

Empowering Teachers to Design Innovative Assessment Tools in a Digital Era

2020-1-PT01-KA201-078733

Intellectual Output 1: Needs-analysis report

2021







Introduction

ASSESS is a project, co-financed by the Erasmus+ Agency of the European, that aims to bring an innovative framework and innovative tools for student assessment. Focusing on the development of academic, environmental, emotional, and social skills, the project also aims to promote an inclusive mindset around student assessment. By doing so, the main goal is to create an assessment that is integrated as part of the learning experience and through which students encounter multiple opportunities for development. In sum, ASSESS aims to provide teachers as students a shift in the assessment, turning it into a powerful tool for learning and development.

ASSESS is a project directed to schools and to teachers. As such, the first step in the development of the project was to involve teachers in the process to co-create with them a framework and tools that are adjusted to their needs and wishes. The first step of their involvement in the project was the creation of a needs-analysis survey. This document reports on the results of this survey in Portugal, Greece, Spain, Romania, Italy, Croatia, Colombia, Germany, Macedonia, Philippines, Nepal, Belgium and Bulgaria.

The results here reported constitute a valuable vision of the needs that teachers face in terms of assessment and will be the basis for the further development of the project.





Purpose of this document

This document aims to report and demonstrate the needs-analysis made in the framework of the ASSESS project. The data here contained can be a valuable resource for the national and international organisations as well as for policy makers working in the field of education.





Methods

Designing the tool

The survey was designed based on the objectives of the project. Considering that innovative tools were going to be designed, the survey was created focusing on the different purposes of such tools. The team reflected about what information should be retrieved by the teachers (who are the main target users of the project outputs) and based on this reflection, the survey was created. This study was the first pilot test of the tool.

Data gathering

After the tool was designed, an announcement was created, which partners of the project used to invite teachers to participate in the project and answer the survey. This announcement was distributed online to over 7000 teachers. The survey was created in English and translated to Greek, Portuguese and Spanish.

Data analysis

After collecting all data, partners translated the answers from their national languages to English. Open ended questions were analysed, and the individual answers were grouped in categories, according to their nature. For each open-ended item, different categories were defined, based on the answers collected from teachers. The answers were attributed to the categories and the data was gathered in graphics. Multiple choice items were reviewed, and the data was cleaned for the optimization of the analysis.

Items where answers showed inconsistency between themselves or in relation to the question were not considered in this analysis.



Characterization of the participants

Number of participants: 208

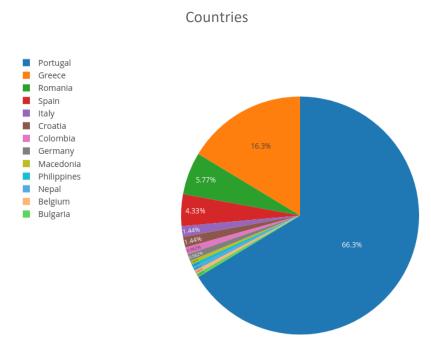


Figure 1. Country of origin of participants in the survey

Grade Levels

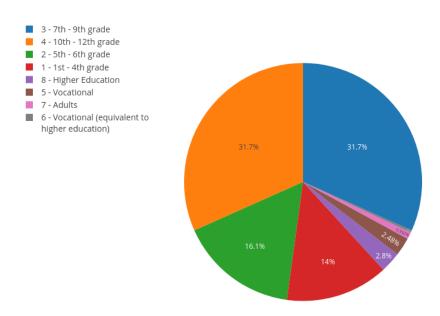


Figure 2. Grade levels that participants teach



Subject domains

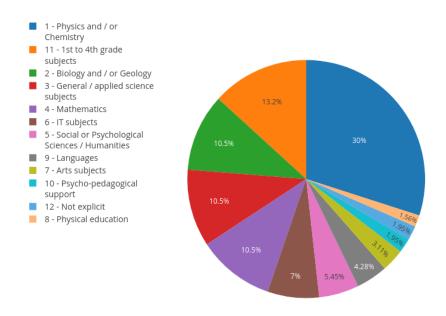


Figure 3. Subject domains that participants teach



Results

1. Current practices in student assessment

1.1 In your opinion, what is the purpose of student assessment?

Type of question: Open ended

Analysis: Answers were grouped in 8 different categories according to their nature. The categories are detailed in the following plot.

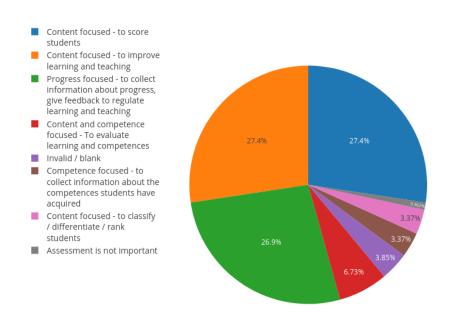


Figure 4. In your opinion, what is the purpose of student assessment?

Important note: When looking at these results, it is important to consider that the validity of this item is not ensured as teachers might have interpreted the question differently. While most teachers shared their own opinion about the importance of student assessment in their view, a few teachers might have shared what they think is nationally established as being important. This is applicable especially to the category "to give a classification and differentiate (rank) students".



1.2 If it was not mandatory, would you still assess your students? If so, why?

Type of question: Open ended

Analysis: Answers were grouped in 7 different categories according to their nature. The categories are detailed in the following plot.

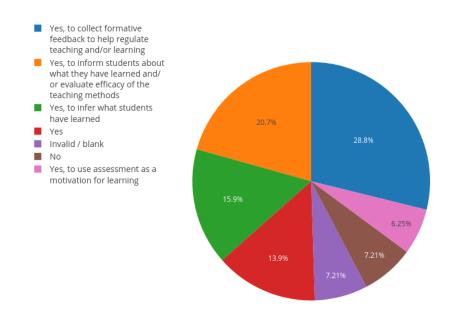


Figure 5. If it wasn't obligatory, would you still assess your students? If so, why?

Summary: Most teachers would still assess their students even if it was not mandatory. Although a minority would assess to collect information about what students learned, to classify students and to infer what students have learned. Many teachers mention that they would prefer a formative assessment to collect information and share it with students to promote the regulation of both teaching and learning. Some teachers would not do it to collect formative feedback, but mainly to inform students about what they have learned and to review their teaching methods. Several teachers mention that they would use different tools if they could.





1.3 What type of assessment are you currently using to assess your students?

Type of question: Multiple choice. Options 1 and 2 were available by default. The others were added by respondents.

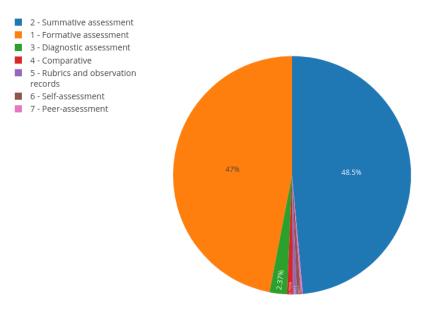


Figure 6. What type of assessment are you currently using to assess your students?.

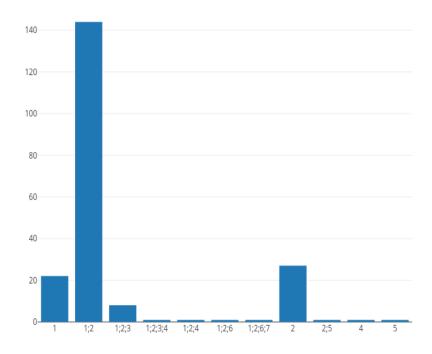


Figure 7.Frequency of the different combinations of choices respondents selected for the question "What type of assessment are you currently using to assess your students?".



1.4 If you chose "formative assessment", can you please explain how you do it? Explain for example in which moments you assess your students and which tools you use?

Type of question: open ended

Analysis: Answers were grouped in 4 different categories according to their nature. The categories are detailed in the following plot.

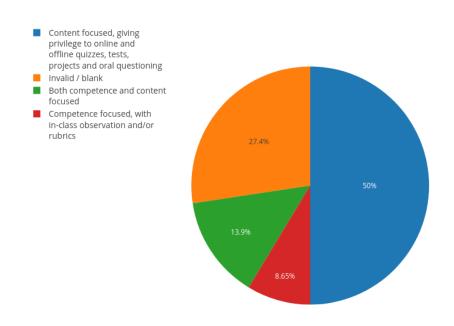


Figure 8. If you chose "formative assessment", can you please explain how you do it? Explain for example in which moments you assess your students and which tools you use?

Summary: Although many teachers have claimed to use formative assessment in a previous answer, it is evident in this item of the survey that many respondents still focus their assessment efforts on evaluating the learning of the content (memorization and understanding) through traditional tools and use the assessment tools for this end instead of focusing on competence development. Still some teachers explain that they constantly evaluate their students through observation, rubrics, projects, presentations, activities, etc. Teachers who seem to use formative assessment to support the students' learning, do it by giving them regular feedback and advice for improvement. In fact, only a few consider formative assessment as a constant daily activity linked to the learning process.



1.5 How do you collect data to assess your students?

Type of Question: Multiple choice with option for custom choices.

Analysis: Answers were grouped in 16 different categories according to their nature. The categories are detailed in the following plot. The choices are identified by numbers to count the different combinations of choices. However, given their diversity, they are too many to show and discuss here. Suffices to say that almost all of them use choices 1 and 2. That is: tests, exams, and observation. Others use the most and least popular choices in many ways.

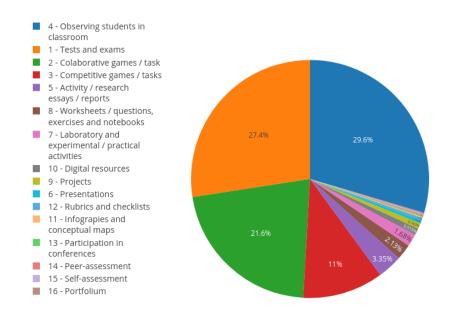


Figure 9. How do you collect data to assess your students?

Summary: The most common choices were the first four options in the legend above, that is: observation of students in the classroom, tests, exams, essays or, collaborative and competitive games / tasks and reports of activities or research topics. And although different combinations of multiple choices were many and diverse (39 combinations) (in fact too many to plot them here), most common combinations included 1, 2, 3 and/or 4. Showing that the traditional methods to collect data do assess students are dominant across teachers, with very few teachers using formative assessment approaches, even if approximately half of them say they do (question 1.3).



1.6.1 What tools do you currently use to assess your students?

Type of Question: Open ended.

Analysis: Answers were grouped in 11 different categories according to their nature. The categories are detailed in the following plot.

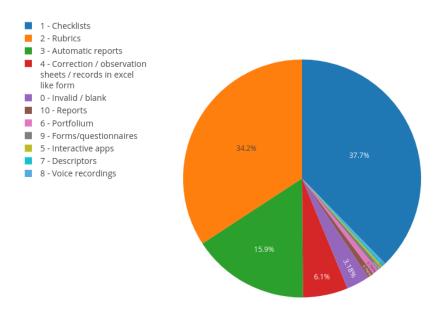


Figure 10. What tools do you currently use to assess your students?

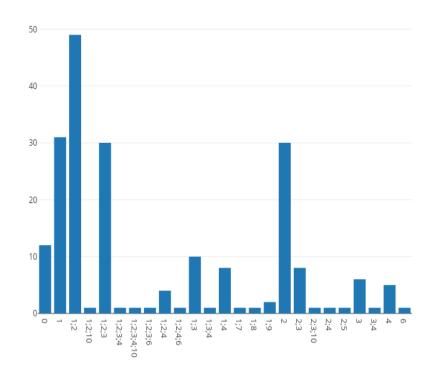




Figure 11. Frequency of the different combinations of choices respondents selected for the question "What tools do you currently use to assess your students?"

Summary: Most teachers described a combination of tools they use when assessing students. More than half of these combinations include checklists and Rubrics (frequently in combination with automatic reports), and many times one or the other was selected as the only tool they use. Those combinations include other less commonly used tools as well.

1.6.2 In what format do you use the tools you selected in the previous question?

Type of Question: Multiple choice.

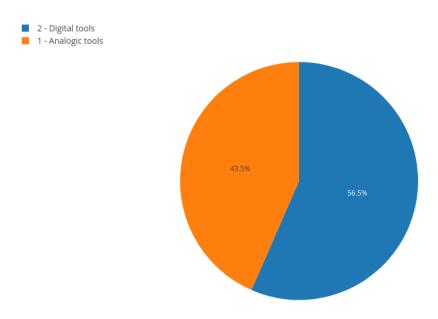


Figure 12. In what format do you use the tools you selected in the previous question?

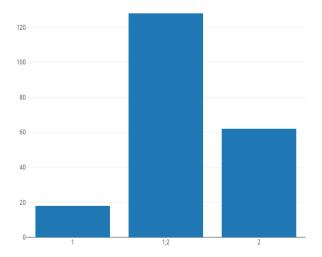


Figure 13. Frequency of the different combinations of choices respondents selected for the question "In what format do you use the tools you selected in the previous question?"



1.7 What is your main focus when assessing your students?

Type of Question: Multiple choice. In the available choices' description; "Knowledge acquired" is described in regard to curriculum content; "Cognitive skills" as scientific reasoning, critical thinking, creativity, communication, etc.; Emotional skills as self-regulation, well-being, interest, engagement, etc.; Social skills as respect, tolerance, friendship, solidarity, helping others, etc.

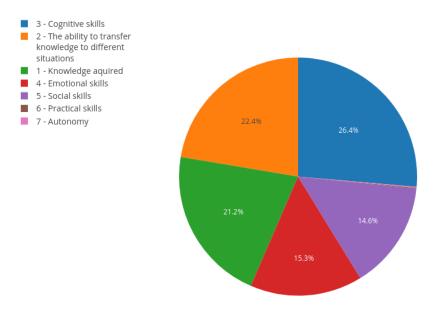


Figure 14. What is your main focus when assessing your students?

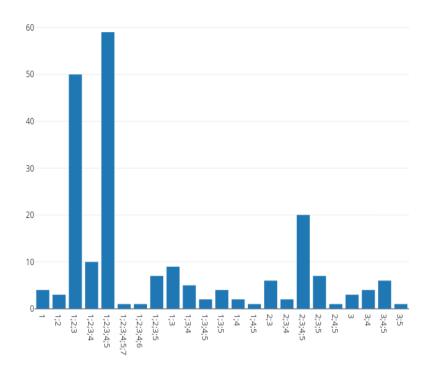


Figure 15. Frequency of the different combinations of choices respondents selected for the question "What is your main focus when assessing your students?"



1.8.1 When you assess your students, which of the following do you consider?

Type of Question: Multiple choice.

Analysis: Answers were grouped in 10 different categories according to their nature. The categories are detailed in the following plot. The choices are identified by numbers to count the different combinations of choices. Again, given their diversity, they are too many to show and discuss here. Suffices to say that almost all teachers consider a variety of aspects and not just one and that the most popular choices come frequently in combinations with one another, namely: Equality in all aspects; the students' current social and emotional situation; the student's personality; the students' family context; UDL principles and gender equality.

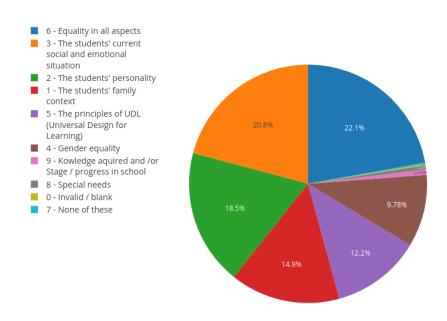


Figure 16. When you assess your students, which of the following do you consider?



1.8.2 Please choose one of the options you selected in the previous question and explain why you consider it important and how you consider it in the student assessment.

Type of Question: Open ended.

Analysis: Answers were grouped in different categories according to their nature. The categories do not necessarily correspond to the teacher's choice or choices in the previous question. They were made according to the teachers' justification for their choices, which many times do not correspond directly to their choices but overlap or combine with others. For instance, some teachers who chose "Gender balance" in the previous question, justified their choice on principles of fairness / equality / inclusiveness. Furthermore, many times their justification was incomplete out totally absent. For these reasons the categories detailed in the following graphics express more the teacher's main focus when assessing students rather than a complete answer to the question above.

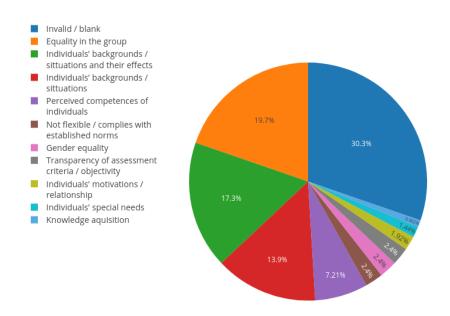


Figure 17. Please choose one of the options you selected in the previous question and explain why you consider it important and how you consider it in the student assessment.

Summary: Most teachers chose a different combination of options in the previous question, but their justification of how and why they consider their option / options important is in general incomplete or absent. Most say they try adjusting their teaching methods and assess tools accordingly to their choice / choices but not all of them explain it in detail or even go beyond repeating their choice. In fact, 30,3% did not answer to this question at all. Many of those who mention the importance of equality, in the first most frequent category, justify their choices based on ideals of fairness and inclusiveness and the fundamental right of access to information / materials, equal opportunities, independently of family / social-economic context or gender and emotional situation. These teachers appear to have a more global perspective of a student class rather than an individualised one, though a few, tend to appreciate (without specificity) diversity and individual situations as well. In the third and fourth most frequent categories "Individual-centered (background / situation and effects)" and "Individual-centered (background / situation)" category, teachers selected mostly different combinations of "The student's family context", "The student's personality", "The student's current social and emotional situation" or just one of them as a factor(s) to appreciate when assessing their students. These teachers appear to individualise more assessment according to needs, personality,



background or situation. When teachers chose "Individual-centered (background / situation and effects)" they argue for the importance of their choices based on the influence (many times negative) that the students family context / personality / current social and emotional situation may have on the student's content/competence acquisition / performance / well-being in general. Few teachers with very different justifications were categorised outside the dominant categories. Their choices and justifications were not representative of the general perspective.

1.9 When you assess your students, which of the following do you consider?

Type of Question: Multiple choice.

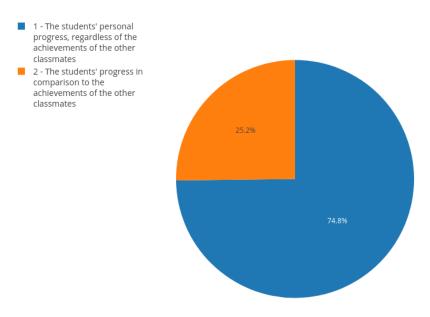


Figure 18. When you assess your students, which of the following do you consider?

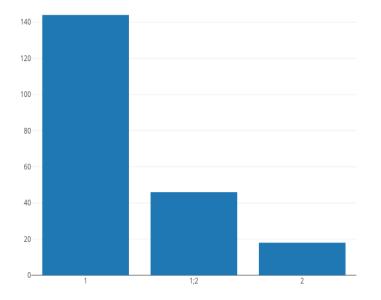


Figure 19. Frequency of the different combinations of choices respondents selected for the question "When you assess your students, which of the following do you consider?"



2. Opinions and ideas about Innovation in student assessment

2.1 In your opinion, what are the biggest challenges when it comes to innovating in assessment?

Type of question: Open ended

Analysis: Answers were grouped in 7 different categories according to their nature. The categories are detailed in the following plots.

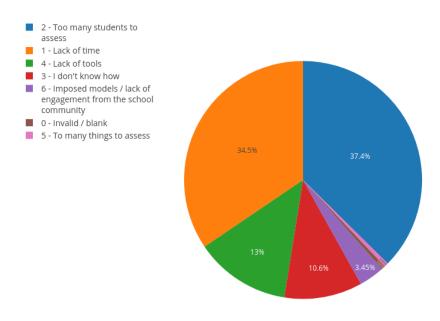


Figure 20. In your opinion, what are the biggest challenges when it comes to innovating in assessment?

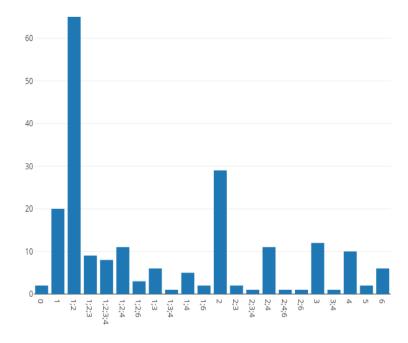


Figure 21. Frequency of the different combinations of choices respondents selected for the question "In your opinion, what are the biggest challenges when it comes to innovating in assessment?"





Summary: The most common challenges, as identified by teachers and ordered by frequency of mentions, are the size of the student class, the lack of time, the lack of tools, the lack of know-how, and the lack of cooperation / engagement / consideration form the school community, including teachers, parents and the students themselves (although in this category, the perception of who is non cooperative varied within the category). It is worth to note that most answers comprised different combinations of each of this challenges, with the most predominant being the combination of lack of time with the size of the class, "Too many students to assess" being the challenge that was mention the most as the only challenge, which we can suppose, can also influence the time needed do assess students and vice-versa, although not mentioned. Besides, if we consider every time "The lack of time" or "The size of the class" was identified as a challenge (in combination or not with one another or other challenges), this amounts for the highest number of responses. On the other hand, when the lack of knowledge or tools is identified as the main challenge, this also amounts for a relevant number of responses which is also worth of consideration.

2.2 Do you think that innovative assessment is important for you to also innovate the way you teach?

Type of question: Multiple choice

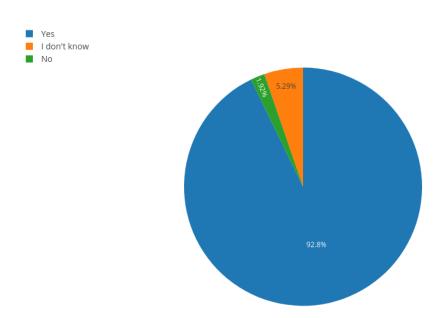


Figure 22. Do you think that innovative assessment is important for you to also innovate the way you teach?



2.3 In your opinion, which one is more complex?

Type of question: Multiple choice

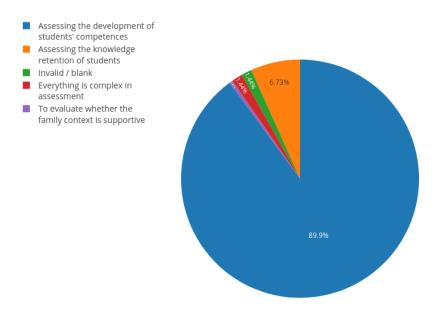


Figure 23. In your opinion, which one is more complex?

2.4 In your opinion, which are the most common challenges when assessing students' skills?

Type of question: Open ended

Analysis: Answers were grouped in 7 different categories according to their nature. The categories are detailed in the following plots.

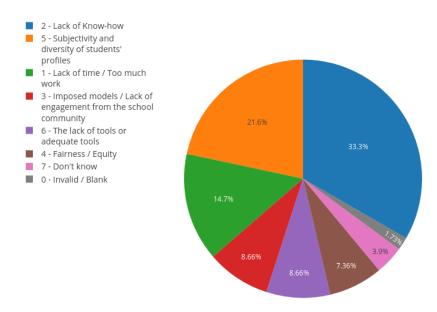


Figure 24. In your opinion, which are the most common challenges when assessing students' skills?



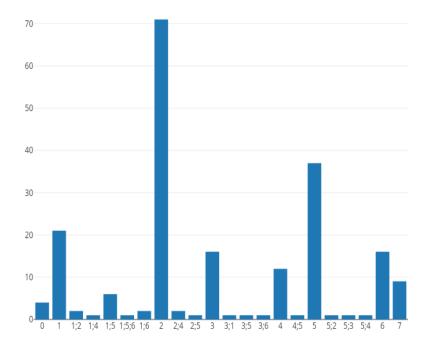


Figure 25. Frequency of the different combinations of choices respondents selected for the question "In your opinion, which are the most common challenges when assessing students' skills?"

Summary: The most commonly identified challenge was the lack of know-how, expressed directly or indirectly in various ways: for instance, while some teachers affirm they don't know where to start at all or find it too difficult / complex to do (in general or for particular skills), others struggle not only to understand / define adequate criteria / objectives / activities and assessment tools, that are different, broad and diverse, but also to create and apply new tools which fulfil the goal of assessing skills in innovative ways that go far beyond the reproduction of the already established assessment framework to promote personal development. Beyond that, many respondents believe that skill assessment is subjective by definition and that it depends very much much on student's expectations and motivations, but also external factors, such as context, and therefore too difficult to assess of even unverifiable / credible, and even too hard considering the diversity of students' profiles. Teachers who refer to this, express that they have a difficult time to understand the degree to which students have truly acquired the knowledge they are expected to. These teachers seem to worry that aspects of students' personality can affect their performance and hinder their true level of understanding.

Moreover, many respondents complain about the amount of work and / or the lack of time, and some relate it to the size and heterogeneity of the students' class, which does't allow teachers to attend and / or assess each student individually and give him the necessary feedback regarding the development of competences. Responses in the category "Imposed models / Lack of engagement from the community" varied much regarding the agent that was identified as the most challenging in the process of assessing students' skills. For instance, while some teachers complain about the lack of cooperation from their peers, others worry that parents are not receptive to innovation or that students do not engage. Others complain about the laws and the design of the education system that prioritizes quantification rather than qualification. Lastly, some say they don't have



enough resources / access to adequate tools or any tools at all. Those amount for a number of teachers similar to those who identify fairness as a main challenge. How is it possible to be fair in such a way that that all students are given equal opportunities / access to tools and that assessment is impartial and does not impair their performance and / or motivation?

2.5 In your opinion, which are the most useful tools and/or resources to assess students' skills?

Type of question: Open ended

Analysis: Answers were grouped in 20 different categories according to their nature. The categories are detailed in the following plot. Because there are many categories which were chosen alone and many different combinations of categories appearing only a few times, no patterns were found, and thus, combinations are not shown bellow.

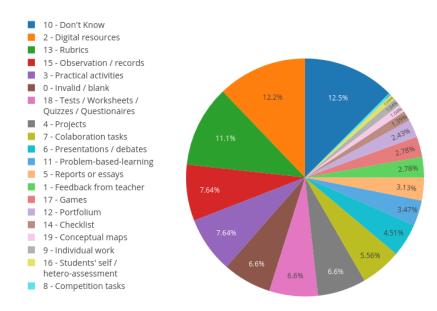


Figure 26. In your opinion, which are the most useful tools and/or resources to assess students' skills?



2.6 What would be necessary to help you assess your students' skills in an easier way?

Type of question: Open ended

Analysis: Answers were grouped in 16 different categories according to their nature. The categories are detailed in the following plot.

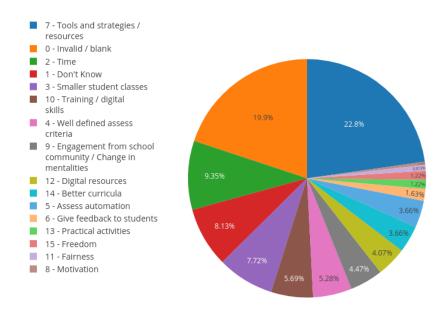


Figure 27. What would be necessary to help you assess your students' skills in an easier way?

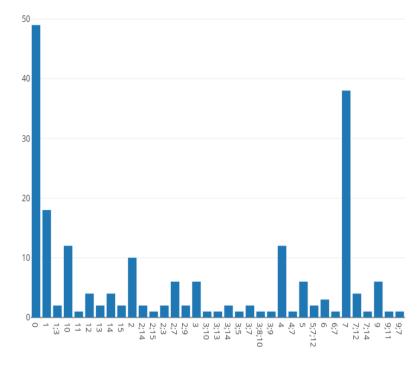


Figure 28. Frequency of the different combinations of choices respondents selected for the question "What would be necessary to help you assess your students' skills in an easier way?".



2.7 Are you happy with the current tools you use to assess your students?

Type of question: Multiple choice

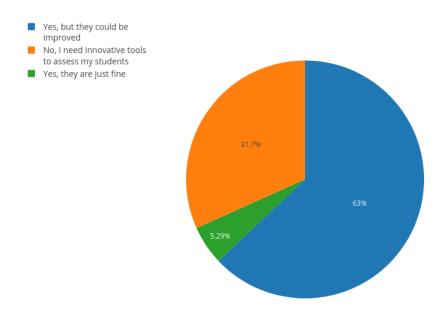


Figure 29. Are you happy with the current tools you use to assess your students?

2.8 Which one do you think is most useful in assessing students?

Type of question: Multiple choice

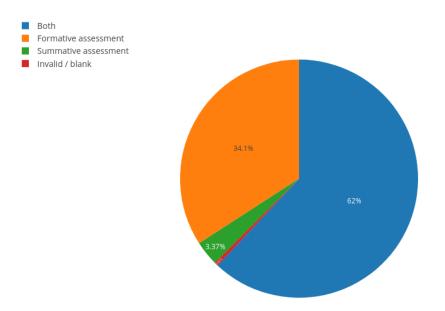


Figure 30. Which one do you think is most useful in assessing students?





2.9 Do you think it is important to share regular development reports with students?

Type of question: Multiple choice

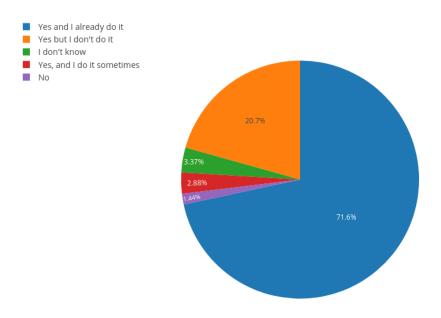


Figure 31. Do you think it is important to share regular development reports with students?

2.10 Do you think that by giving regular feedback to students helps them to improve and to adapt their learning techniques?

Type of question: Multiple choice

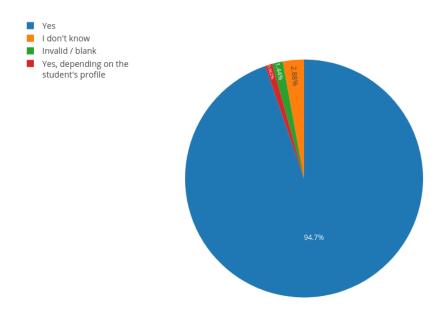


Figure 32. Do you think that by giving regular feedback to students helps them to improve and to adapt their learning techniques?



2.11 Which of the following do you consider to be important when assessing students

Type of question: Multiple choice

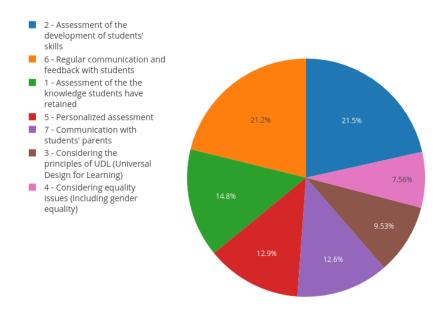


Figure 33. Which of the following do you consider to be important when assessing students.

Analysis: The combinations of different choices are too many to display and discuss here. Suffices to say that no relevant pattern was found: the most popular choices come frequently in combinations with one another and the least chosen options in a wide variety of patterns.



2.12 Would you be interested in using an assessment toolkit that includes digital tools for assessment, and a global assessment tool that generates automatic graphics and development reports of your class?

Type of question: Multiple choice

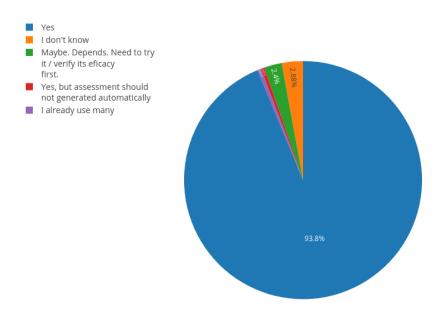


Figure 34. Would you be interested in using an assessment toolkit that includes digital tools for assessment, and a global assessment tool that generates automatic graphics and development reports of your class?



2.13 Would you be interested in using a digital app that aggregates several tools to assess your students?

Type of question: Multiple choice

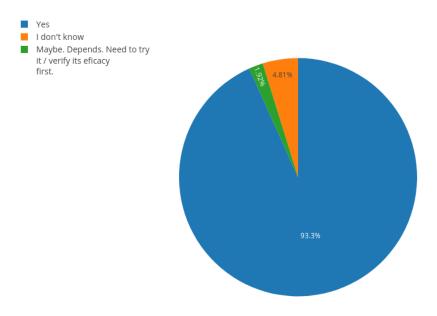


Figure 35. Would you be interested in using a digital app that aggregates several tools to assess your students?