- [ ] **Îmi ajut colegii** în dezvoltarea strategiilor lor digitale de predare

* 4 **Particip la oportunități de formare online**

de ex., cursuri online, cursuri online deschise (MOOC), seminare online...

- [ ] Aceasta este o zonă **nouă** pentru mine, pe care nu am valorificat-o
- [ ] Deocamdată nu, dar mă **interesează**
- [ ] Am participat la cursuri online de formare **o dată sau de două ori**
- [x] Am **încercat diverse** oportunități de formare online
- [ ] Particip **frecvent** la **toate tipurile** de formare online

Zona 2: Resurse digitale

Una dintre competențele cheie pe care orice cadru didactic trebuie să le dezvolte este de a identifica resurse educaționale bune și de a modifica, crea și distribui resurse digitale care să corespundă

obiectivelor de învățare, grupurilor de elevi și stilului lor de predare. În același timp, profesorii trebuie să fie conștienți de utilizarea și gestionarea responsabilă a conținutului digital, de respectarea normelor privind drepturile de autor și de protecția datelor cu caracter personal. Aceste aspecte se află în zona 2.
Opțiunile de răspuns sunt listate în ordinea creșterii nivelului de angajament și implicare în raport cu resursele digitale. Vă rugăm să alegeți opțiunea care reflectă cel mai bine activitatea Dvs. profesională actuală.

* 1 **Folosesc diferite site-uri web și strategii de căutare pentru a găsi și a selecta o gamă variată de resurse digitale**

- ○ Nu **utilizez** internetul pentru a identifica resurse
- ○ Utilizez **motoare de căutare** și **platforme educaționale** pentru a găsi resursele relevante
- ◉ **Evaluez** și selectez resursele **conform** grupului meu de elevii
- ○ **Compar resursele** digitale, utilizând o **serie de criterii** relevante, cum ar fi eficiența, calitatea, capacitatea, proiectarea, interactivitatea, atractivitatea
- ○ Recomand **colegilor** resurse digitale și strategii de căutare relevante/potrivite

* 2 **Creez propriile resurse digitale și modific resursele digitale existente, adaptându-le la nevoile mele de predare, de ex., slide-uri, înregistrări video, fișe de lucru**

- ○ **Nu creez** resurse digitale proprii
- ○ Creez fișe de lucru pe un calculator, dar **apoi le imprim**
- ○ Creez doar **prezentări** digitale, nimic mai mult
- ◉ Creez și modific **diferite tipuri** de resurse
- ○ Am creat și adaptat resurse **interactive și complexe**

* 3 **Securizez eficient conținutul sensibil, de exemplu, cel care se referă la examene, clasele de elevi, date cu caracter personal**

- ○ **Nu trebuie** să fac acest lucru, deoarece școala/instituția se ocupă de aceasta
- ◉ Evit **stocarea** electronică a datelor cu caracter personal
- ○ Securizez **unele** date cu caracter personal
- ○ **Securizez cu parolă** fișierele ce conțin date cu caracter personal
- ○ Securizez **în mod comprehensiv** datele cu caracter personal, de exemplu, prin combinarea parolelor greu de spart, criptate și programe software de actualizare frecventă a acestora

Zona 3: Predare și învățare

Competența fundamentală a cadrului DigCompEdu este cea de design, planificare și implementare a utilizării tehnologiilor digitale în diferite etape ale procesului de predare și învățare. Oricum, în acest proces este extrem de important să fie asigurată centrarea procesului pe elev, nu pe cadru didactic. Aceasta este puterea reală a tehnologiilor digitale și orientarea zonei 3.
Opțiunile de răspuns sunt listate în ordinea crescătoare a nivelului de aplicare și implementare a tehnologiilor digitale în procesul de predare și învățare. Vă rugăm să alegeți opțiunea care reflectă cel mai bine practica Dvs. actuală.

* 1 **Analizez cu atenție cum, când și de ce utilizez tehnologiile digitale la clasă, pentru a mă asigura că acestea sunt utilizate eficient, cu valoare adăugată**

- **Nu utilizez** sau utilizez **rar** tehnologiile la clasă
- Utilizez la nivel **elementar** echipamentele disponibile, de ex., tabla interactivă sau proiectorul
- În activitatea mea de predare, utilizez o **varietate** de strategii digitale
- Utilizez instrumente digitale pentru a îmbunătăți în **mod sistematic** predarea
- Utilizez instrumente digitale pentru a pune în aplicare strategii **pedagogice inovatoare**

* 2 **Monitorizez activitățile și interacțiunile/comunicarea elevilor mei în mediile online colaborative, pe care le folosim, de ex., Moodle, Google Classroom, MS Teams**

- **Nu utilizez mediul digital** cu elevii mei
- **Nu monitorizez** activitatea elevilor în mediile online, pe care le folosim
- Efectuez în **mod ocazional** verificări cu privire la interacțiunile elevilor și la discuțiile purtate de aceștia
- In mod sistematic **monitorizez și analizez** activitatea online a elevilor mei
- În mod **sistematic intervin** cu comentarii motivaționale sau corective

*

3 **Atunci când elevii lucrează în grupuri sau echipe, aceștia utilizează tehnologiile digitale pentru a acumula și documenta evidențe/dovezi**

- ○ Elevii mei **nu lucrează în grupuri**
- ○ **Nu este posibil** pentru mine să integrez tehnologiile digitale în activitatea de grup
- ○ **Încurajez** studenții care lucrează în grupuri să caute informații online sau să își prezinte rezultatele în format digital
- ◉ Le **solicit** elevilor care lucrează în echipe să utilizeze internetul pentru a găsi informații și a prezenta rezultatele obținute în format digital
- ○ Elevii mei fac schimb de dovezi și creează în comun cunoștințe într-un **spațiu de colaborare online**

* 4 **Utilizez tehnologiile digitale pentru a permite elevilor să planifice, să documenteze și să monitorizeze propriul lor proces de învățare**

de ex., chestionare pentru autoevaluare, e-portofolii pentru documentare și prezentare, agende/bloguri online pentru reflecție...

- ○ **Nu este posibil** în mediul meu de activitate
- ○ Elevii mei reflectează asupra învățării, dar **fără a utiliza tehnologiile digitale**
- ○ **Uneori**, utilizez, de ex., chestionare pentru autoevaluare
- ◉ Utilizez o **varietate** de instrumente digitale pentru a permite cursanților să planifice, să documenteze sau să reflecteze asupra învățării
- ○ Integrez în **mod sistematic** diferite instrumente digitale pentru a permite elevilor să planifice, să monitorizeze și să reflecteze asupra progreselor lor

Zona 4: Evaluare

Tehnologiile digitale pot consolida strategiile de evaluare existente și pot facilita aplicare unor metode noi, mai avansate de evaluare. În plus, analizând multitudinea de date (digitale) disponibile cu privire la acțiunile individuale ale studenților (inter-), cadrele didactice pot oferi feedback și sprijin mai focusat. Zona 4 abordează această schimbare a strategiilor de evaluare.
Opțiunile de răspuns sunt listate în ordinea crescătoara a nivelului de angajament și implicare în evaluarea digitală. Vă rugăm să alegeți opțiunea care reflectă cel mai bine activitatea Dvs. actuală.

* 1 **Utilizez formatul de evaluare digitală pentru a monitoriza progresul elevilor**

- **Nu monitorizez** progresele realizate de elevi
- **Monitorizez,** în mod regulat, progresele realizate de elevi, **dar nu** prin mijloace **digitale**
- **Uneori** utilizez un instrument digital, de ex., un test scurt, pentru a verifica progresele înregistrate de elevi
- Utilizez o **varietate** de instrumente digitale, pentru a monitoriza progresul elevilor, de ex., partajarea de fișiere, sondaje, chestionare, discuții în chat
- Folosesc, în **mod sistematic,** o varietate largă de instrumente digitale pentru a monitoriza progresul **ele vilor**

* 2 **Analizez toate datele disponibile în format digital, pentru a identifica în timp util elevii care au nevoie de suport suplimentar**

„Date” includ: implicarea elevilor, performanța, notele, participarea; activități și interacțiuni sociale în mediul, inclusiv, online;

Elevii care au nevoie de suport suplimentar sunt: elevii care sunt expuși riscului de abandon școlar sau de a avea performanțe slabe; elevii care au tulburări de învățare sau nevoi speciale de învățare, elevii care nu dispun de competențe transversale, de ex., competențe sociale, verbale sau de învățare.

- Aceste date nu sunt disponibile și/sau **nu îmi revine mie responsabilitatea** de a le analiza
- Eu analizez **numai datele relevante** din punct de vedere academic, de ex., performanțele și notele
- Eu iau în calcul**, de asemenea,** și datele **privind activitatea** și **comportamentul** elevilor, pentru identificarea elevilor care au nevoie de sprijin suplimentar
- Examinez **cu regularitate toate dovezile/evidențele disponibile** pentru a identifica elevii care au nevoie de sprijin suplimentar
- Fac o analiză sistematică a datelor și **intervin** în **timp util**

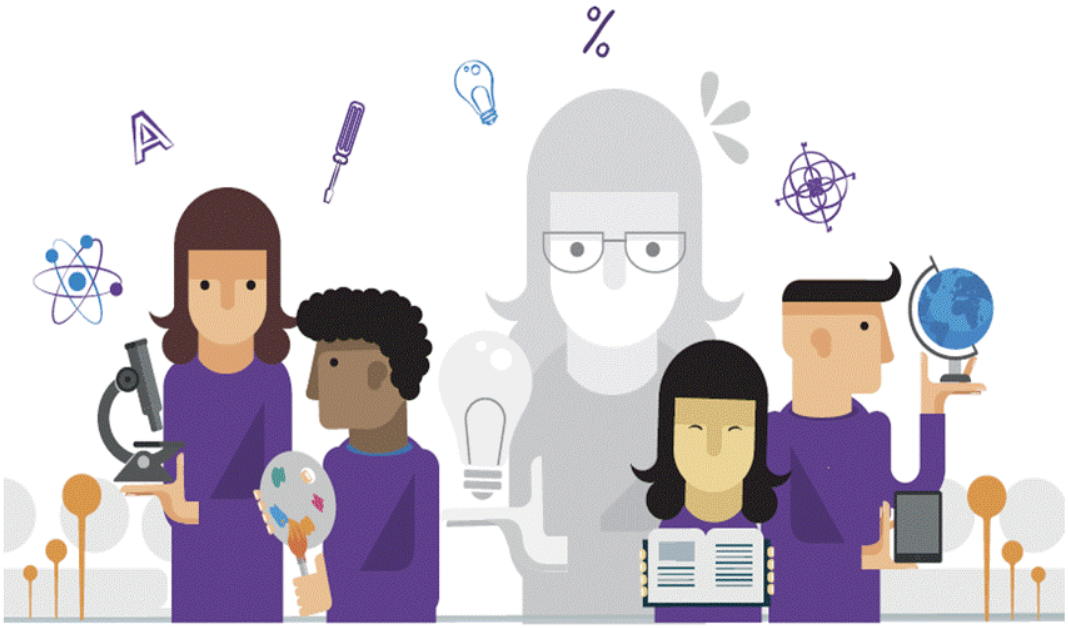
* 3 **Utilizez tehnologiile digitale pentru a oferi feedback eficace elevilor**

- Feedback-ul **nu este necesar** în mediul meu de activitate profesională
- Ofer feedback elevilor, dar **nu în format digital**
- **Uneori,** utilizez modalități **digitale** pentru a oferi feedback, de ex., punctaje automate la chestionare online, comentarii sau „like-uri” în mediul online
-

Frecvent utilizez o **varietate largă** de modalități digitale pentru a oferi feedback

Utilizez în **mod sistematic** modalități digitale pentru a furniza feedback

Zona 5: Împuternicirea și încurajarea elevilor



Unul dintre principalele puncte forte ale tehnologiilor digitale în educație este potențialul acestora de stimulare a implicării active a elevilor în procesul de învățare și oferirii oportunității de a fi parte din proces. În plus, tehnologiile digitale pot fi utilizate pentru a implementa activități de învățare adaptate la nivelul de competență al fiecărui elev în parte, precum și la interesele și nevoile acestora în materie de învățare. Cu toate acestea, în același timp, trebuie să avem grijă să nu fie accentuate inegalitățile existente (de ex., în ceea ce privește accesul la tehnologiile digitale) și să se asigure accesibilitatea pentru toți elevii, inclusiv, pentru cei cu nevoi speciale de învățare. Zona 5 abordează aceste aspecte.

Opțiunile de răspuns sunt listate în ordinea crescătoare a atenției oferite nevoilor individuale de învățare ale elevilor. Vă rugăm să alegeți opțiunea care reflectă cel mai bine activitatea Dvs. actuală.

* 1 Atunci când creez sarcini digitale pentru elevi, iau în calcul eventualele probleme digitale

De ex., accesul egal la dispozitive și resurse digitale; probleme de interoperabilitate și de conversie; lipsa competențelor digitale

Nu am creat sarcini digitale

Elevii **nu se confruntă cu probleme** legate de utilizarea tehnologiilor digitale

Adaptez sarcina astfel încât să minimizez dificultățile

Discut despre posibilele obstacole cu care se confruntă elevii și **prezint soluții**

Permit varietatea, de ex., eu adaptez sarcina, discut soluțiile și furnizez modalități alternative pentru realizarea sarcinii

* 2 **Utilizez tehnologiile digitale pentru a oferi elevilor oportunități de învățare personalizate**

de ex., ofer elevilor diferite sarcini digitale, pentru a răspunde nevoilor de învățare, preferințelor și intereselor individuale în materie de învățare

- ○ În mediul meu de activitate, **toți** elevii trebuie să **desfășoare aceleași** activități, indiferent de nivelul lor
- ○ Ofer elevilor **recomandări** cu privire la resurse suplimentare
- ○ Furnizez **activități digitale opționale** pentru cei care au avansat sau au rămas în urmă
- ◉ **Ori de câte ori este posibil**, utilizez tehnologiile digitale pentru a oferi oportunități de învățare **diferențiate**
- ○ În **mod sistematic** îmi adaptez activitatea didactică la nevoile individuale de învățare, la preferințe și la interesele elevilor

* 3 **Utilizez tehnologiile digitale pentru ca elevii să participe activ la clasă**

- ○ În mediul meu de activitate **nu este posibilă** implicarea activă a elevilor la clasă
- ○ Implic elevii în **mod activ, dar nu** cu utilizarea tehnologiile **digitale**
- ○ **Atunci când** predau, utilizez stimulii motivaționali, de ex., videoclipuri, animații, benzi desenate
- ◉ Elevii mei **aplică activ modalități media digitale** la orele mele, de ex., fișe de lucru electronice, jocuri, teste
- ○ Elevii mei folosesc în **mod sistematic** tehnologiile digitale pentru a **cerceta**, a **discuta** și a **crea** cunoștințe

Zona 6: Facilitarea dezvoltării competențelor digitale ale elevilor

Capacitatea de a facilita dezvoltarea competențelor digitale ale elevilor este parte integrantă a competențelor digitale ale cadrelor didactice și constituie ideea centrală a zonei 6.

Opțiunile de răspuns sunt listate în ordinea crescătoare a nivelului de implicare în promovarea și consolidarea competențelor digitale ale elevilor. Vă rugăm să alegeți opțiunea care reflectă cel mai bine activitatea Dvs. actuală.

* 1 **Predau elevilor modalități de evaluare a credibilității informațiilor și de identificare a informațiilor false și a erorilor sistemice**

- Acest lucru **nu este posibil** la disciplina pe care o predau sau în mediul meu de activitate
- Le reamintesc, în mod **ocazional**, că nu toate informațiile online sunt credibile
- Predau modalități pentru a **discerne între sursele** sigure și cele false
- **Discut** cu elevii despre **modul în care se verifică** exactitatea informațiilor
- Discut **în profunzime** despre modul în care informațiile sunt generate și pot fi denaturate

* 2 **Am elaborat și lansat sarcini care cer elevilor să utilizeze mijloace digitale pentru a comunica și a colabora între ei sau cu un public extern**

- Acest lucru **nu este posibil** la disciplina mea sau în mediul meu de activitate
- Elevilor mei li se solicită doar cu ocazii **rare** să comunice sau să colaboreze online
- Elevii mei utilizează comunicarea și cooperarea digitală, **în principal, doar între ei**
- Elevii mei utilizează mijloace digitale pentru a comunica și a coopera atât între ei, cât **și cu un public extern**
- Lansez **în mod sistematic** sarcini care permit elevilor să își extindă pas cu pas competențele

* 3 **Lansez sarcini care cer elevilor să creeze conținut digital**

de ex., înregistrări video, fotografii, prezentări digitale, bloguri, wiki...

- ○ Acest lucru **nu este posibil** la disicplina mea sau în mediul meu de activitate
- ○ Acest lucru este **dificil** de pus în aplicare cu elevii mei
- ○ **Uneori**, ca activitate distractivă
- ◉ Elevii mei creează conținut digital ca **parte integrantă din studiul lor**
- ○ Aceasta este parte integrantă a procesului de învățare și eu extind **în mod sistematic** nivelul de dificultate, așa încât aceasta să contribuie în continuare la dezvoltarea competențelor lor

* 4 **Învăț elevii cum să se comporte în condiții de siguranță și în mod responsabil în mediul online**

- ○ Acest lucru **nu este posibil** la disciplina mea sau în mediul meu de activitate
- ○ **Informez** elevii că trebuie să fie atenți privind transmiterea online a informațiilor cu caracter personal
- ○ **Eu le explic elevilor** normele de bază pentru a acționa în siguranță și în mod responsabil în mediul online
- ◉ Noi **discutăm** și agreăm normele de conduită în mediul online
- ○ Promovez în **mod sistematic** aplicarea de către elevi a normelor sociale în diferite medii digitale, pe care le folosim

* 5 **Încurajez elevii să utilizeze tehnologiile digitale în mod creativ pentru a rezolva probleme concrete**

de ex., să depășească obstacolele sau provocările care apar în procesul de învățare

- ○ Acest lucru **nu este posibil** cu elevii mei, în mediul meu de activitate
- ○ **Rareori** am posibilitatea de a promova soluționarea problemelor digitale de către elevi
- ○ **Ocazional**, ori de câte ori apare o oportunitate
- ◉ Noi experimentăm **frecvent** soluții tehnologice/digitale în rezolvarea problemelor
- ○ Integrez **sistematic** oportunități pentru soluționarea digitală creativă a problemelor

Informații personale

Acest compartiment ne va ajuta să înțelegem contextul în care vă aflați în calitate de profesor. Informațiile Dvs. cu caracter personal nu vor fi publicate.

Pentru orice întrebări sau incertitudini, vă rugăm să consultați politica EUSurvey privind confidențialitatea.

* 1 **Ce vârstă aveți?**

- ○ sub 25
- ○ 25-29
- ○ 30-39
- ◉ 40-49
- ○ 50-59
- ○ 60 sau mai mult
- ○ prefer să nu spun

* 2 **De câți ani sunteți cadru didactic, luând în calcul și anul curent?**

- ○ 1-3
- ○ 4-5
- ◉ 6-9
- ○ 10-14
- ○ 15-19
- ○ 20 sau mai mulți
- ○ prefer să nu spun

* 3 **Care dintre următoarele discipline le predați Dvs., în principal?**

- (●) Discipline generale academice, de ex., matematică, limbi
- ( ) Disciplinele profesionale sau de specialitate, de ex., inginerie, administrarea afacerilor
- ( ) Altele

* 5 **Predați informatica, tehnologia informației sau programarea?**

- ( ) Da
- (●) Nu

6 **În timpul crizei COVID-19, cât de des ați utilizat instrumentele/activitățile digitale?**

	Niciodată	De câteva ori	O dată pe săptămână	De trei ori pe săptămână sau mai des
* Software pentru clase virtuale (de ex., MS Teams, Google Classroom, Moodle)	( )	( )	(●)	( )
* Instrumente de comunicare video sincrone (de ex., Zoom, Skype, WhatsApp, Facebook)	( )	( )	(●)	( )
* Partajarea și schimbul de documente („servicii de cloud", de ex, Basamp Dropbox, Google Drive, editori online pentru lucrările colaborative)	( )	( )	(●)	( )
* Partajarea ecranului (a profesorului), de ex., pentru a face prezentări sau a transmite sarcini	( )	( )	( )	(●)
* Schimb de idei, chestionare sau sondaje (de exemplu, o Hartă conceptuală, chestionare cu variante multiple de răspuns (pentru autoevaluare))	( )	( )	(●)	( )
* Instrumente de planificare și organizare (de ex., e-mailul și calendarul, sisteme de management al informației prin care să se comunice cu școlile, elevii și părinții)	( )	( )	(●)	( )
* Vizionarea de materiale video și/sau audio de instruire înregistrate (de ex., dintr-o bibliotecă online)	( )	( )	(●)	( )
* Crearea și difuzarea de materiale video și/sau audio (de ex., YouTube)	( )	( )	(●)	( )
* Partajarea și schimbul de documente și mesaje text, de ex., prin e-mail sau site-uri web sau rețele sociale (de ex., Facebook, Whatsapp)	( )	( )	(●)	( )

Dezvoltare profesională continuă (DPC)

COVID-19 a obligat profesorii să treacă la învățământul la distanță și online și să utilizeze diverse tehnologii digitale. Această secțiune analizează posibilitățile de dezvoltare profesională pe care le-ați valorificat în ultimele 12 luni și care au avut un impact asupra activității Dvs.

Vă rugăm să selectați opțiunea care descrie cel mai bine modul în care sunteți de acord cu această afirmație.

* 1 **În ultimele 12 luni am participat la Activități online de dezvoltare profesională pentru a-mi dezvolta competențele digitale.**

- ○ Niciodată
- ○ O singură dată
- ◉ De două sau trei ori
- ○ Deseori

* 2 **În ultimele 12 luni, am fost asistat/sprijinit de alți profesori sau metodiști din școala mea pentru a-mi dezvolta competențele digitale.**

- ○ Niciodată
- ○ O singură dată
- ◉ De două sau trei ori
- ○ Deseori

3 **Dacă ați primit alte tipuri de sprijin sau de instruire pentru a vă îmbunătăți competențele digitale în ultimele 12 luni, vă rugăm să precizați mai jos:**

4 **Cum ați descrie experiența Dvs. în ceea ce privește formarea profesională continuă realizată în ultimele 12 luni, care v-a consolidat competențele digitale?**

	Categoric nu	Nu sunt de acord	Nici acord, nici dezacord	De acord	Categoric da
* Am fost încurajată de instituția mea să particip la activități de dezvoltare profesională	○	○	○	◉	○

* Am selectat cursurile de formare continuă în baza nevoilor mele de dezvoltare personală	○	○	○	◉	○

5 Ținând cont de competențele și de formarea pe care ați avut-o deja, precum și de experiențele din ultimele 6 luni, vă rugăm să evaluați necesitatea de perfecționare profesională continuă care se referă la următoarele tipuri de competențe digitale.

	Nu am astfel de necesități	Nevoie redusă	Nevoie ridicată	Foarte mare
Comunicarea digitală cu elevii și părinții	○	○	◉	○
* Colaborarea digitală cu colegii	○	○	◉	○
* Identificarea, adaptarea și crearea de resurse digitale care servesc unor sarcini de învățare diverse și diferitor categorii de elevi	○	○	◉	○
* Gestionarea și protejarea datelor și a conținutului sensibil	○	○	○	◉
* Utilizarea mai intensă și mai eficace a diferitelor tehnologii digitale	○	○	◉	○
* Facilitarea utilizării de către elevi a tehnologiilor digitale pentru activitățile de grup	○	○	◉	○
* Utilizarea tehnologiilor digitale pentru a evalua activitatea elevilor și a le oferi feedback	○	○	○	◉
* Utilizarea tehnologiilor digitale pentru monitorizarea și analizarea activității digitale a elevilor	○	○	◉	○
* Utilizarea tehnologiilor digitale pentru a implica elevii în învățare în mod activ	○	○	◉	○
* Utilizarea tehnologiilor digitale pentru a răspunde nevoilor individuale de învățare	○	○	◉	○
* Planificarea învățării digitale care va depăși eventualele probleme digitale, de ex., lipsa accesului la dispozitive sau date	○	○	◉	○
* Instruirea elevilor cum să lucreze și să învețe digital	○	○	○	◉
* Instruirea elevilor să utilizeze responsabil, cu spirit critic tehnologiile digitale	○	○	◉	○
* Predarea și evaluarea la distanță în timpul crizei COVID-19	○	○	◉	○

6 **Cum ați descrie impactul programelor de dezvoltare profesională continuă (DPC), la care ați participat, în ceea ce privește competențele digitale?**

	Categoric nu	Nu sunt de acord	Nici acord, nici dezacord	De acord	Categoric da
* Programele DPC m-au ajutat să comunic digital cu elevii și părinții	○	○	○	◉	○
* Programele DPC m-au ajutat să colaborez digital cu colegii	○	○	◉	○	○
* Programele DPC m-au ajutat să identific, adaptez și creez resurse digitale care servesc unor sarcini diferite de învățare și diferitor categorii de elevi	○	○	○	◉	○
* Programele DPC m-au ajutat la gestionarea și protejarea datelor și a conținutului sensibil	○	○	○	○	◉
* Programele DPC m-au ajutat să utilizez mai intens și mai eficace diferite tehnologii digitale	○	○	○	○	◉
* Programele DPC m-au ajutat la facilitarea utilizării de către elevi a tehnologiilor digitale pentru activitățile de grup	○	○	○	○	◉
* Programele DPC m-au ajutat să utilizez tehnologiile digitale pentru a evalua activitatea elevilor și a le oferi feedback	○	○	○	○	◉
* Programele DPC m-au ajutat să utilizez tehnologiile digitale pentru a monitoriza și analiza activitatea digitală a elevilor	○	○	○	○	◉
* Programele DPC m-au ajutat să utilizez tehnologiile digitale pentru a implica elevii în învățare în mod activ	○	○	○	◉	○
* Programele DPC m-au ajutat să utilizez tehnologiile digitale pentru a răspunde nevoilor individuale de învățare	○	○	○	◉	○
* Programele DPC m-au ajutat la planificarea învățării digitale, așa încât să depășesc eventualele probleme, de ex., lipsa accesului la dispozitive sau date	○	○	○	○	◉
* Programele DPC m-au ajutat să îi învăț pe elevi cum să lucreze și să învețe pe cale digitală	○	○	○	○	◉
*					

Programele DPC m-au ajutat să instruiesc elevii în ceea ce privește utilizarea responsabilă și judicioasă a tehnologiilor digitale	○	○	○	○	◉
* Programele DPC m-au ajutat în predarea și evaluarea de la distanță în timpul crizei COVID-19	○	○	○	○	◉

7 Ce modalități de formare continuă pentru dezvoltarea **competențelor digitale preferați?**

Vă rugăm să precizați dacă sunteți de acord cu următoarele afirmații.

	Categoric nu	Nu sunt de acord	Nici acord, nici dezacord	De acord	Categoric da
* Aș dori să particip la activități cu contact direct, facilitate de formatori în sala de curs, pentru a-mi dezvolta competențele digitale	○	○	○	○	◉
* Aș dori să particip la cursuri online pentru a-mi dezvolta competențele digitale	○	○	○	◉	○
* Aș dori să ajut și alți profesori sau metodiști din școala mea să își dezvolte competențele digitale	○	○	○	◉	○
* Aș dori să particip la programe de formare continuă, care combină metode „față în față” și „online”.	○	○	○	○	◉

8 **Vă rugăm să adăugați orice altă observație referitoare la Programele de formare continuă pentru dezvoltarea competențelor digitale.**

9 **Dacă doriți să primiți informații actualizate despre învățarea digitală și online, vă rugăm să introduceți adresa dvs. de e-mail în caseta de mai jos.**

Contact

Contact Form