

Sharing regional findings on the use of VR/AR in teaching methodologies in Albania

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Workshop
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- The **WP1** focused on a needs assessment analysis to observe the level of efficiency of traditional teaching methods and level of use of ICT tools. It was conducted through the involvement of partners from the Consortium and other institution from WB to enlarge the quantitative/qualitative outcomes from this assessment study.
- **Objectives of the WP:**
 - Understand the current state, needs and gaps, as well as common needs and gaps across partners. The project partners' initial needs are within the project scope;
 - address both institutional level and common partner approaches;
 - Understand possible implementation solutions considering the variety of results coming from every specific partner.

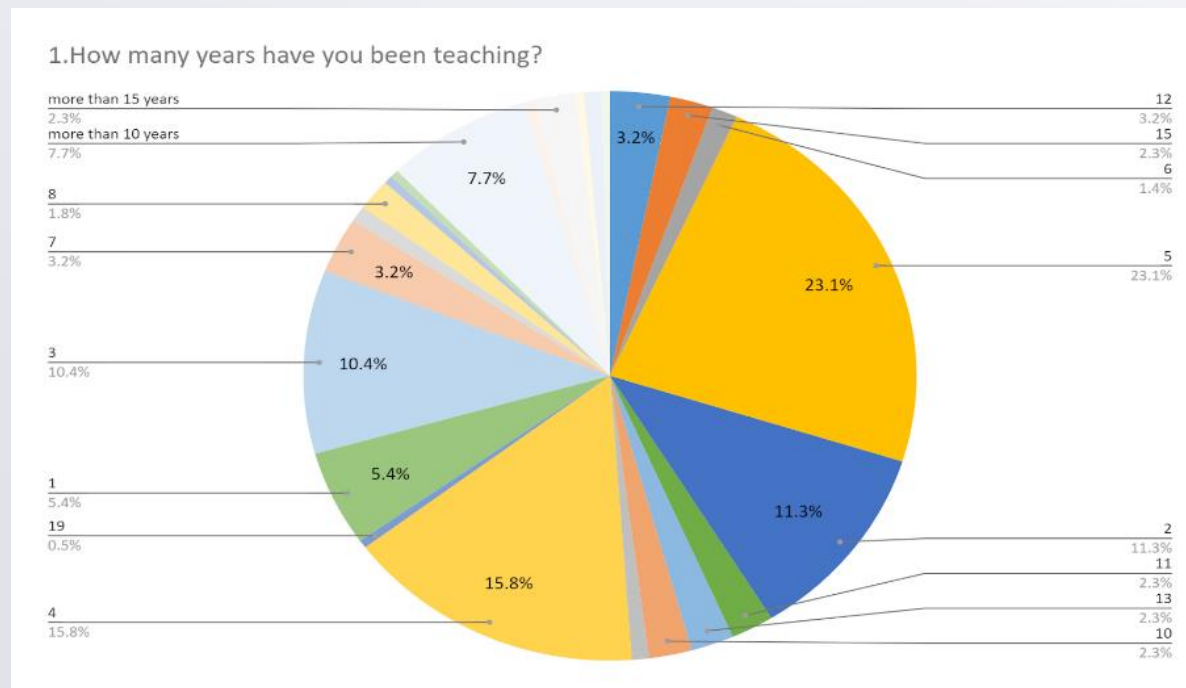
- **TASK of WP1**
- Preparation of a questionnaire to gather inputs for a detailed gap analysis at institutional level; conduct questionnaire, process data.
- Results and review on institutional level
- Workshop to share the results of gap analysis and address these for findings.
- Give an overview over all deliverables/reports of the WP and its status

- Preparation of a questionnaire to gather inputs for a detailed gap analysis at institutional level; conduct questionnaire, process data. (✓ **completed**);
- Regional event in one Western Balkan country. Share results/ findings in one event with regional partners (✓ **completed**);
- Gathering reports and data analysis from all the Consortium's partners (✓ **completed**).

- **Time schedule – Activities**

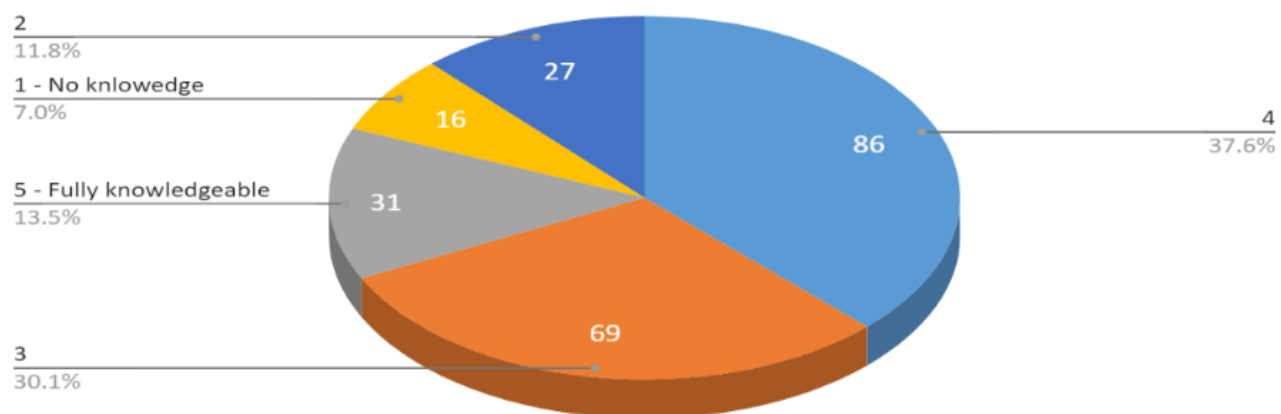
- **January 2020** – Kick off meeting
- **March 2020** – Questionnaire preparation (Questions; choice of the platform to be used for the dissemination of the questionnaire; sharing of the questionnaire within the Consortium and final version to be implemented)
- **March 2020 (End) – May 2020** – first round of dissemination within the Consortium through the Google Form platform.
- **June 2020 – September 2020** – second round of dissemination and first critical analysis of the gathered data
- **September 2020 – October 2020** – dissemination to other institutions outside the Consortium
- **November 2020 – February 2021** – Final results WP1; reports and workshop organization

- **There were prepared two different questionnaires:**
 - Academic staff / researcher questionnaire
 - Students questionnaire
- **The list of universities included on the survey is made up by those institutions:**
 - *Aleksander Moisiu University*
 - *Epoka University*
 - *Polis University*
 - *European University of Tirana*
 - *Polytechnical University*
 - *Marin Barleti University*
 - *University "Our Lady of good Council"*
 - *Agricultural University of Tirana*
 - *University of Tirana*
 - *Luarasi University*
 - *Beder University College*
- **There is a total of 375 staff members and 641 students participating on the survey**



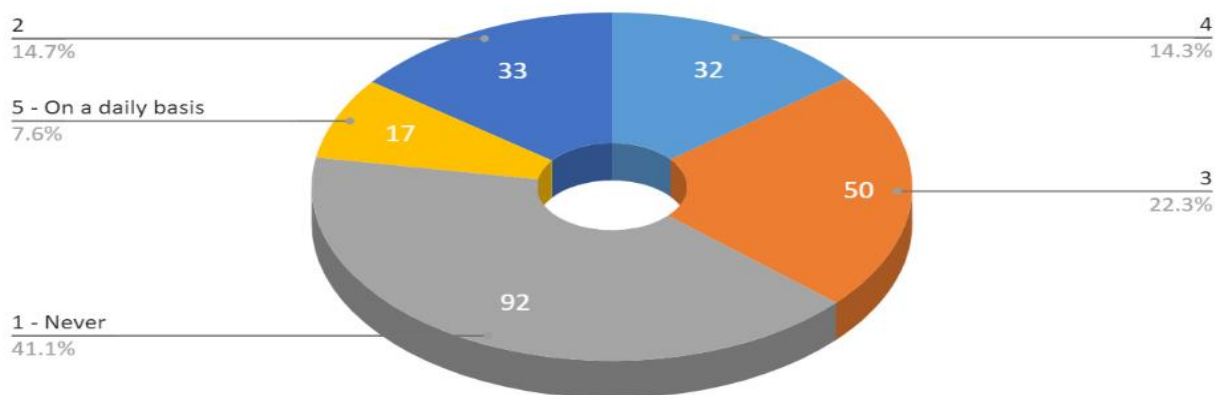
Question 1 results: Majority of the respondents from consortium belong to 4 and 5 teaching years groups with 14.4% percentage each

2. Which is your actual knowledge regarding virtual/digital technologies?

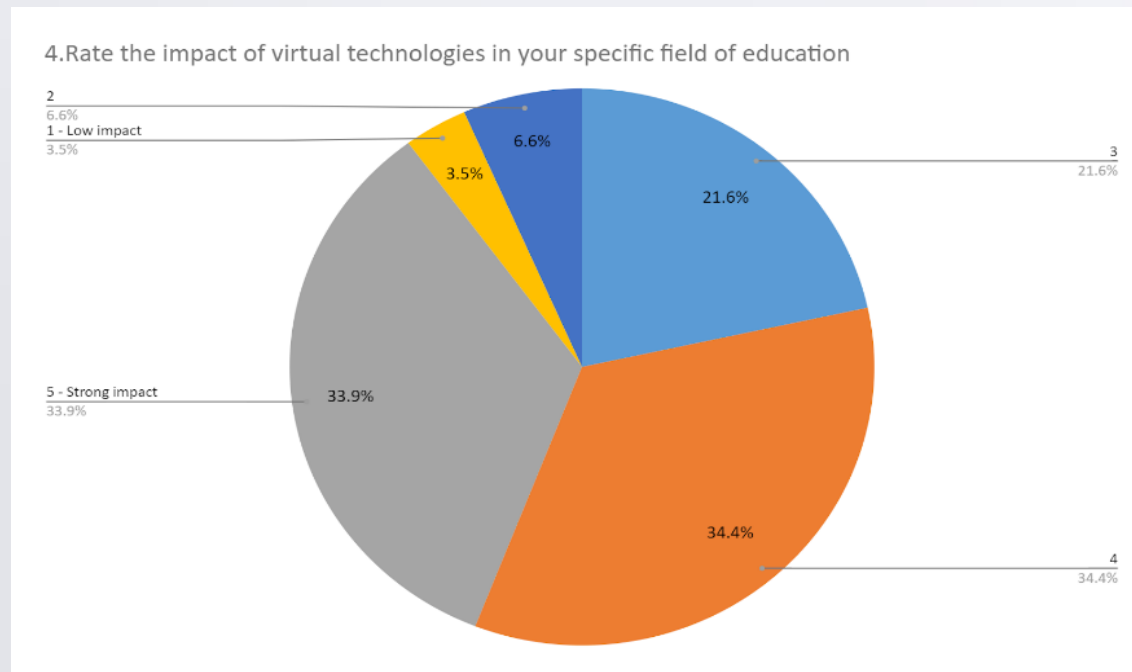


***Question 2 results:** Majority of albanian academic staff have a technological knowledge on virtual/digital technologies above average, ranging from level 3 to level 5 and promisingly 13.5%*

3. How much have you tested the use of virtual reality or augmented reality in order to supplement current classroom teaching?

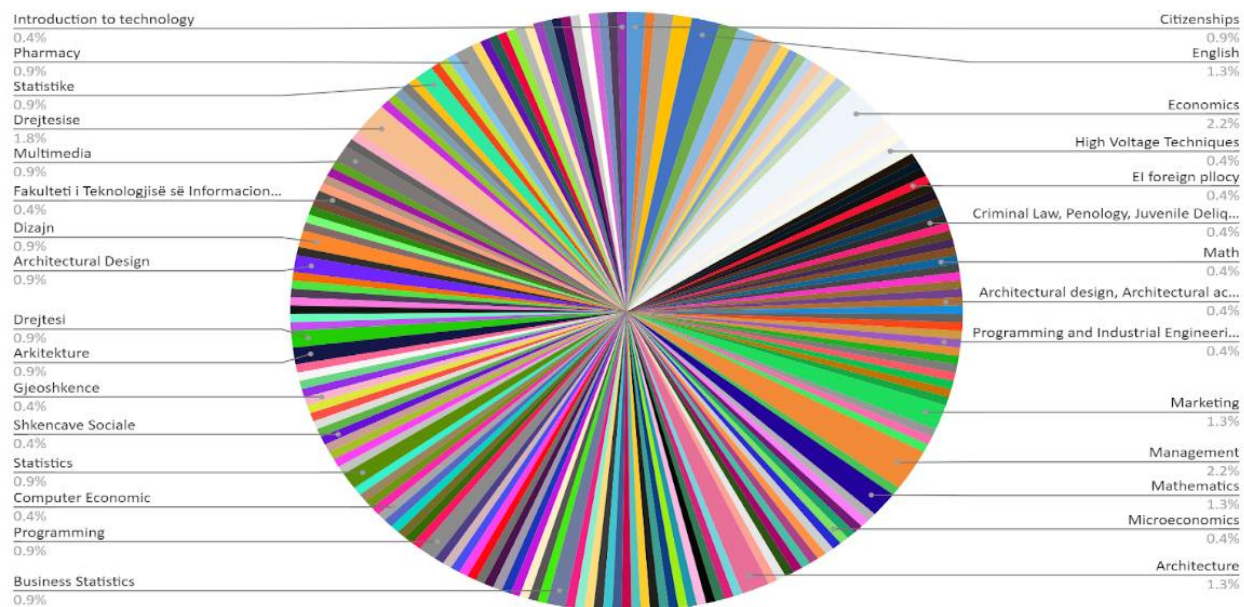


Question 3 results: Only 7.6% do so on daily basis, but there is a considerable high group of teacher who never use them in their daily teaching practices (41%).



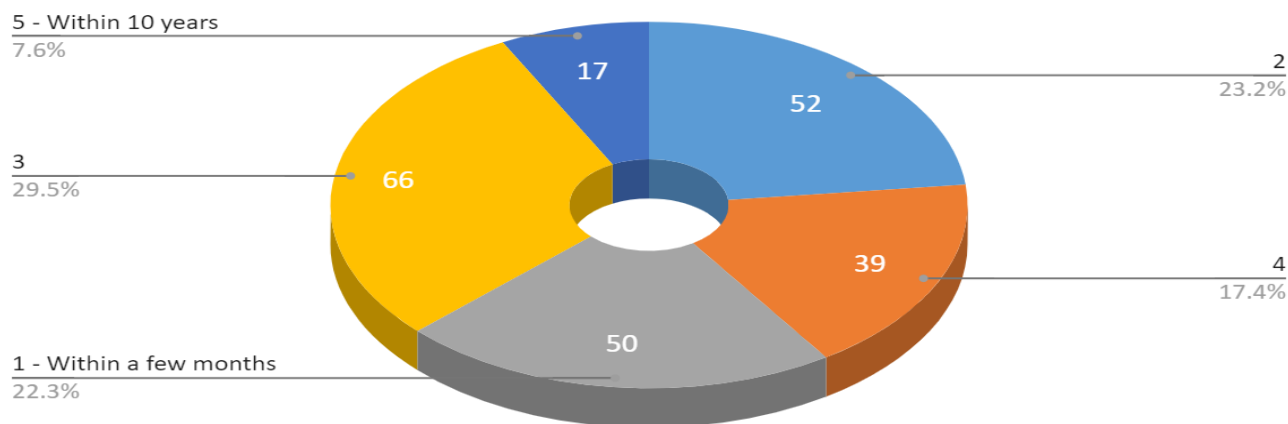
Question 4 results: 33.9% of staff thinks that VR/AR has very high impact and that 34.4% are shown more moderate saying that it has high impact on their field of education

5. Your specific teaching:



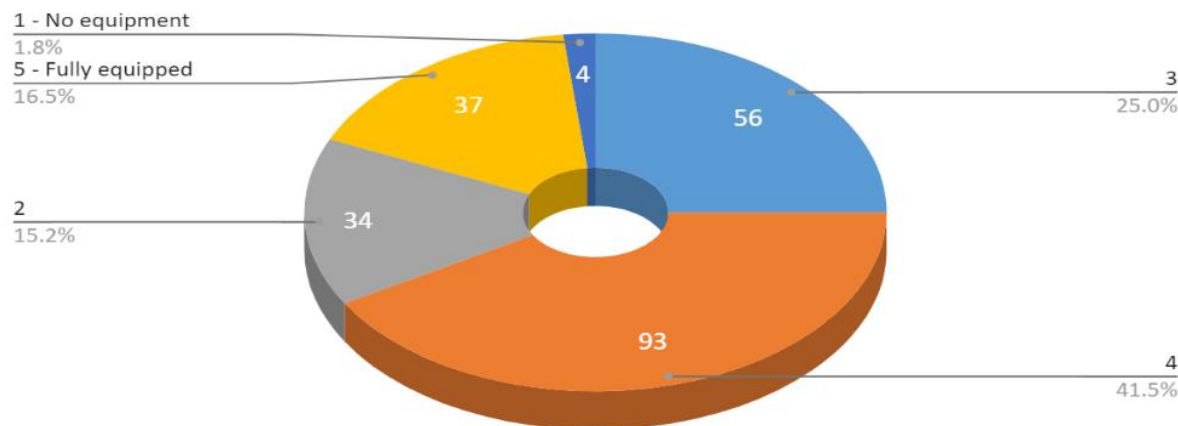
Question 5 results: There is a very heterogeneous group of teachers who have filled the survey. The main fields of their occupation include Architecture, Design, Mathematics, Computer Sciences and all its programs, Economics and all its subfields, Statistics, Law, Multimedia, etc.

6.Thinking about the adoption of this new technology into education, how soon do you see virtual reality making it into your school?

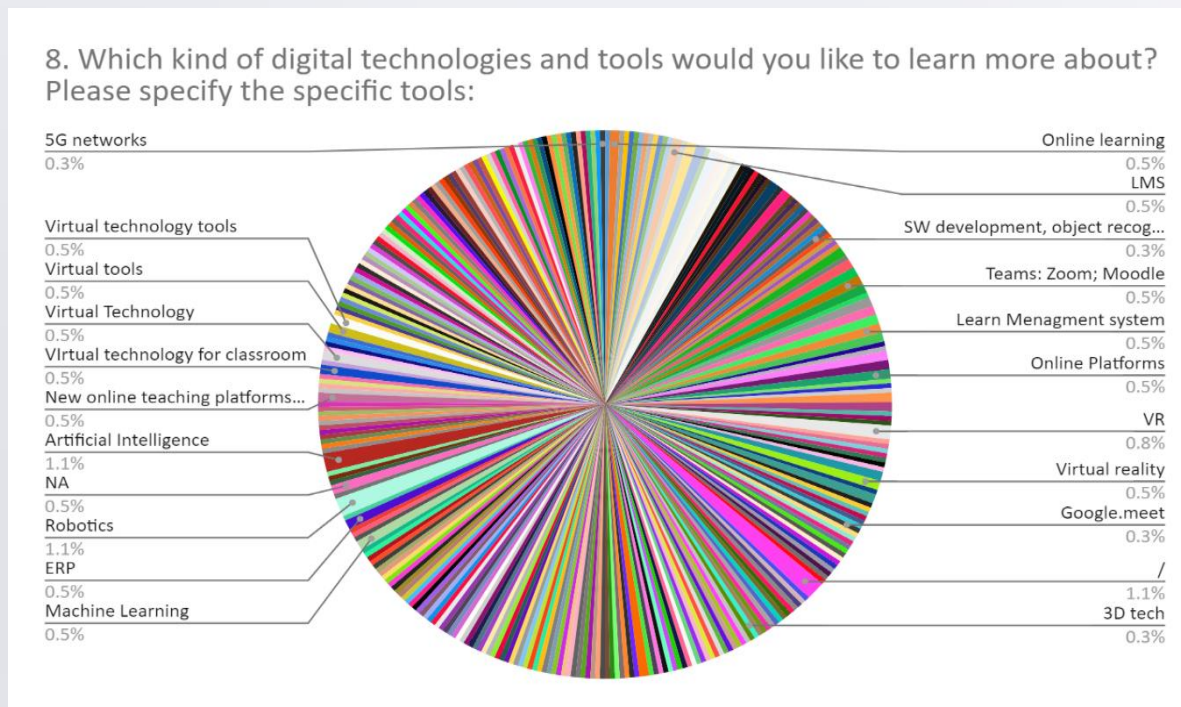


Question 6 results: most of respondents state that it will take at least some years to adopt this new technology in education, but only 7.6 thinks that it will happen within 10 years.

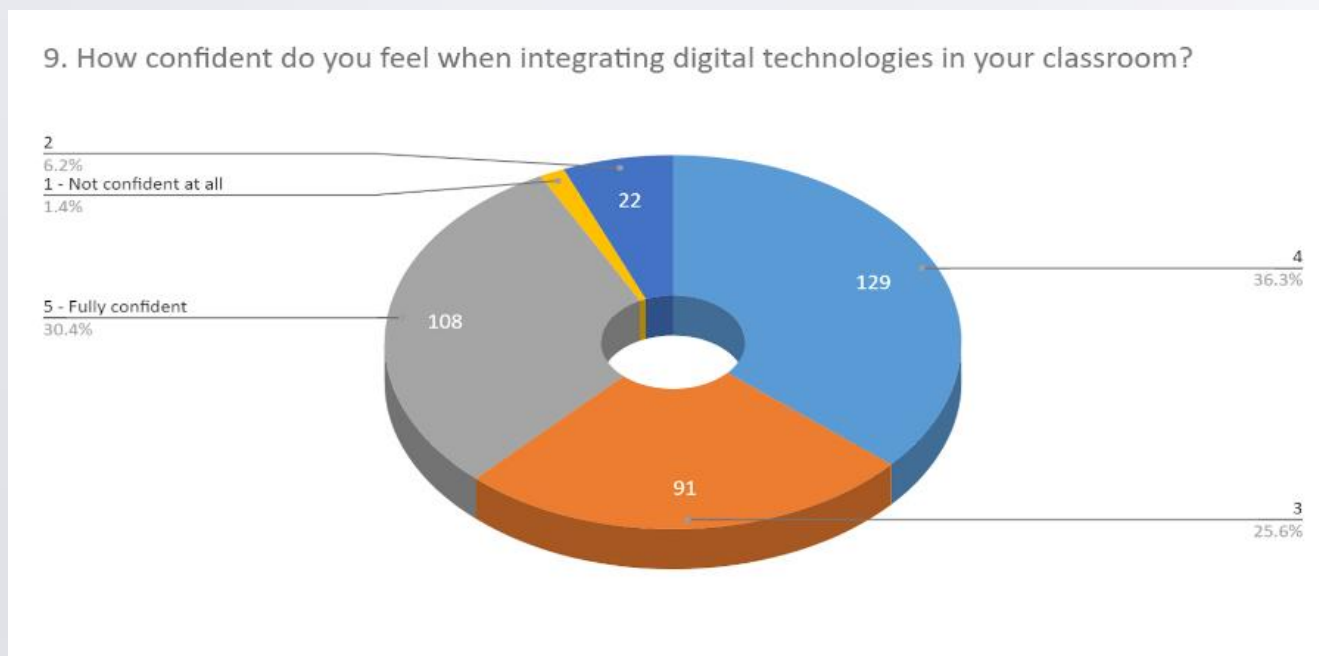
7. Please rate the current level of the hardware present in your school/university.



Question 7 results: a high percentage affirms that their university currently is fully equipped. Anyway, considering the different fields included in the survey, most of the equipment relates to a classic pc/desktop room.

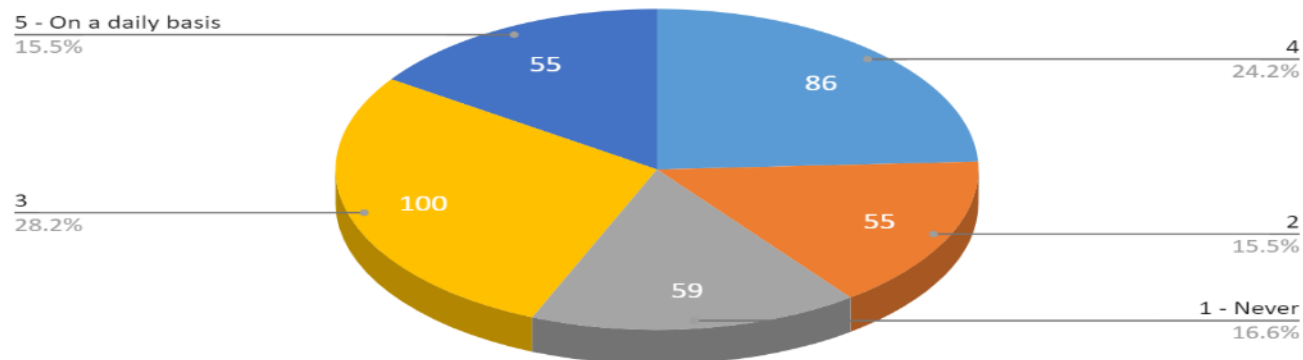


Question 8 results: most of the academic staff mention specific digital technologies related to their field. Only 1% of them declare that they have augmented reality.



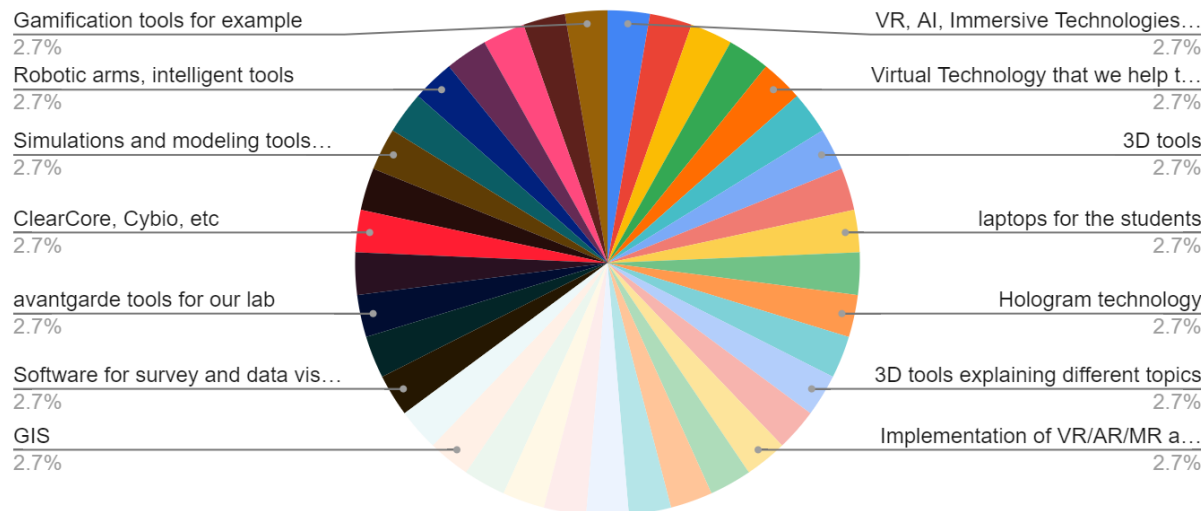
Question 9 results: Academic staff of the albanian universities is well prepared for integration of digital technologies. 30.4% of them are fully confident about the readiness to use them and 36.3% are confident enough to support them.

10. How often do you use the dedicated laboratories in your school/university?



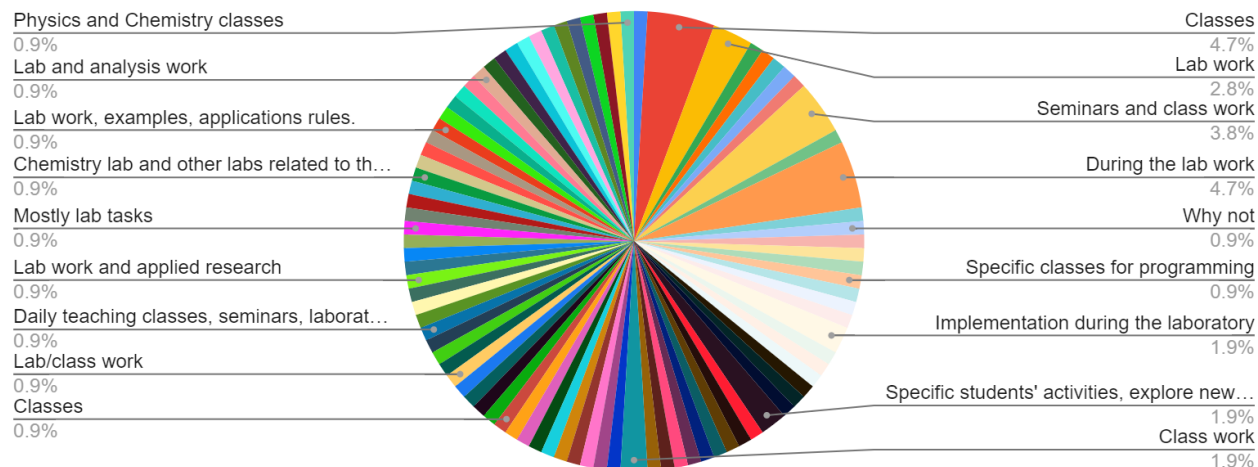
Question 10 results: **15.5%** of institutions who use it on daily bases; **24.2%** use the laboratories often; **16.6%** of them do never use them .

Add any suggestion regarding which kind of technologies you would like to be implemented in your school and how:



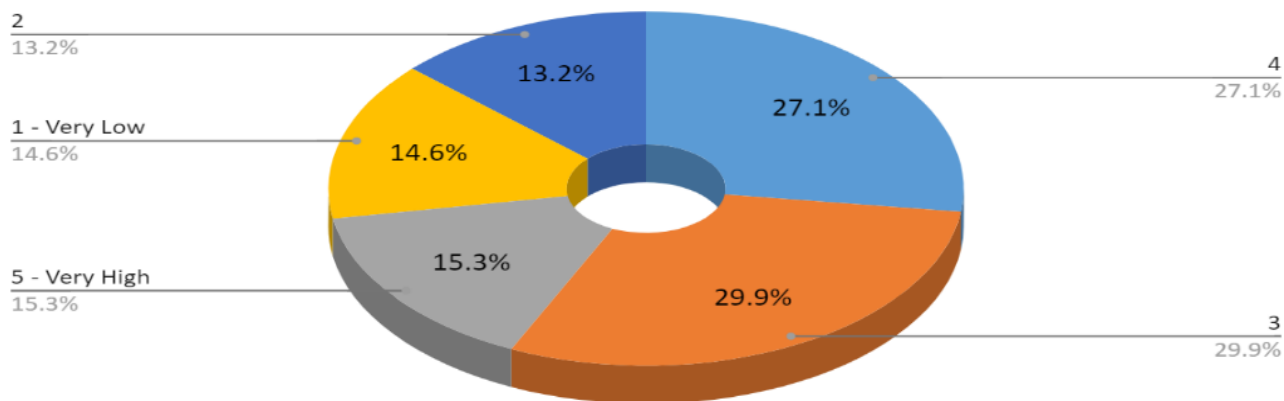
Question 11 results: main suggestions are: a complete digitalization of the available literature; creating video practicum for more accessible intercommunication with students; 3D printing technologies; 5G; a fully integrated smart mix technology; AI in research.

Give some examples on where, during your daily work, you would find the implementation of VR technologies useful (classes, topics, lab work, etc.).



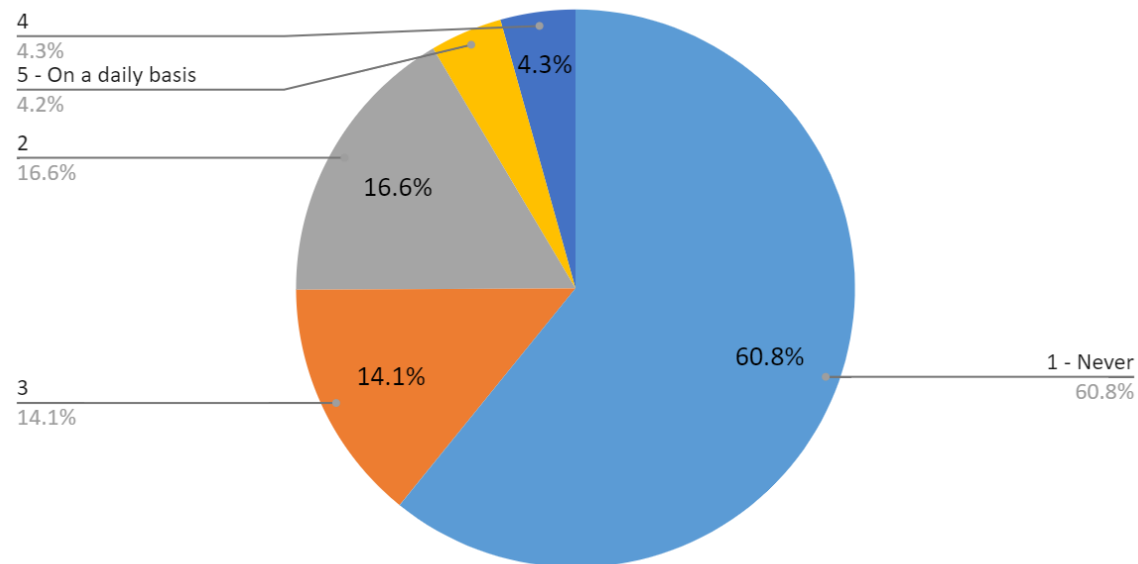
Question 12 results: staff will find useful VR technologies in the following fields: product promotion; time frequency representation of signal; Fourier analysis; using CAD software; HRM; 3D videos; simulating different manufacturing process.

1. Which is your actual knowledge regarding virtual/digital technologies?



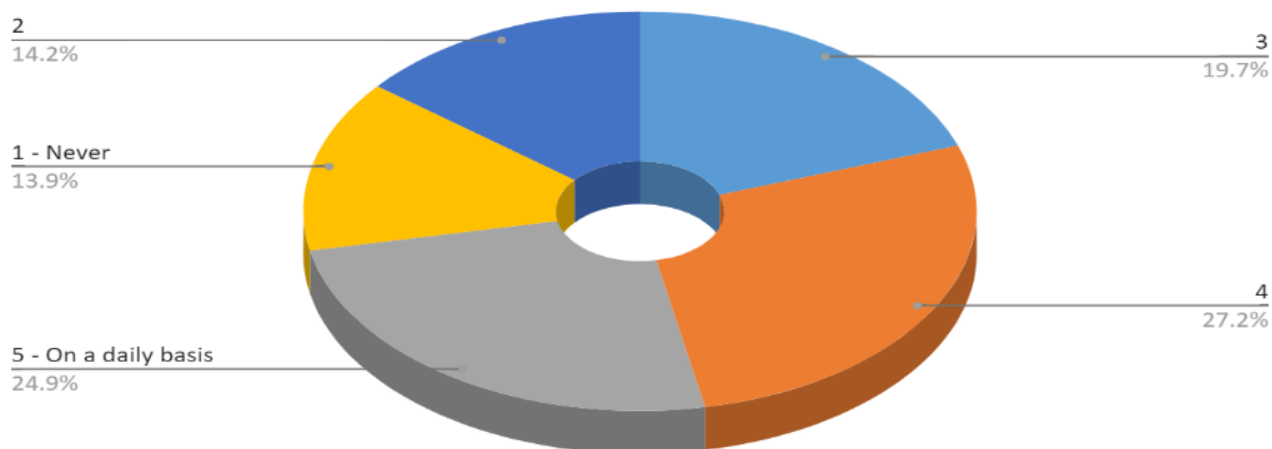
Question 1 results: according the results we have identified that the students are included within 3 and 4, which means a moderate knowledge within the different institutions.

2. During your precedent years of study, have you ever been introduced or trained on VR/AR technologies?

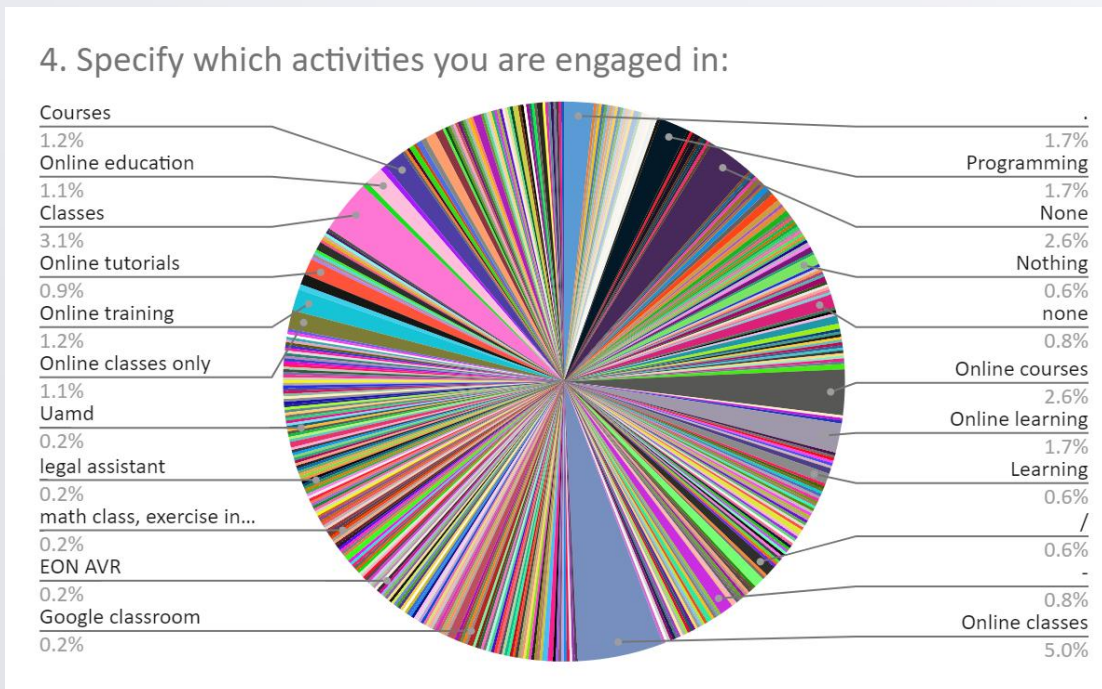


Question 2 results: the result demonstrates that 60.8% of the students have never been introduced/trained to VR/AR technologies.

3. How often do you engage in digital learning activities?

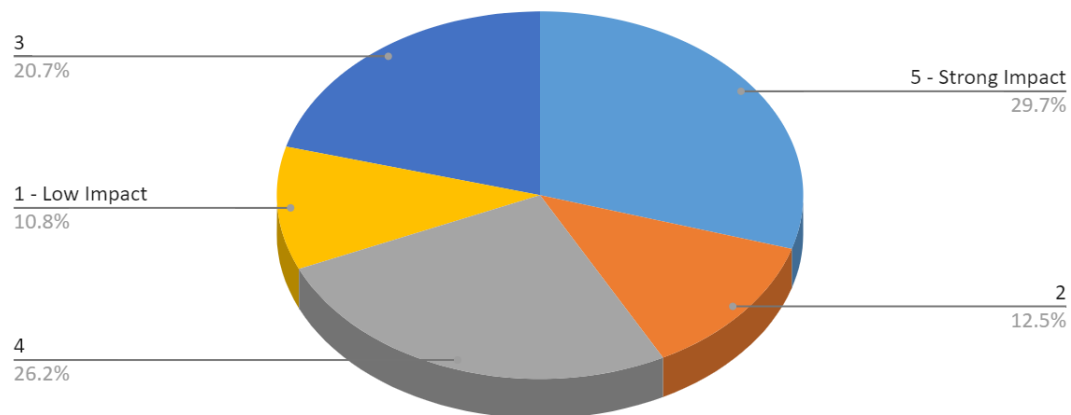


Question 3 results: the results are quite homogeneous in relation to the questions. This can be intended with the fact that even everyday online learning is intended as a proper digital activity.

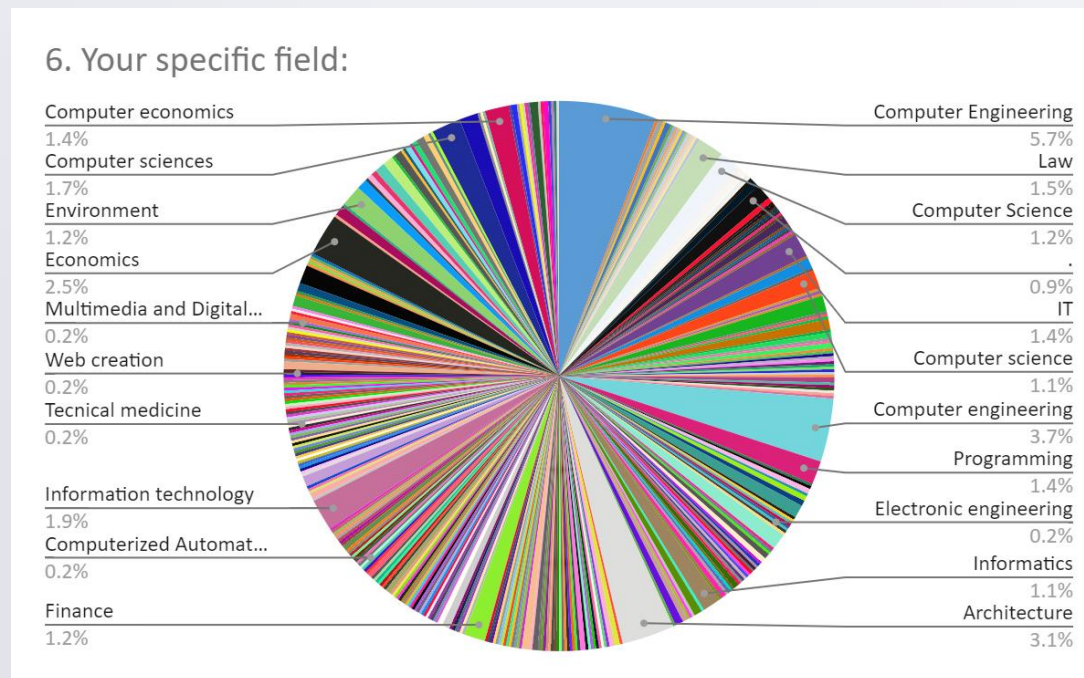


Question 4 results: There is a very wide range of digital learning activities on which student have declared they are engaged in.

5. Rate the impact of virtual technologies in your specific field of education

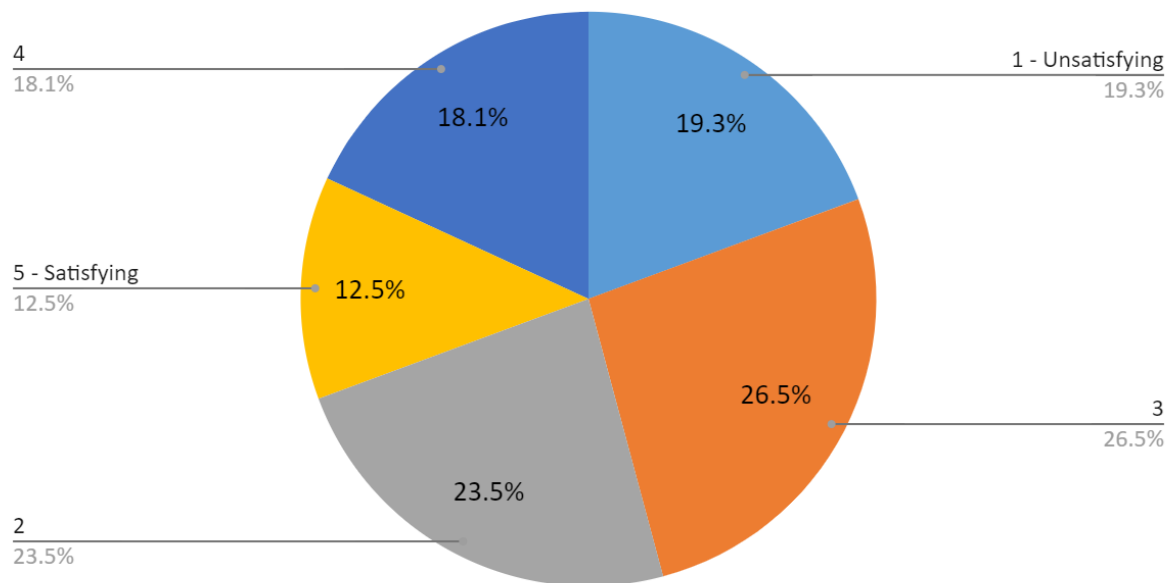


Question 5 results: The majority of students consider the impact that virtual technologies have on their field as high or very high.

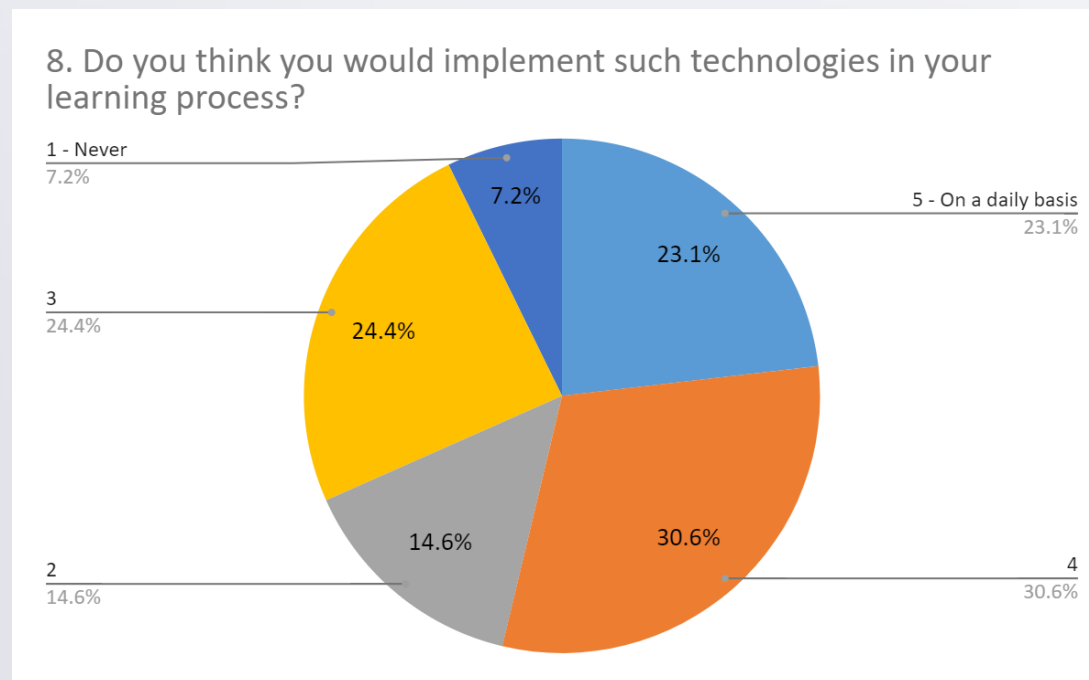


Question 6 results: the students cover a wide range of fields: from more technical to more theoretical ones. This reflects also on the broad road of answers we have collected.

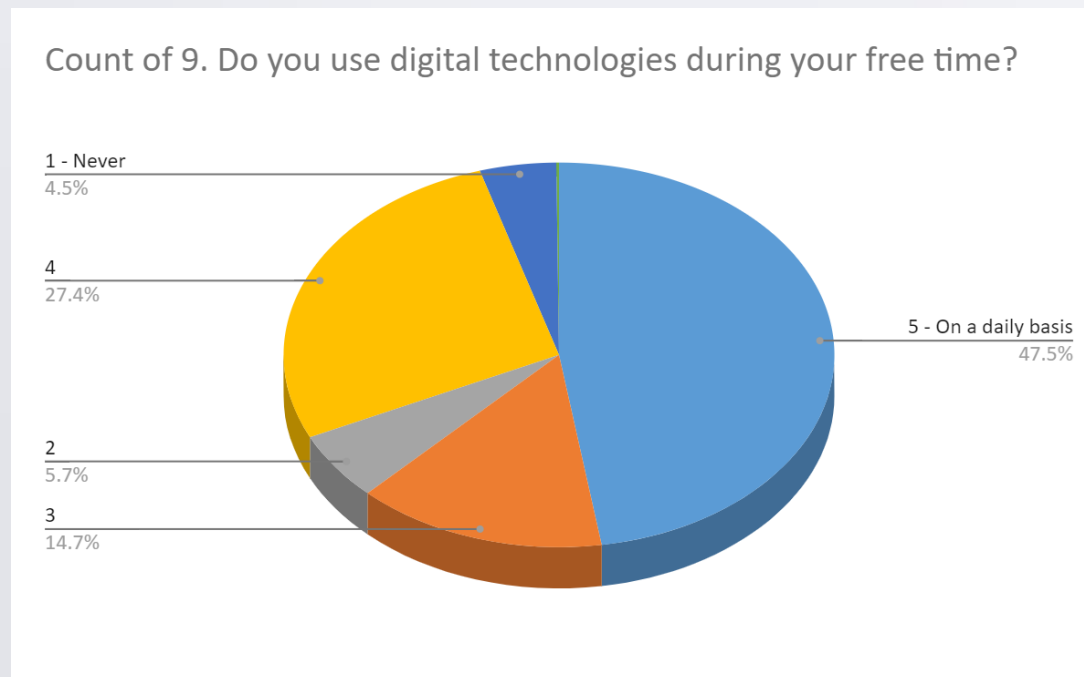
7. How much is information regarding these technologies shared at school between students and professors?



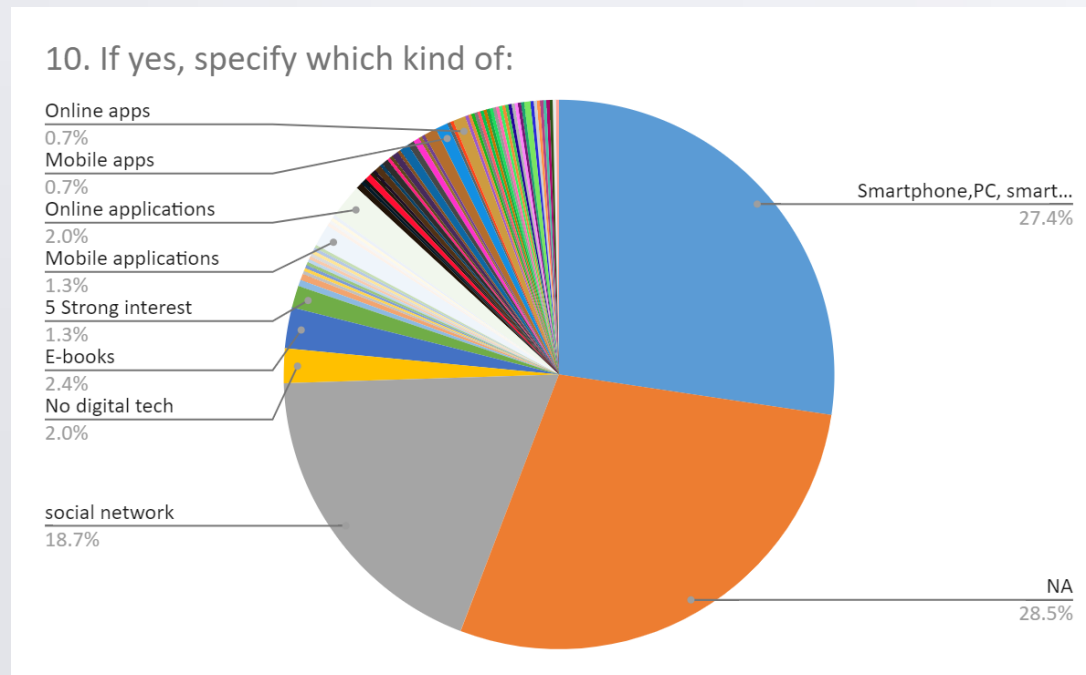
Question 7 results: there is a medium amount of information regarding digital technologies that students consider properly shared within their institutions.



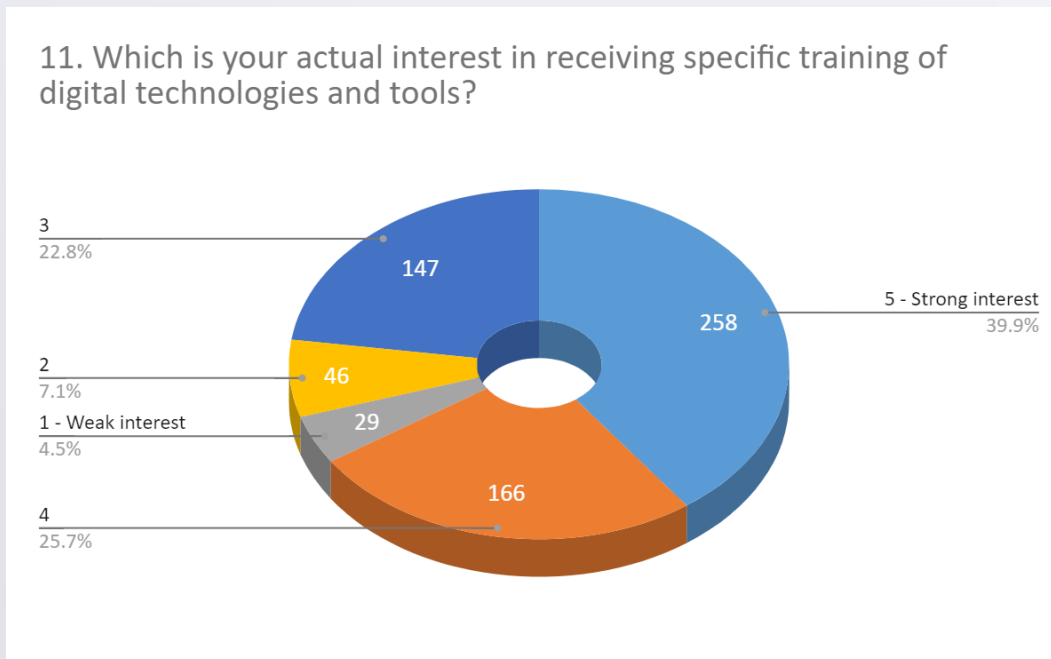
Question 8 results: the majority of students are willing to implement very often digital technologies in their learning process.



Question 9 results: 50% of the students respond that they use digital technology on daily basis

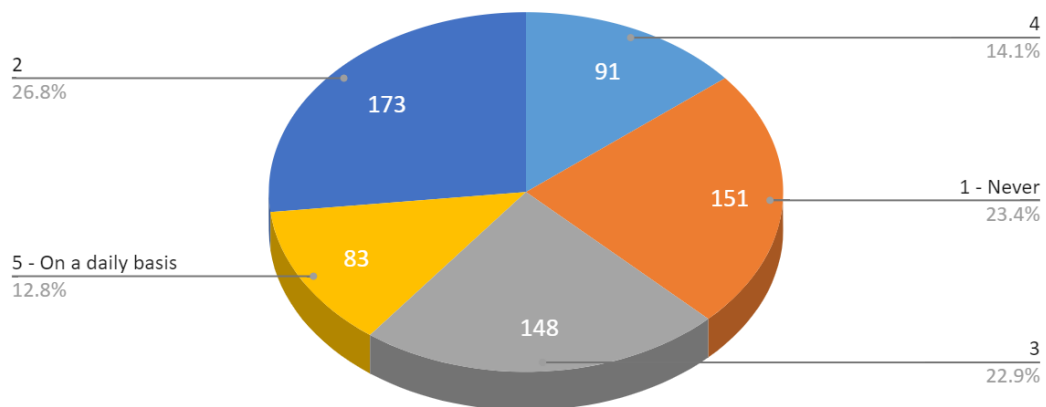


Question 10 results: the kind of technology mostly used by students are digital devices (smartphones) and social networks.



Question 11 results: Almost 85% of them have an interest above average.

12. How often do you use the dedicated laboratories in your school/university?



Question 12 results: A considerable percentage of students affirms that they never use laboratories in their daily work at university.

- There is an actual need for advancement and, according to the results, Albanian universities are making efforts to pursue continuous progress in digital teaching and learning processes;
- Technological integration and experience-based learning stands in a moderate level within the institutions' strategies.
- Students and staff show enthusiasm and willingness to participate on VR/AR trainings and activities which can further develop their knowledge regarding these specific tools;
- Institutions should take care to offer innovative practices and to continuously monitor their effectiveness.

Thank you for your attention!