



Co-funded by
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Distance Education
Quality Framework

PR1

DEQF Students Survey

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Introduction

Recently, a growth in *distance education* programs can be seen because of the time and space restrictions of face-to-face learning systems caused by the global Covid-19 pandemic which has forced an immediate worldwide transition from frontal teaching in classrooms to online-teaching on various video conference platforms. Because of its suddenness, little framework or guidelines existed for online teaching. Hence, many teachers and trainers, not only in the VET and IVET fields, were caught unprepared to deal with the new emergency challenge often using the methods - mainly of transmissive type - they have always applied in their conventional classes.

The aim of this project, called Distance Education Quality Framework, is exactly that of rethinking *distance education* as a valuable tool to be integrated into ordinary classes through a set of specific suggestions and approaches intended for the teaching staff. Some main points of this research will concern the effective design of online courses and the active presence of the instructor, the development of an online sense of community, participation and discussion by the students, a rich set of online presentation materials/study aids, and inclusion of both knowledge and problem-based learning exercises.

In order to accomplish this project, the partners involved in this study, *Luigi di Savoia, Abruzzo Regional Education Authority, Dimitra, and Stiftelsen Kursverksamheten vid U-auniversitet* have decided to develop three meaningful *Intellectual Results*:

- **R1** - *Survey of perceived quality in distance learning and data analysis;*
- **R2** - *Toolkit containing tools, didactic approaches, to make Distance Learning more inclusive and personalized with respect to the needs of learners;*
- **R3** - *Implementation of a quality framework on distance learning that takes into account the EQAVET quality assurance cycle.*

Following this introduction is the *First Intellectual Result* which is the first tangible product of the work and cooperation of this Strategic Partnership for vocational education and training. Students' attitudes and perceptions, the corresponding attitudes of the course instructor, instructors' expertise with the technology and their ability to overcome interactive problems have been found to be important factors that can influence distance education experience and for this reason have been deeply analyzed in this work.

Thus, an initial phase of study and research on the perceptions of online learning was fundamental to develop the project. To do so, the partners determined to carry out a qualitative survey addressed to 400/500 VET students - 16/17 year-olds - in the 3 partner countries. The questionnaire included 27 items, the responses of which have been analyzed with the help of the National Association of Psychologists.

The areas investigated have comprised the methodological field, the digital tools used, the emotional and motivational sphere of the students during distance classes, and the assessment and testing methods.

On the other hand, perceptions on online teaching were likewise central. Therefore, another questionnaire was arranged to be submitted to a number of teachers ranging from 3 to 6 per partner-country for specific disciplines, such as English, Mathematics, Literature and History. As to the areas investigated in this survey, emphasis has been placed on teachers' digital skills and technical mastery, their ability to adapt teaching methodologies to *distance education*, content, timing, evaluation, and their ability to motivate students and re-adjust their actions based on feedback received by students.

In essence, R1 turns out to be an analysis of the perceived quality of *distance education* based on the perceptions of the questionnaire respondents. On the basis of the information collected from the students' survey, the partnership will arrange a toolkit (R2) which is the



second tangible result of this project consisting in a fundamental collection of resources for the teachers engaged in distance education. The last paragraph of this analysis shows the critical areas emerging from the results of the questionnaires. Targeting these areas has led to the development of a set of indicators essential for the development of the framework (R3) which represents the last intellectual output of the project.

The sections below illustrate in detail the findings of this research.

Teachers' Interviews – analysis

Teachers perceive that they have good digital skills and overall adequate knowledge of the tools, supported by in-service training that only in 30 percent of cases was conducted independently in self-training. The transition to distance education has been for many a source of stress especially because of the short time in which one had to reorganize the work and the awareness that DL introduces aspects of change that pose a new challenge for teachers. To this end, exchange of ideas and support among colleagues have been very useful in managing the new tools of teaching and acquiring new problem-solving skills (learning by doing).

All the teachers interviewed say they have developed a plan for distance education that has generally been revised on a weekly or multi-day basis in the wake of settling and/or improving distance activities. Most schools (90 percent) provided computing devices to students. In case of poor connection or other problems, teachers indicate that alternative ways of working were used, such as using personal devices or providing asynchronous activities within virtual classrooms in the adopted e-learning platforms (LMS) of individual schools, sharing assignments and materials with students.

In contrast, the design of distance activities in only half of the cases considered learners' prior digital skills, which were considered essential, while the other half of the teachers indicate that these skills were not always recovered or considered concerning a curricular development of digital skills.

However, 60 percent of teachers believe that the experience gained in distance learning can turn useful in teaching once the pandemic emergency has passed. Therefore, DL is perceived as an element of teaching innovation for a quality school.

In the evaluation phase, then, 70% of teachers say they take into account the entire evaluation process, indicating, in a few cases, motivation, continuity and quality of participation as process aspects. In contrast, the rest of the respondents focus evaluation only on results. For most teachers, digital skills enter the assessment of learning in an integrated way with disciplinary skills, most interesting is that 50% of respondents consider creative skills in the use of digital tools as part of the assessment. Both, formative and summative aspects, are taken into account in assessment, by a variety of means/tools, structured and unstructured.

For three-quarters of teachers, moreover, assessment results constitute feedback to recalibrate learning activities over the year, while almost all teachers state that these results are useful for planning activities in the following year. In any case, all teachers take into account possible contextual interference and factors related to the students' situation at home when assessing; therefore, flexibility and additional opportunities to conduct tests and verifications have been offered to students, but most importantly, all teachers have made efforts to help students overcome the difficulties that have arisen.

Students' survey results

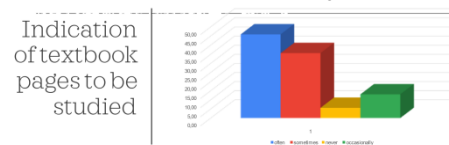
The partners submitted DEQF survey to almost 500 VET students attending VET schools in different Countries: Italy, Greece, Sweden, Austria. The questions have been developed thanks to the scientific supervision of the Italian Psychologist Association.

The survey aimed at the investigation of the students' perception of DL, especially during the pandemic period. The questions of the survey were conceived according to a multiple-choice model: (never, occasionally, sometimes, often)

At first, the project staff wanted to investigate the composition of the sample, in general students aged between 16 and 17 years old (56% males, 44% females). Almost 85% of the sample stated to have a good internet connection at home; in addition, almost 90% of them had their own PCs or tablets. The two indicators seem to represent a good start for quality distance learning!

The first section of the questionnaire dealt with learning and teaching practice, focusing on the different activities developed by the teachers in DL.

Oral explanation



It is possible to stress that most of the teachers didn't make so many efforts to adapt the contents of their DL lessons. Almost 80% of the teachers used the approach of oral explanations to present the topics of the subjects as reported by the students (see above). Among them, more than 40% gave the students only the indication of the textbook pages to be studied. On the other hand, some teachers (about 27%) allowed the pupils to conduct free research of material and information.



Interactive
whiteboard



Explanation
with slides

Videos
made by
the
students

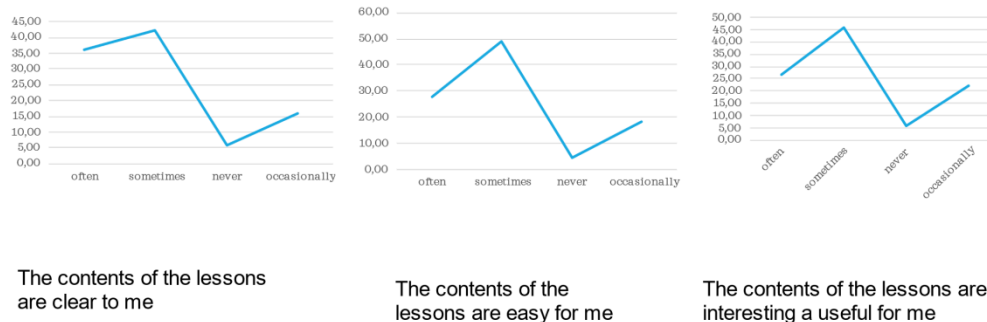


Videos
made by
teachers



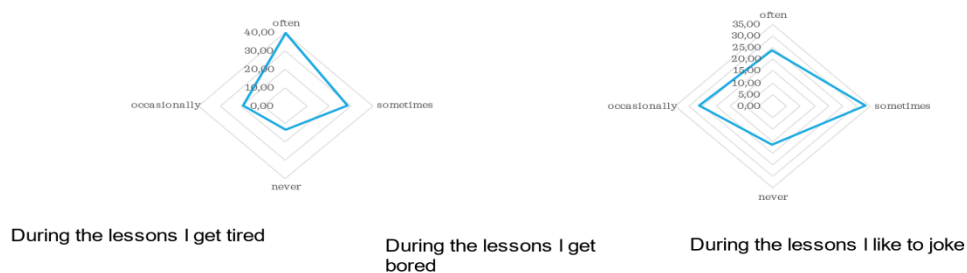
We tried to add some more details to this topic by asking additional questions related to the activities proposed by the teacher during DL lessons. We found out that 17,45% of the teachers never used Interactive whiteboard in class, while 26,49% of them used it. More than 10% of the teachers neither used slides or videos during the explanations nor promoted the production of visual resources among the students (never 56%).

The contents of the lessons



A group of items tried to inquire what was the students' perceptions related to the contents of the disciplines presented in DL. It is possible to record that for 35% of the students, contents in DL were "often" clear, for 28% they were "often" easy, for 26% they were "often" useful. Considering the 3 indicators: clear, easy, and useful, it can be also underlined that the contents are only "sometimes" clear, easy, and useful for a percentage of students between 40% and 50%. Therefore, it seems quite clear that it's necessary to take into consideration these critical aspects highlighted by the students to compose a quality DL framework.

During the lessons...

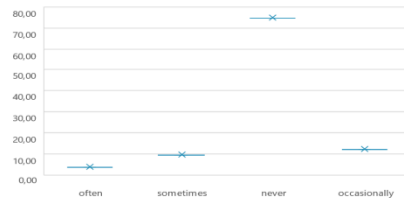


The previous data can be matched with the items related to the behaviour of the students during the lessons in DL. As the contents were not always clear, easy, or useful, the students got tired or bored (40%) and they started to joke during the lesson (23%). Only 13% of the sample reported never being tired or bored during DL lessons; in addition, only 16% reported never getting distracted (see the indicator "during the lessons I like to joke"). From the last data it is possible to summarize that, on average, only 14% of the interviewed students were always focused during DL lessons

DL at home



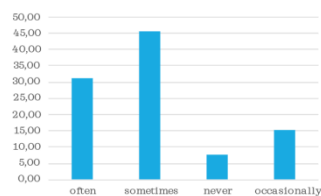
I get distracted at home because of the noise around me



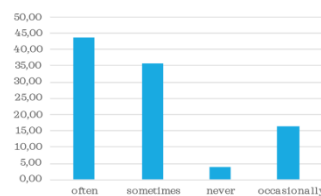
My parents/ relatives help me with tasks during the lesson

Afterwards, we wondered why the students got bored or distracted, perhaps for the surrounding noise. More than 20% said "often"; 26% said "sometimes". Consequently, it is possible to assume that home settings were not always appropriate for DL, but, as it can be logically inferred, teachers cannot do anything to improve the learning conditions during DL. The only possible action to be taken is to establish a dialogue with the families. Although the parents stay around at home while their children are having DL lessons, they hardly ever interfere. In this regard, we directly asked the students if their parents helped them with assignments during the lessons, well 75% answered "never".

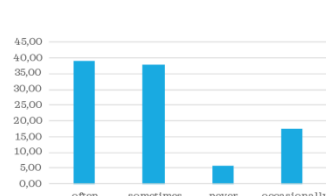
I'm Interested...



I am interested / I feel involved when a topic is concrete (I have a problem to solve)



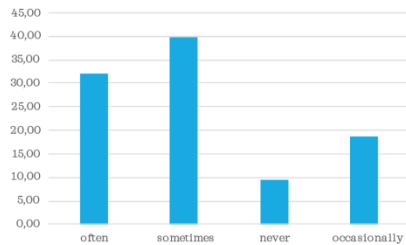
I am interested / I feel involved when a topic is related to my experience (mark only one answer)



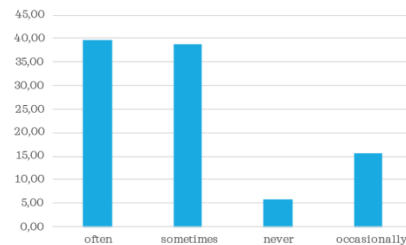
I am interested / I feel involved when I have to do, build or create something

The items of the survey above aimed at understanding when and how the interest of the students has been shown during DL. Through the answers of the learners, it is possible to understand what kind of methods or approaches could be more effective in DL. We found out that learners felt involved when a topic is concrete, it is related to their experiences (often 43%) or they could create something (often 38%). The answers to these items show that students would be more involved through cooperative learning or problem-based learning approaches, even in DL. That's the real challenge of our Distance Learning Quality Framework.

I'm Interested...



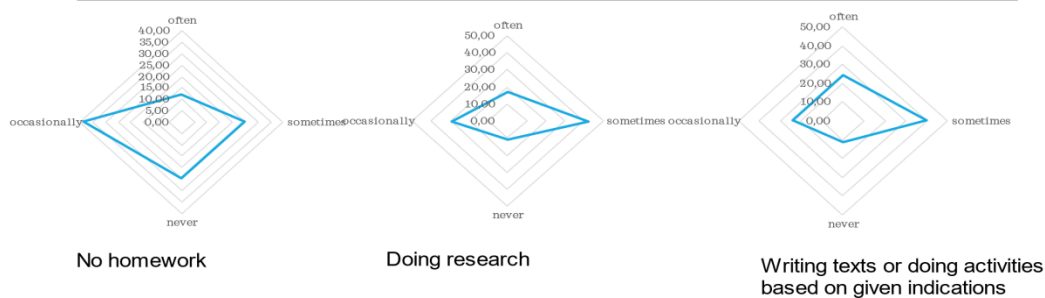
I am interested / I feel involved when I can work in group in a virtual room



I am interested / I feel involved when someone asks my opinion

It is possible to reinforce our belief by observing the results of the items above: most of the learners said they felt more involved if their opinions were asked (40% answered "often" and 48% "sometimes"), but they were not sure that the best way to get involved was to work in the virtual room (32% answered "often" and 40% "sometimes"). That means that it is necessary to reflect upon the appropriate tools which could allow cooperative learning in DL. (Refer to the toolbox in this matter).

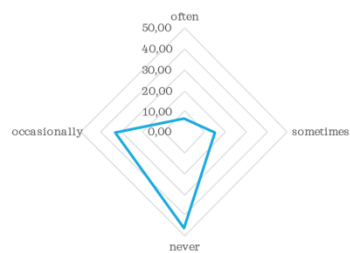
Assignment



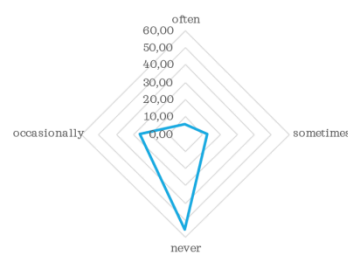
Once investigated the feelings of the survey sample during the presentation of the content, we wished to understand what kind of assignments the teachers proposed to the students. We didn't make any difference between synchronous and asynchronous tasks, meant as a self-activity without the teacher or with the supervision of the teacher.

Looking at the following spider graphs, it is possible to underline that 24,44% of the sample had homework regularly and about 39% of them had occasionally assignments to do so, what kind of tasks or homework did they have to do? Most of the teachers gave their students research to do on different topics (17% "often"; 42% "sometimes") other teachers proposed guided written activities ("often" 24%; "sometimes" 40%) as tasks.

Assignment



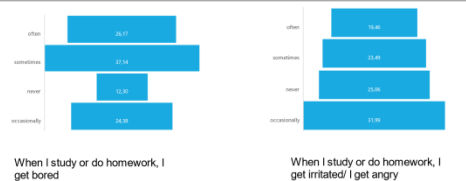
Making role -playing, games or simulations and lessons



Creating artistic products from different genres

However, we realized that most teachers didn't assign tasks aimed at improving creative skills and critical skills. As a matter of fact, half of the learners (on average) reported they never had such activities as role-playing, games, lessons, or simulations. We got the same result from the item related to the creation of artistic products

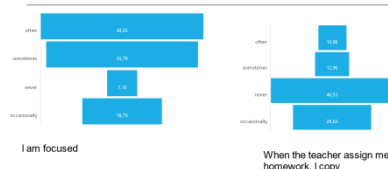
When I study



When I study or do homework, I get bored

When I study or do homework, I get irritated/ I get angry

When I study

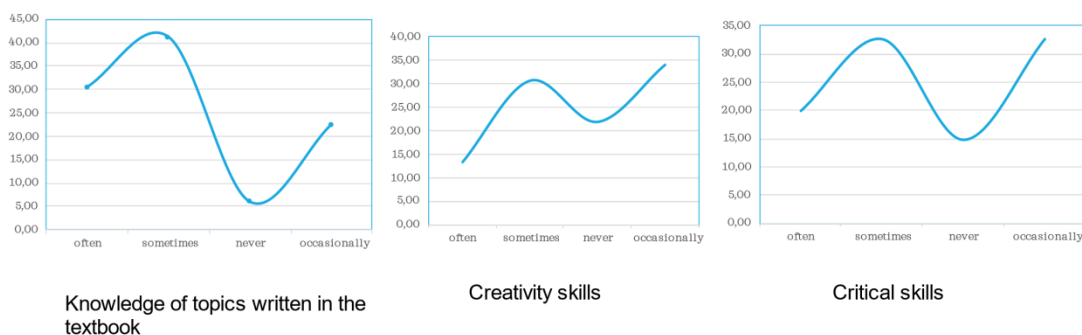


I am focused

When the teacher assign me homework, I copy

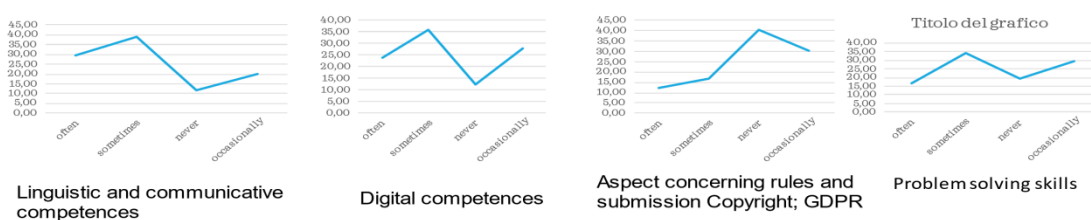
As a result of a lack of creativity, the students reported getting bored (“often” 26%; “sometimes” 37%); angry (“often” 20%; “sometimes” 23%). Despite this, about 38% of the students were focused while studying.

Assessment



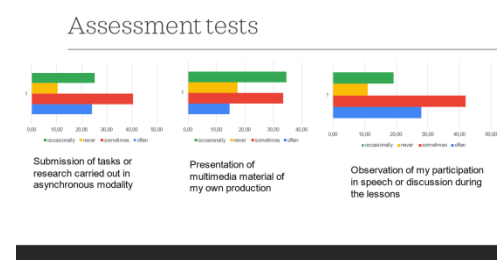
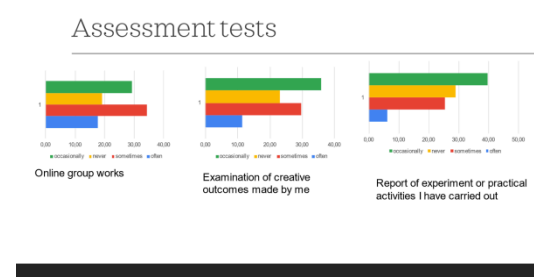
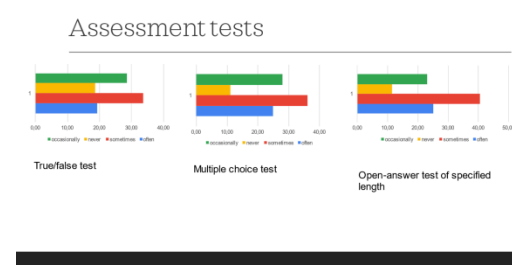
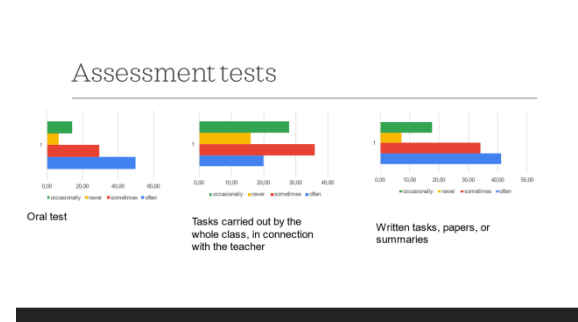
Many items of DEQF survey were dedicated to the assessment. In the first place, the team tried to understand if the teachers assessed only contents (knowledge) or contents+skills and which of those skills were assessed. As you can see above, many students were assessed on their knowledge of the contents in their textbooks (“often” 30%, “sometimes” 41%). While creative skills were not very often assessed (“never” 22%; “occasionally” 34%). On the other hand, critical skills were more frequently taken into consideration (“often” 20%; “sometimes” 32% - the graph is much more balanced as you can notice).

Assessment contents



Moving forward with our reflection on the assessment indicators, we found out that linguistic and communicative competencies were only “sometimes” assessed for 39% of respondents and frequently assessed (“often”) for 30% of respondents. We can also remark that, on the other hand, teachers seem to include digital competences in the global evaluation of the students’ performance (24% answered “often” and 36% “sometimes”) even if most of them didn’t take into account the aspects related to Copyright and GDPR (40% of the

teachers answered “never”). We can also notice that problem-solving skills were not always assessed by the instructors which instead would be crucial in developing a real cooperative learning approach. Problem-solving skills were “never” assessed by 20% of the educators interviewed which conflicts with what the students stated in their survey reporting that 17% of learners were assessed in their problem-solving skills.



As a second step related to the assessment field, the survey aimed at investigating what kind of assessment tests the teachers presented to their students in order to check if they were related to the competencies and skills the teachers planned to assess. For practical reasons, we divided the test models into two blocks: the first category could be considered not appropriate for a quality DL; the second category, according to our opinion, could be used in a DL setting. Based on the results, it is possible to affirm that most of the teachers submitted

quite traditional tests to their students. Let's try to go into detail, analyzing the first category (assessment tests unfit for DL).

As you can observe from the above images, oral and written tests represent the majority of assessment tests category, but they are not always appropriate for distance learning per se. The students reported being assessed often through oral tests ("often" was answered by 50% of students and "sometimes" by 30%); besides written tests were often chosen by 41% of the teachers. True/false and multiple-choice tests, definitely unfit on DL, were often chosen to assess students by 19% of the teachers and, going into detail, as many as 33% of instructors stated that they "sometimes" used true/false testing, and another 24% "often" used multiple choice tests.

Concerning the second category (appropriate for DL), we can remark that the results are not so encouraging.

On average it is possible to stress that the indicators: "sometimes" and "occasionally" are predominant in this category. The above-mentioned data leads us to reflect on the importance of training the teachers to reformulate assessment tests in DL.

Cooperative Assessment



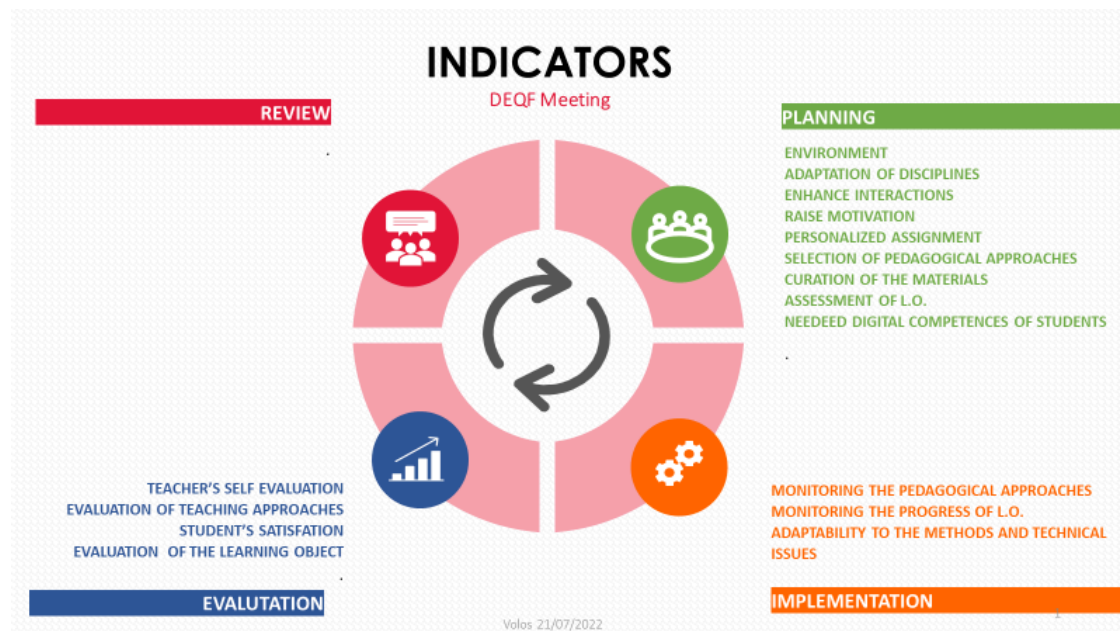
The final questions of the DEQF survey were related to the post-assessment or cooperative assessment. We found out that 10% of the students get no explanation of their marks ("occasionally" this happened for only 30% of the students). In addition, 20% of the pupils were never "initiated" to self-assessment (31% only "occasionally"). Finally, a peer assessment method was "never" used by 24% of the teachers and only 35% "occasionally" used it.

Conclusions – Indicators for the DL Framework

The survey addressed to learners' sample gave a great opportunity to reflect upon the urgency to develop a DL quality framework. We started the reflection deeply analysing the critical points pictured by the students, developing some indicators referred to the EQAVET cycle. Quality assurance is based on 4 phases: planning, implementation, evaluation and review. EU strongly recommends the use of QA in education. For each phase and based on

the answers given by the students, we developed some indicators to improve the critical points highlighted by the learners.

Below is a diagram of the indicators selected by the partnership.



In order to develop a Quality Distance Education Framework, during the planning phase it's necessary to take into account the environment of the students at home such as a good Internet connection, a quiet setting, and the availability of digital devices. As a prior intervention, the teachers should measure the digital skills of their students.

From the teachers' side, they should plan learning outcomes according to the needs of the students taking into consideration specific aspects, such as the adaptation of the discipline contents, the curation of the resources, and the selection of pedagogical approaches. Furthermore, the teachers should plan appropriate strategies or tools to enhance interaction and raise motivation. Finally, they should plan how they are going to assess learning outcomes in terms of test categories and appropriate time.

During the implementation phase, the teachers will have the role of facilitator and supervisor. It is necessary, during this stage, to monitor the relevance of the pedagogical approaches, and the progress of learning outcomes. Finally, it is crucial to check if the adjustment to the methods was successful. At this point, the teachers might have also to deal with the solution of technical issues.

From the evaluation phase, the teacher will be able to collect the elements to review the cycle from the very beginning (planning phase). It is the time for the teachers to evaluate the success of their learning and teaching action. This can be done through a complex process dealing with the teachers' self-evaluation, evaluation of the learning outcomes, evaluation of the teaching approaches, and students' satisfaction.