



Co-funded by the
Erasmus+ Programme
of the European Union



ERASMUS+ CBHE PROJECT # 585760-EPP-1-2017-1-AM-EPPKA2-CBHE-JP

**“CHANGE IN CLASSROOM: PROMOTING INNOVATIVE TEACHING &
LEARNING TO ENHANCE STUDENT LEARNING EXPERIENCE IN
EASTERN PARTNERSHIP COUNTRIES”, PRINTeL**

ILIA STATE UNIVERSITY (ISU)

NEEDS ANALYSIS REPORT

**Results of the Surveys on
Teaching Staff Development Needs Assessment
and Student Learning Needs Assessment**

TBILISI 2018

CONTENTS

Introduction.....	3
Teaching staff professional development needs Assesment	4
Recommendations	12
Student learning needs Assesment.....	14
Recommendations	22
Conclusions and recommendations	23

Introduction

The following report presents the Needs Analysis for Innovative Teaching and Learning at Ilia State University (ISU). Two questionnaires were developed to address the core aspects of teaching and learning: First questionnaire targeted teachers - “Teaching staff professional development needs assessment” and the second addressed students - “Student learning needs assessment”. Both questionnaires were aimed at collecting information concerning teaching and learning methods used at ISU, technological tools applied and teachers and learners’ needs for innovative methods.

Each of the questionnaires included eight sections, illustrating teachers’ and students’ perspectives:

Section 1. General information

Section 2. Teaching styles and pedagogical approaches used in class

Section 3. Learning styles and approaches

Section 4. Assessment methods and approaches

Section 5. Use of technology, e-teaching & social media for teaching and support of learning

Section 6. Facilities to support teaching

Section 7. Teaching materials/Learning materials

Section 8. Teachers’ comments and recommendations/ Students’ comments and recommendations

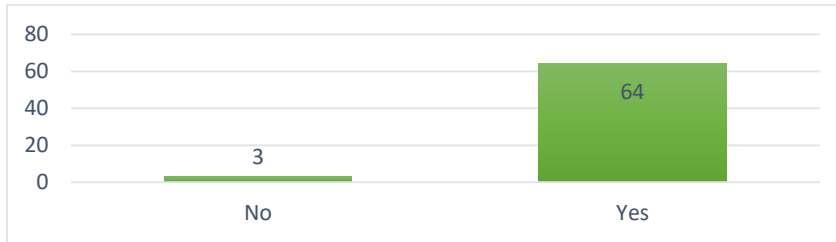
The questionnaires were created with the help of Google forms that made it possible to conduct the survey online. On 6th of May, 2018, the online questionnaires were delivered to ISU teachers and students. The collection of responses was ceased on 29th of May, 2018. Overall, 67 teachers and 98 students completed the online survey forms.

As two separate questionnaires were administered for teaching staff and students, below we present separate descriptive analysis of each survey results as well as conclusions and recommendations of each cohort of respondents.

Teaching staff professional development needs assessment

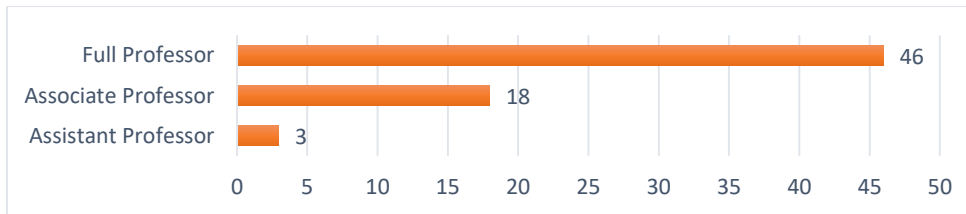
First Questionnaire addressed the perspective of the teaching staff. The study enrolled 67 participants (professors). There was inequality in the male/female ratio - most of the respondents were male (38 professors). As shown in Figure 1, all respondents except three are full time faculty members.

Figure 1: Are you a full time faculty member?



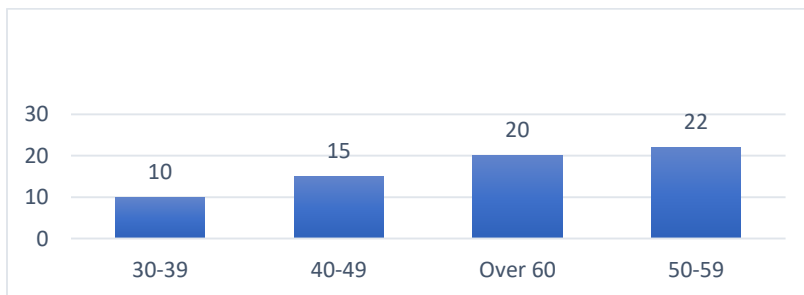
According to **Figure 2** below the majority of respondents are full professors.

Figure 2: What is your title at your university?



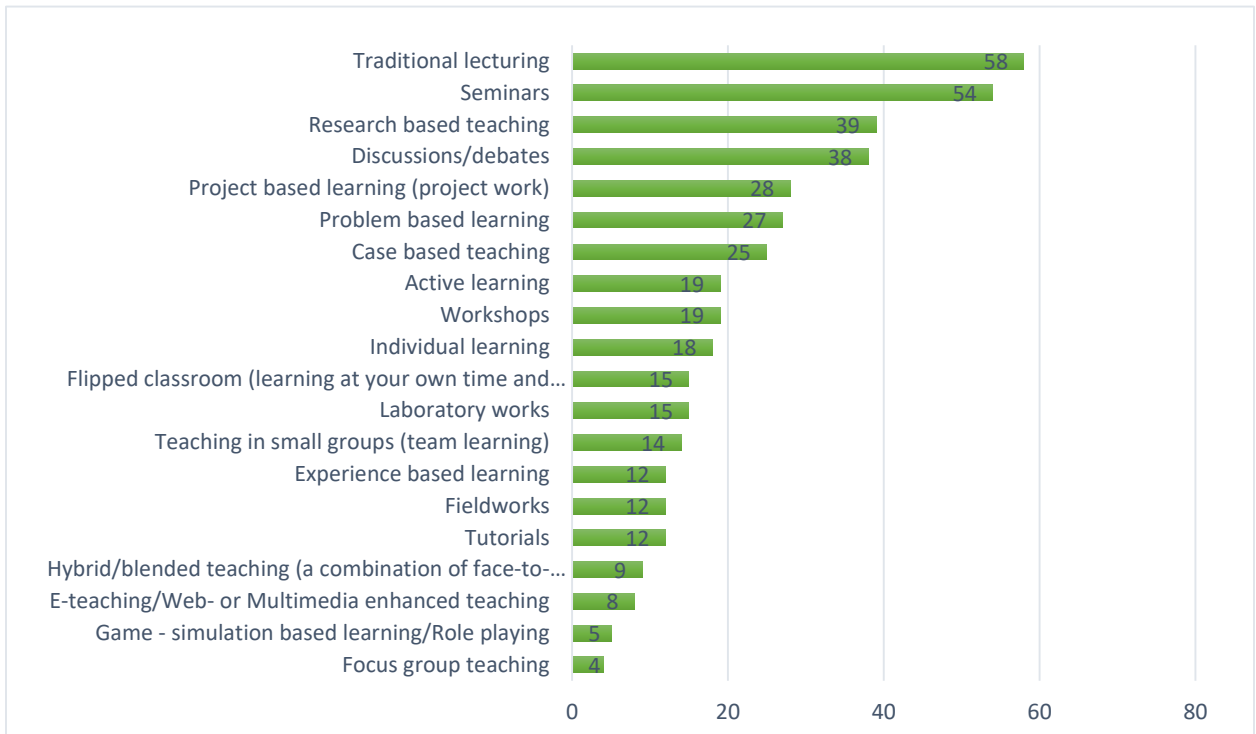
The majority of the respondents, (22 in total) were teachers aged 50-59 (see **Figure 3**).

Figure 3: Please select your age group from the following.



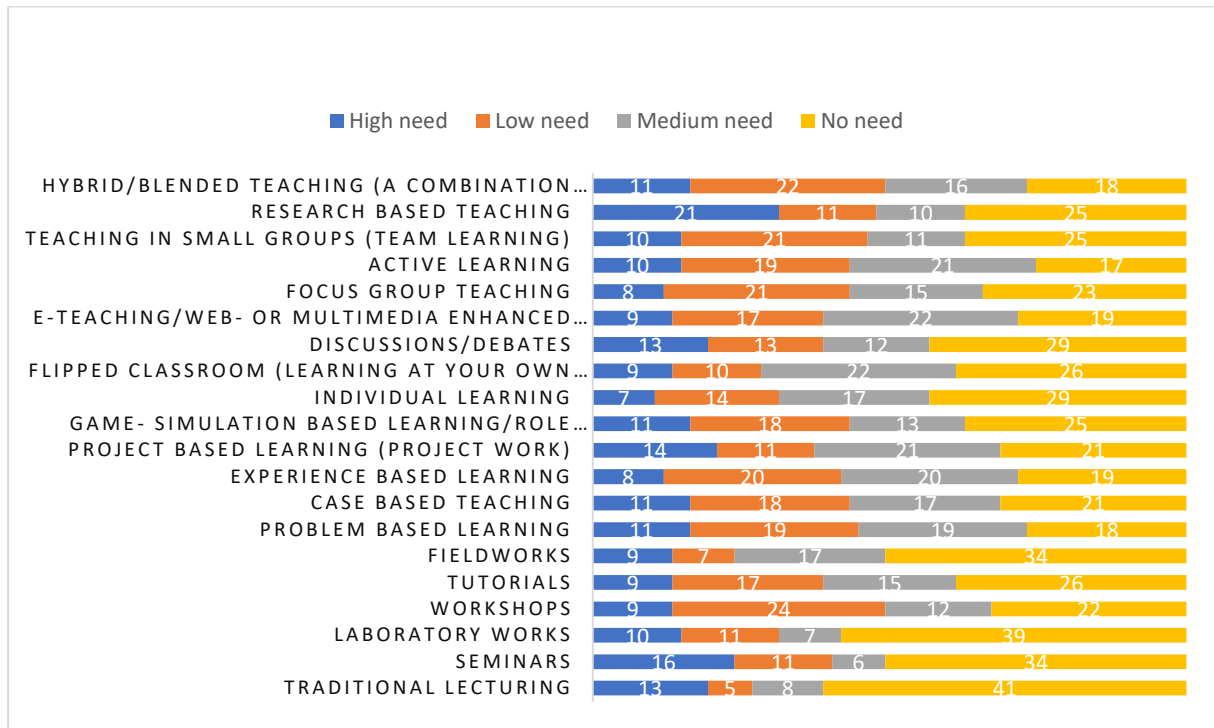
The survey results showed that the professors most frequently use such teaching styles as “Traditional lecturing” and “Seminars”. Nearly all of the professors (58 respondents) use these pedagogical approaches in their classrooms. Only four professors indicated using “Focus group teaching” thus identifying it as the least used teaching method (see **Figure 4**).

Figure 4: How do you teach? Please select teaching styles and pedagogical approaches listed below currently used by you in class.



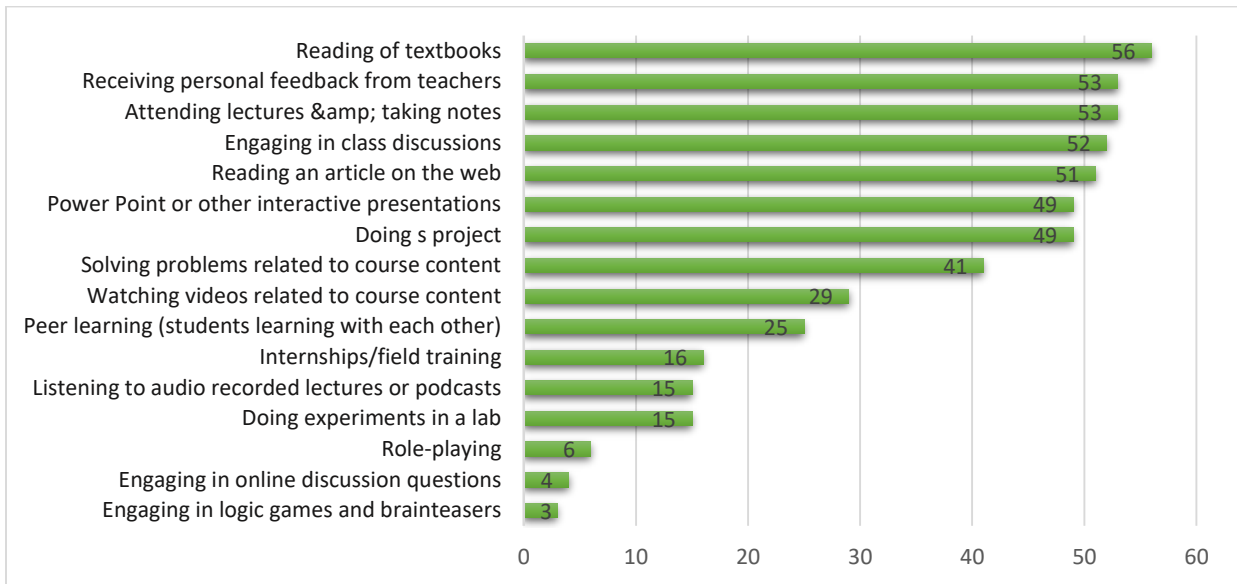
According to teachers' choice, the most desirable teaching method is "Research based teaching". Other methods in which teachers clearly expressed their need for professional development are "Active Learning", "E-Teaching/Web or Multimedia Enhanced Teaching", "Flipped Classroom" and "Problem-based Learning". Teachers rated their needs for professional development as either medium or high. More than half of the respondents (41 professors) said that they don't need formal training in traditional lecturing (see Figure 5).

Figure 5: Please, rate your level of need for training in the teaching styles/approaches listed below from "No need" to "High need"



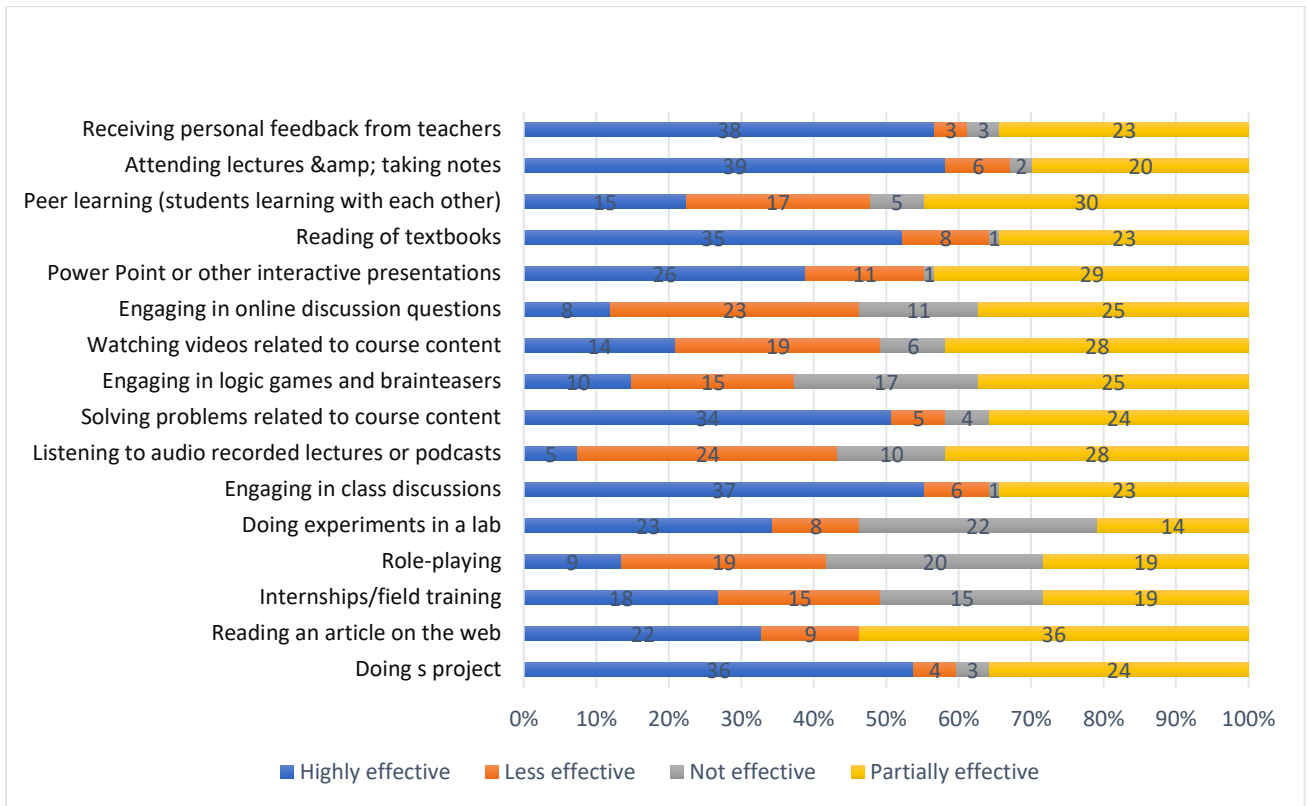
The study also evaluated teachers' perceptions about "learning styles mostly used by students". It turns out that the most common learning style observed by the teachers is "Reading of textbook" while the least used are "Logic games and brainteasers" and "Role playing". Technology in learning process is rarely used among students as "Engaging in online discussion questions" was mentioned by very few teachers. (see **Figure 6**).

Figure 6: How do your students learn? Please select learning styles/approaches listed below currently experienced by your students.



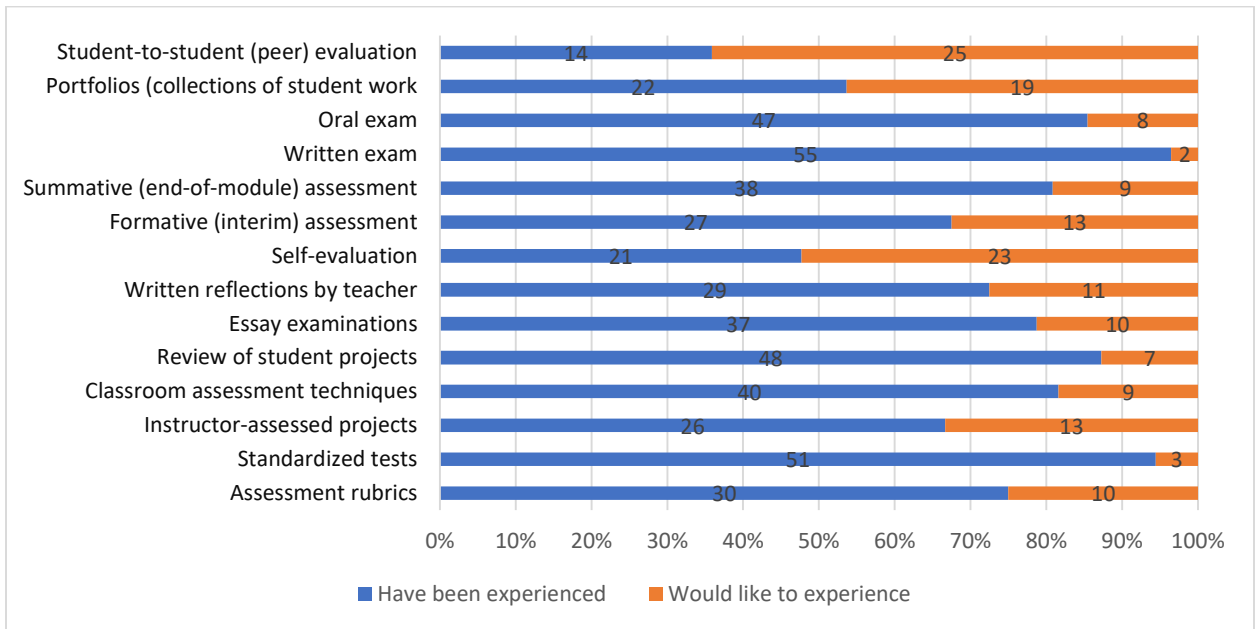
According to the teachers, the most effective learning methods are “Attending lectures and takings notes”, “Receiving personal feedback from teachers”, “Reading of texts”, “Solving problems related to course content”, “Engaging in class discussions” and “Doing projects”. The survey results demonstrated that “Doing experiments in a lab” and “Role playing” are the least effective learning styles as they are predominantly rated as not effective or less effective (see **Figure 7**).

Figure 7: How do your students learn best? Please rate the learning styles/approaches listed below which you think would enable your students to learn effectively from "Not effective" to "Highly effective".



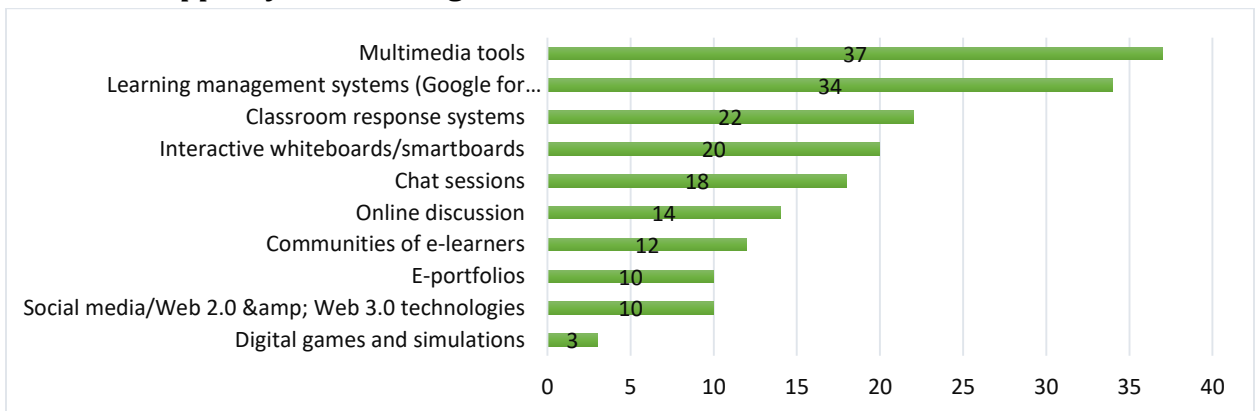
According to teachers' responses, the most popular assessment methods applied in the classrooms are "Writing exams", "Standardized tests" and "Review of student projects". The most popular assessment methods teachers would like to apply are "Student-to-student (peer) evaluation", "Self evaluation" and "Portfolios" (see **Figure 8**).

Figure 8: How you assess your students? Please select the assessment methods/approaches listed below which you have used and those you would like to use.



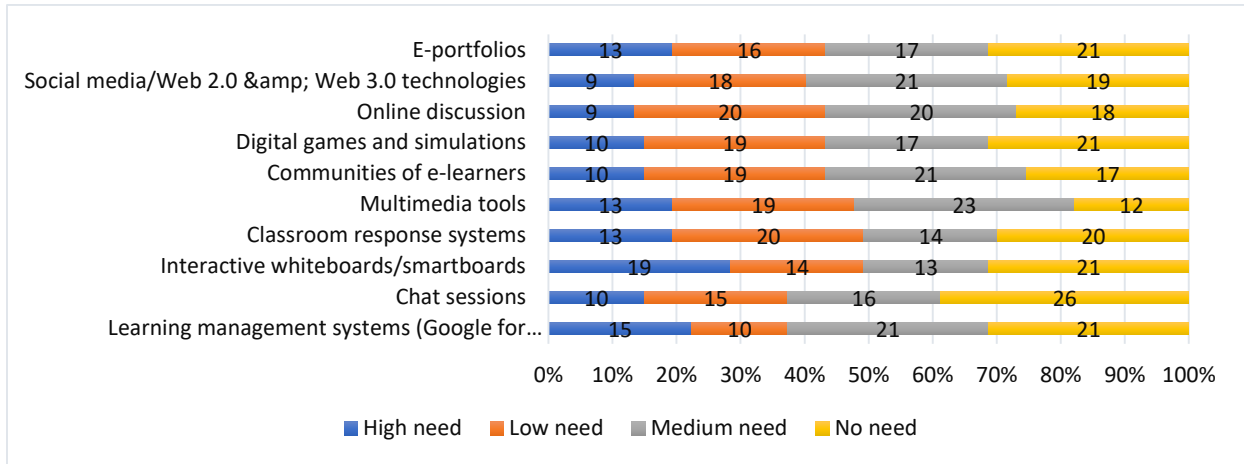
The teacher survey shows that “Multimedia tools” and “Learning management systems (Google for education/Microsoft Office 365/Moodle/Blackboard etc.)” are the most used technologies supporting the teaching process. The least used technology is “Digital games and simulations” (see **Figure 9**).

Figure 9: Please select the forms of technology listed below, which you use in your classes to support your teaching.



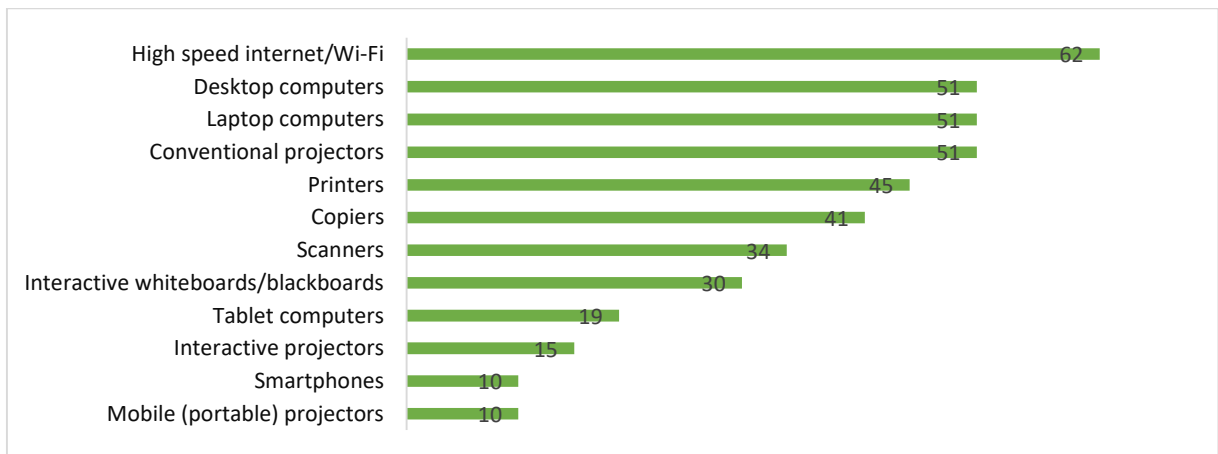
Teachers expressed a high need for trainings in the technology-enhanced approaches via “Interactive whiteboards/smart boards” and “Learning Management systems (Google for education/Microsoft Office 365/Moodle/Blackboard etc)” (see **Figure 10**).

Figure 10: Please rate your level of need for training in the technology-enhanced approaches used for teaching and support of learning listed below from "No need" to "High need".



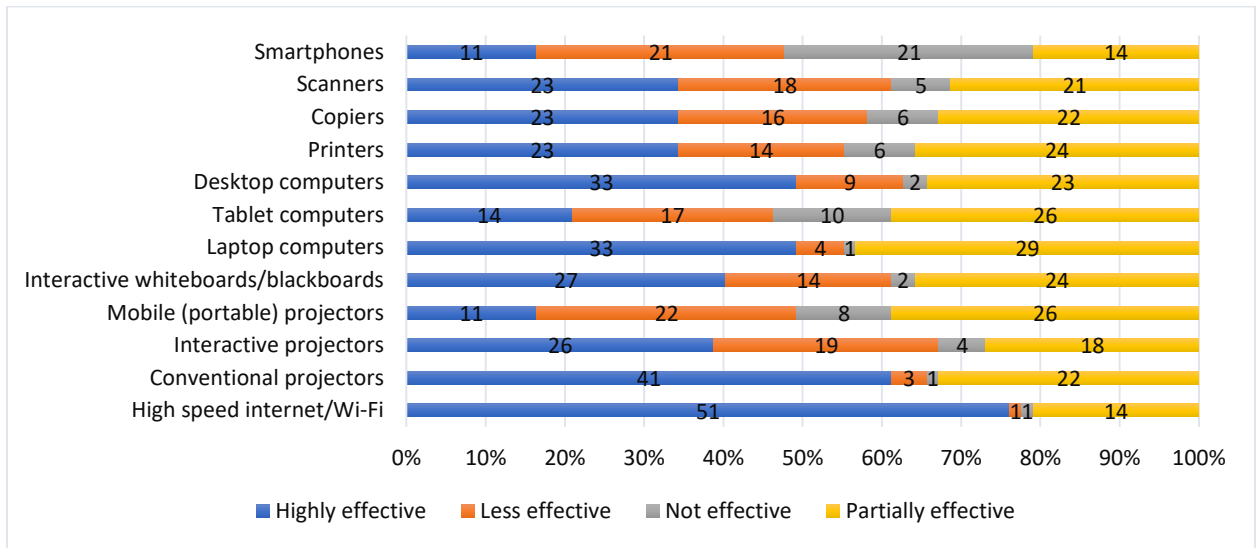
In their responses teachers have mentioned that the most used facilities to support their teaching are “High speed internet/Wi-Fi”, “Desktop computers”, “Laptop computers” and “Conventional projectors”. The least used are “Smartphones” and “Mobile (portable) projectors” (see **Figure 11**).

Figure 11: Please select the facilities listed below, which are used to support your teaching.



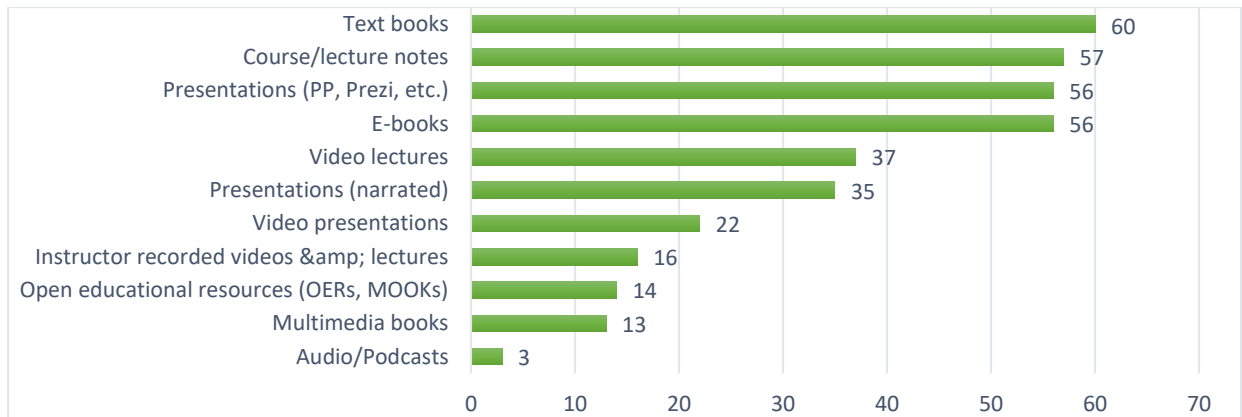
According to the teachers’ responses, highly effective facilities, which they think support their teaching process, are “High speed internet/wi-fi” and “Conventional projectors”. The most ineffective facilities are Smartphones (see **Figure 12**).

Figure 12: Please rate the facilities listed below which you think would support your teaching best from "Not effective" to "Highly effective".



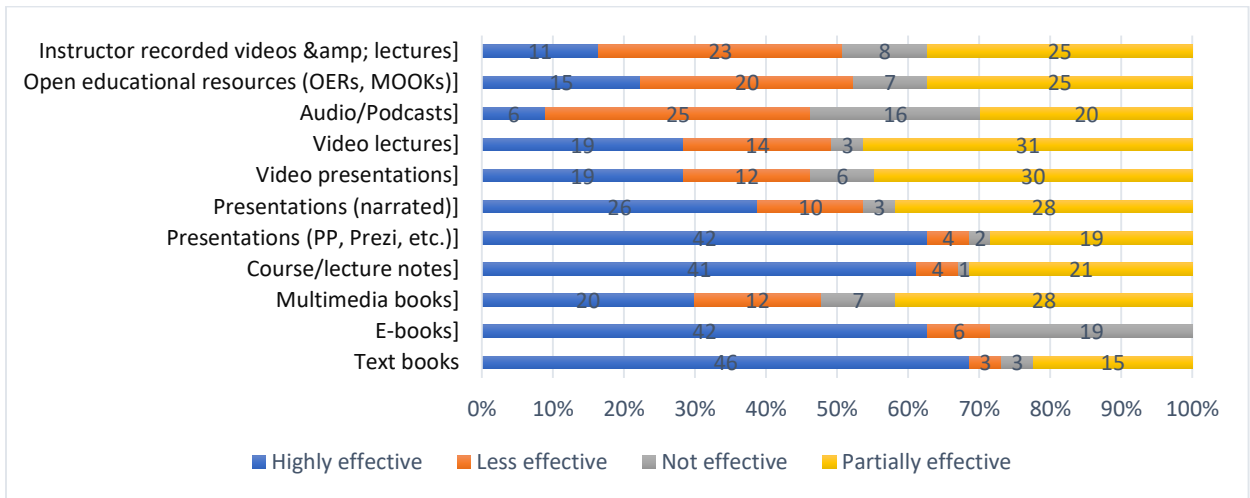
The majority of teachers make use of conventional teaching resources and generally use “Text books” and “Course/lecture notes”. A significant proportion of the respondents have indicated using “Presentations (PP, Prezi, etc.)” and “E-books for teaching”. Such tools as Open Educational resources (OERs, MOOKs), Multimedia books and Audio/Podcast are among the least used materials (see **Figure 13**).

Figure 13: What kind of teaching materials listed below are currently used by you.



The most effective teaching materials according to the teachers’ feedback are: “Text books”, “E-books”, “Course/lecture notes”, “Presentations (PP, Prezi, etc.)”. “Instructor recorded videos; lectures”. “Open educational resources” and “Audio/Podcasts” were considered among the least effective materials as the largest number of teachers rated them as not effective or less effective. (see **Figure 14**).

Figure 14: Please rate the teaching materials listed below which you think would support your teaching best from "Not effective" to "Highly effective".



Recommendations

Respondents were given an opportunity to express their thoughts, suggestions and ideas in a form of an open ended questions.

In their responses, teachers have mentioned various recommendations about:

- Outcomes and possible training;
- Using technologies in teaching;
- Practice more about modern electronic technologies.

Some of the quotes are presented below:

"I would like to take part in the training/workshop where I would have an opportunity to get to know new trends in lecturing (especially, using technologies in teaching)."

"The survey does not sufficiently address the learning environment, such as the need to work during studies and limited time for preparation for the course, program coordination among lecturers for skills improvement, university internal & horizontal institutionalized teaching and learning system (university as a learning institution) is missing. I am highly interested in the outcomes and possible trainings. I have had some good experience with co-teaching. I will learn about "Networked University" in the future."

“Working in social sciences, I still think that traditional way of learning, based on text-books, articles and interactive seminars is the most valid way, though need to practice more about modern electronic technologies.”

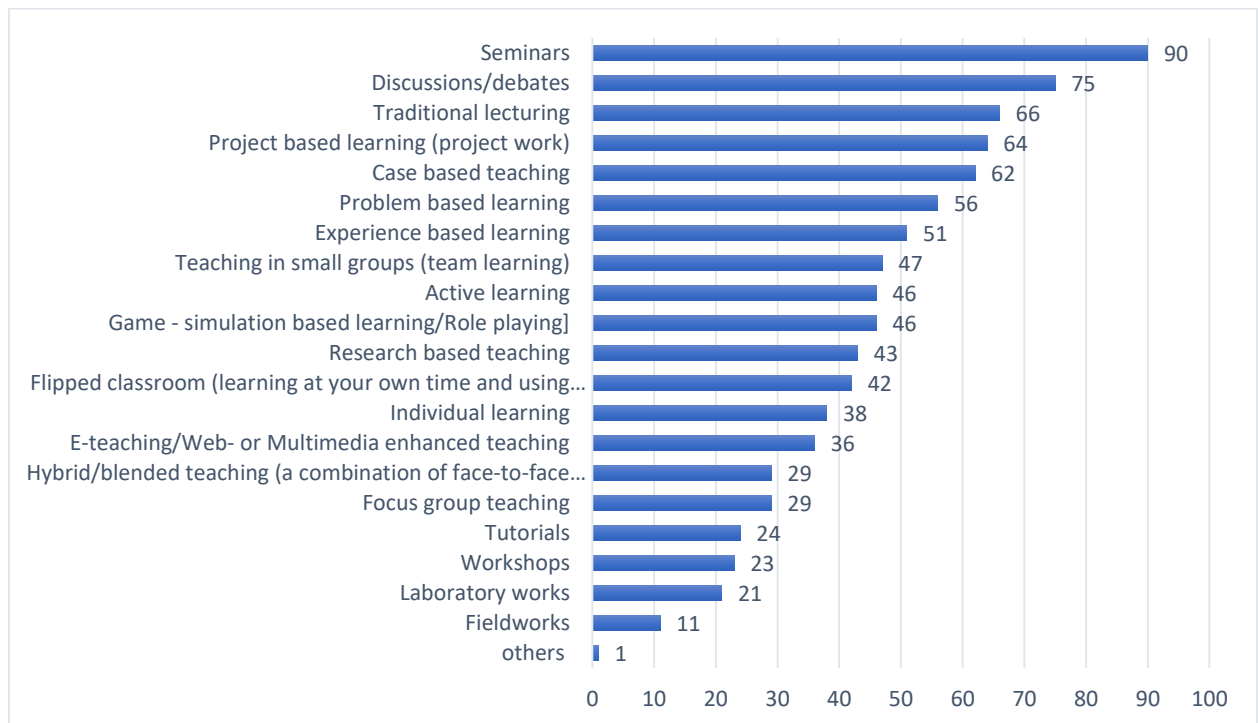
“Gadgets and assorted media are no substitute for a qualified instructor who is responsive to the needs and talents of students in the classroom. Rather than investigate class-room technology, I suggest you look at what makes some professors/teachers more effective than others.”

Student learning needs assessment

Second Questionnaire assessed students' needs and their perspectives on learning and teaching. The survey was administered to 98 participants, 82% of whom were female students.

According to the survey results, teachers mostly use “Seminars” and “Discussions/debates” as their dominating teaching styles. Such teaching styles as “E-teaching/Web- or Multimedia enhanced teaching”, “Focus-group teaching”, “Tutorials”, “Workshops” “Laboratory work” and “Fieldwork” were identified by considerably fewer students (see **Figure 15**).

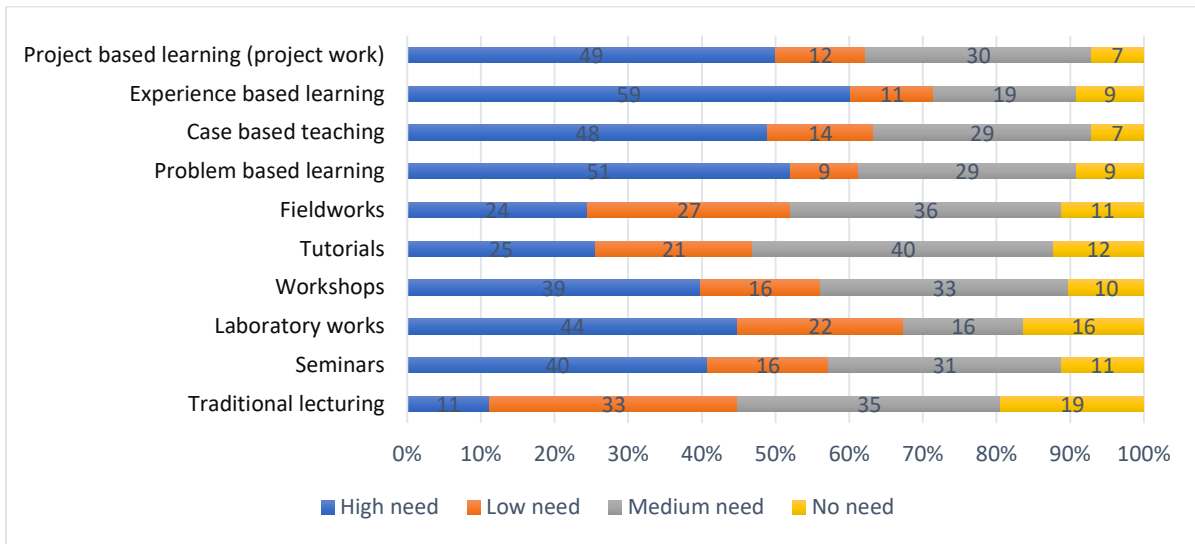
Figure 105: How do your teachers teach you? Please select teaching styles/approaches listed below currently used by your teachers in class.



It is worthwhile to note that teacher and student responses largely coincided regarding the most frequently used teaching styles (see Figures 4 and 15). They both identified “Traditional lecturing”, “Seminars” and “Discussion/Debates” as dominating approaches. Roughly, only half of surveyed students and teachers mentioned “Research based teaching” as an actively used teaching method.

In their responses, students have rated “Experience based learning”, “Problem based learning” and “Project based learning” as highly needed eaching styles. They identified “Traditional lecturing” as least needed (see **Figure 16**).

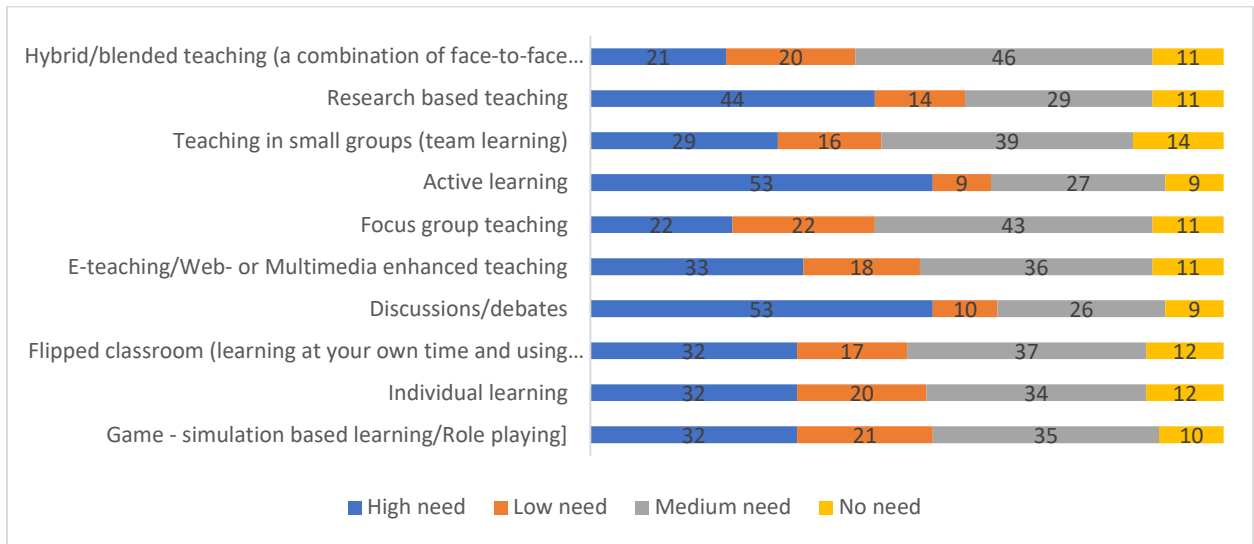
Figure 16: rate your level of need in the teaching styles/approaches listed below from "No need" to "High need".



Here, teacher and students responses diverged to a certain degree. On the one hand, in line with students teachers identified “Doing projects” and “Solving problems related to course content” among teaching styles that best enable students to learn effectively (see Figure 7). However, roughly only half of the surveyed teachers used these methods in their classrooms (see Figure 6). Importantly, teachers named “Research based teaching”, “Problem based learning” and “Project based learning” as priority areas for their professional development (see Figure 5).

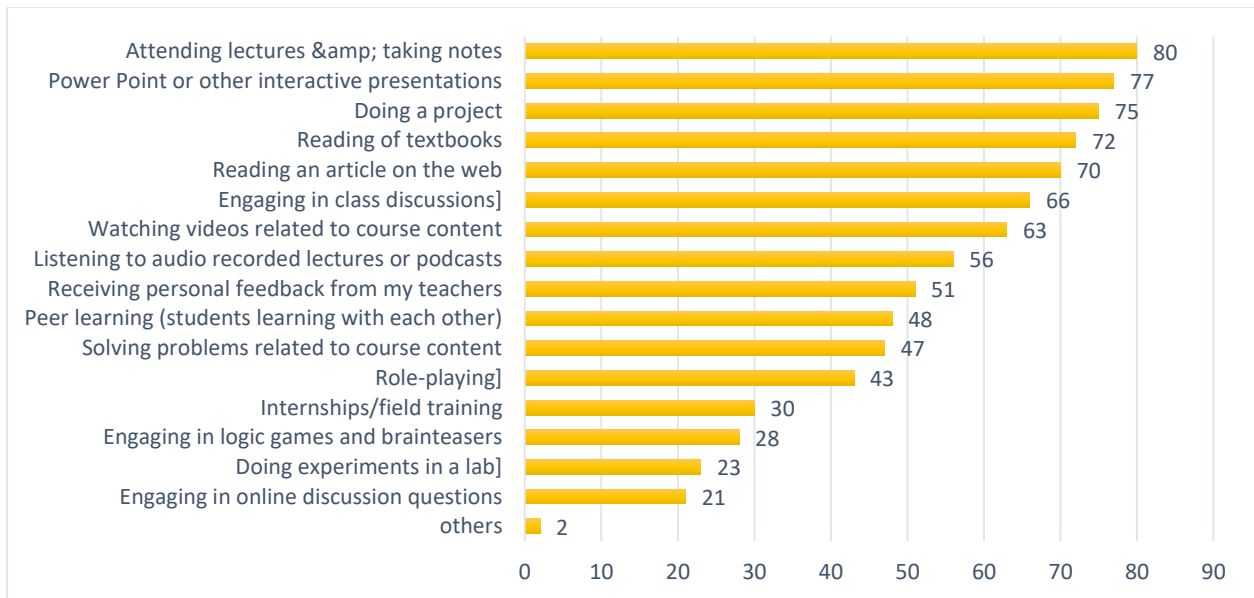
Along the “Discussion/Debate” the students rated “Active learning” and “Research based teaching” as highly needed teaching styles (see **Figure 17**).

Figure 17: rate your level of need in the teaching styles/approaches listed below from "No need" to "High need".



The results of this study showed that the most frequently used learning style by students are: “Attending lectures and taking notes” and “Power point or other interactive presentations”. The least used method is “Engaging in online discussion questions” (see **Figure 18**).

Figure 18: How do you learn now? Please select learning styles/approaches listed below currently experienced by you.

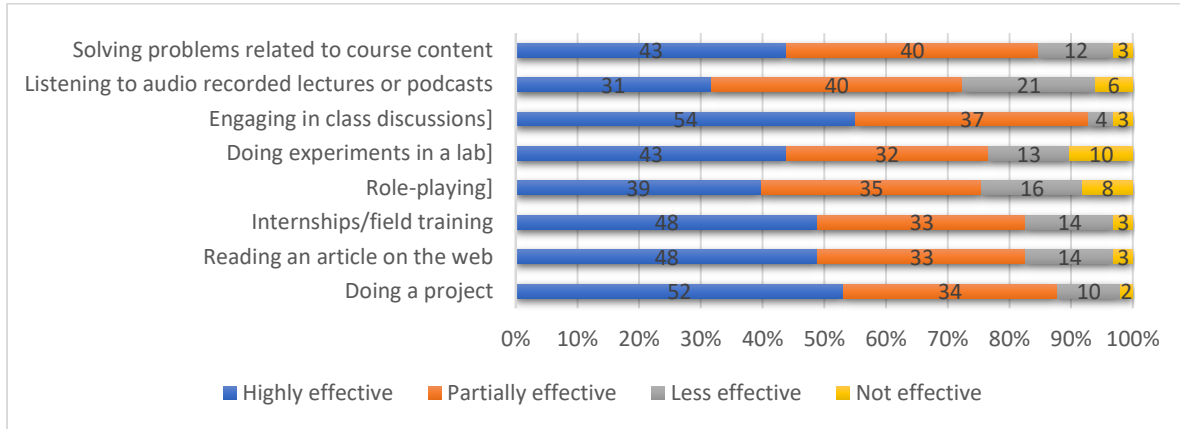


Teachers and students concurred in their assessments. Their majority identified “Reading of textbook” as the leading learning style currently applied in their classrooms (see Figures 6 and 18). “Engaging in logic games and brainteasers” and “Engaging in online discussion

questions” are named among the least used learning styles by both students and teachers (see Figures 6 and 18).

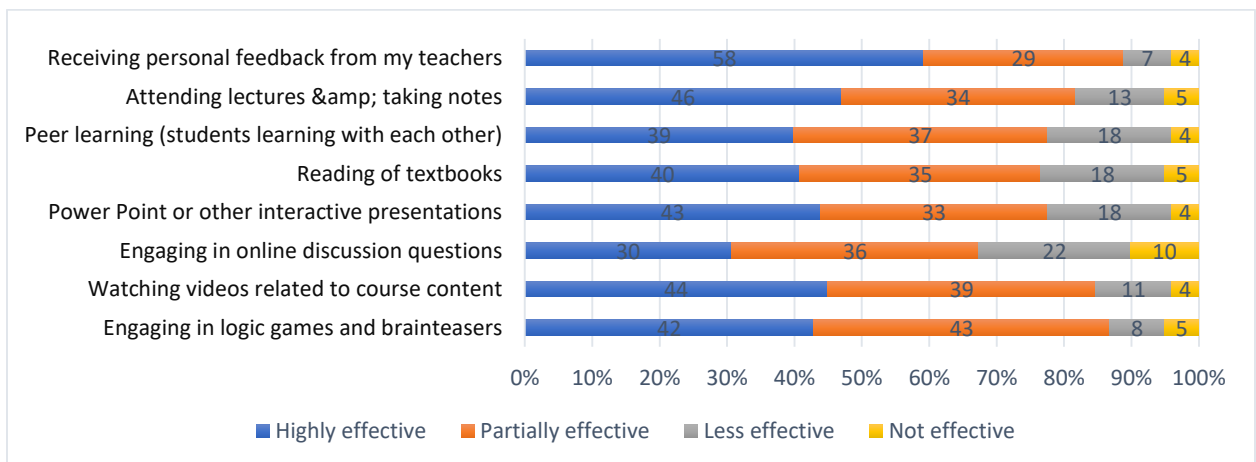
According to students, they learn best while: “Engaging in class discussions” and “Doing a Project”. The most ineffective learning style is “Doing experiments in a lab” (see **Figure 19**)

Figure 19: How do you learn best? Please rate the learning styles/approaches listed below which would enable you to learn effectively from "Not effective" to "Highly effective":



Also, according to students, the most desirable teaching form is: “Receiving personal feedback from my teachers“. The most ineffective learning style is “Engaging in online discussion questions“ (see **Figure 20**).

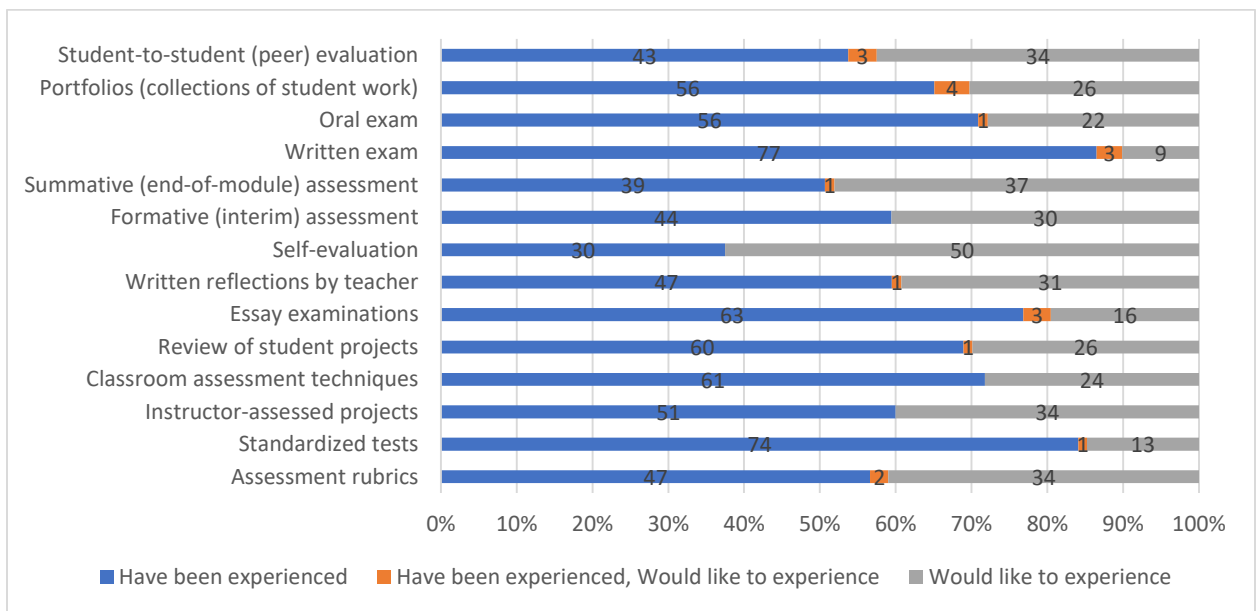
Figure 20: How do you learn best? Please rate the learning styles/approaches listed below which would enable you to learn effectively from "Not effective" to "Highly effective":



The survey results showed that both teachers and students largely agreed on their assessment of most desirable learning styles. They both identified “Doing projects”, “Engaging in class discussions” and “Receiving personal feedback from my teacher” as the ones that were most effective (see Figures 7, 19 and 20). However, teachers were much more likely to identify “Attending lectures & taking notes” and “Solving problems related to course content” as effective styles than students themselves (see Figures 7, 19 and 20).

According to the student survey, students are predominantly assessed based on “Written exams” and “Standardized tests”. However, they would like to see more “Self-evaluation” as an assessment method in their classrooms (see **Figure 21**).

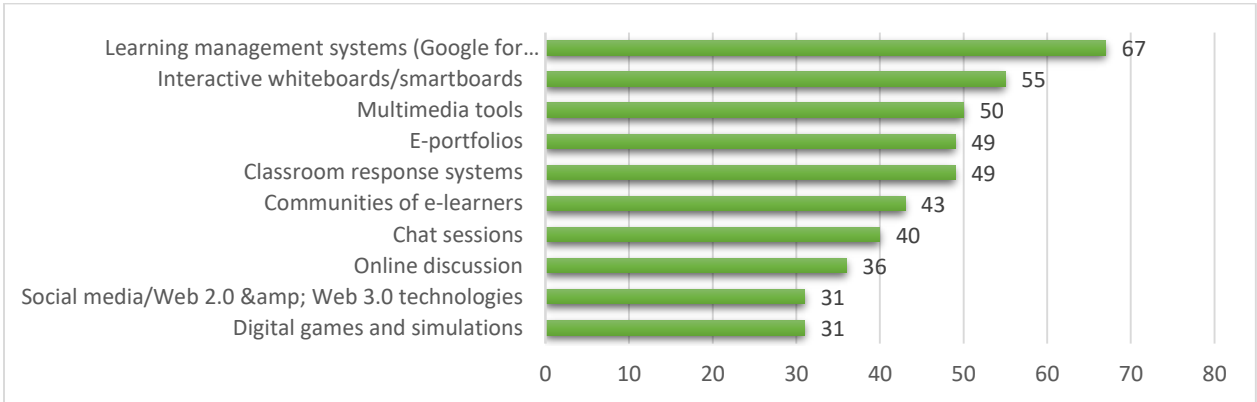
Figure 21: How are you assessed? Please select the assessment methods/approaches listed below which you have been experienced and those you would like to experience.



Similarly, the surveyed teachers named “Written exam” and, “Standardized tests” as dominating tools they currently use to assess students’ performance (see Figure 8). They largely repeated students’ priority when they identified “Self-evaluation” as an assessment method they would like to experience in their classrooms (see Figure 8). Interestingly, the teachers put nearly as high a priority on “Student-to student evaluation” while students opted for a “Summative assessment” as their next choice of an assessment style.

According to student responses, “Learning management systems” is the most used technology supporting their learning process. They identified “Social media/Web 2.0 & Web 3.0 technologies” and “Digital games and simulations” as least used forms of technology in their classrooms (see **Figure 22**).

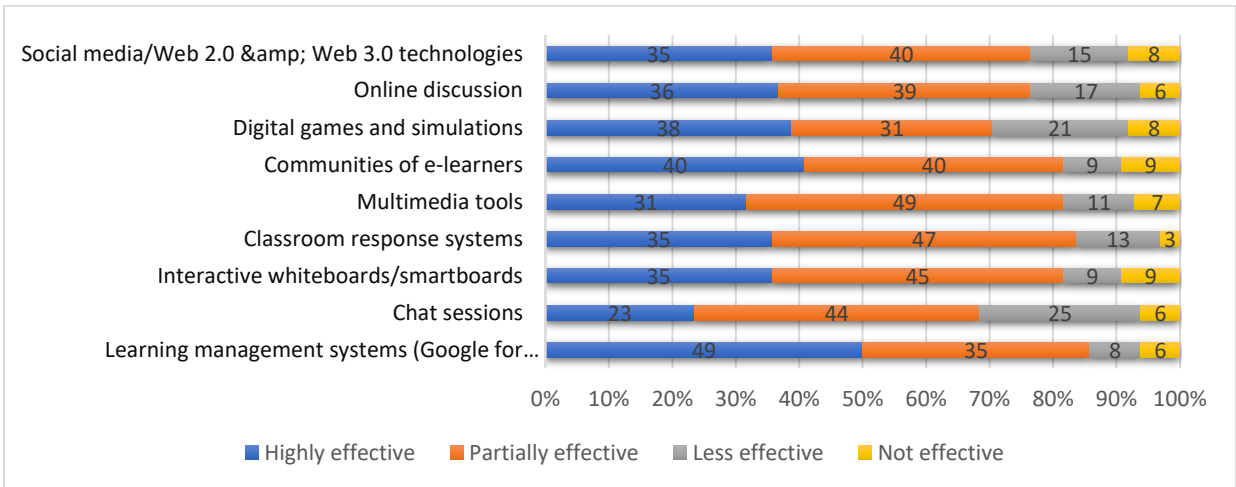
Figure 22: Please select the forms of technology listed below, which are used in your classes to support your learning.



Teacher survey revealed largely the same trend as teachers identified “Learning Management systems” as one of the most applied and “Digital games and simulations” and “ Social Media/Wb 2.0; Web 3.0 technologies” as the least applied technologies (see Figure 9). However, teachers were more likely to mention “Multimedia tools” than students in their survey.

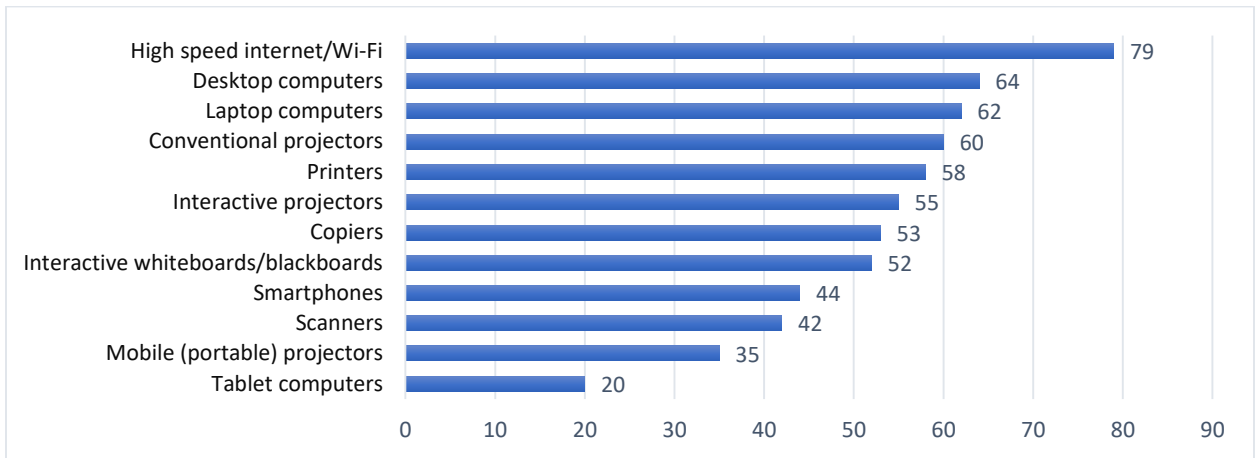
The surveyed students rated “Learning management systems “as highly effective. They named “Communities of e-learners” as their next priority. The surveyed students categorized ”Digital games and simulations” and “Chat sessions” as less effective (see **Figure 23**).

Figure 23: Please rate the forms of technology listed below which would support your learning best from "Not effective" to "Highly effective"



According to the students’ responses, the most used facilities which they think support their learning process are “High speed internet/wi-fi” and “Desktop computers”; the least used facility is “Tablet Computers” (see **Figure 24**).

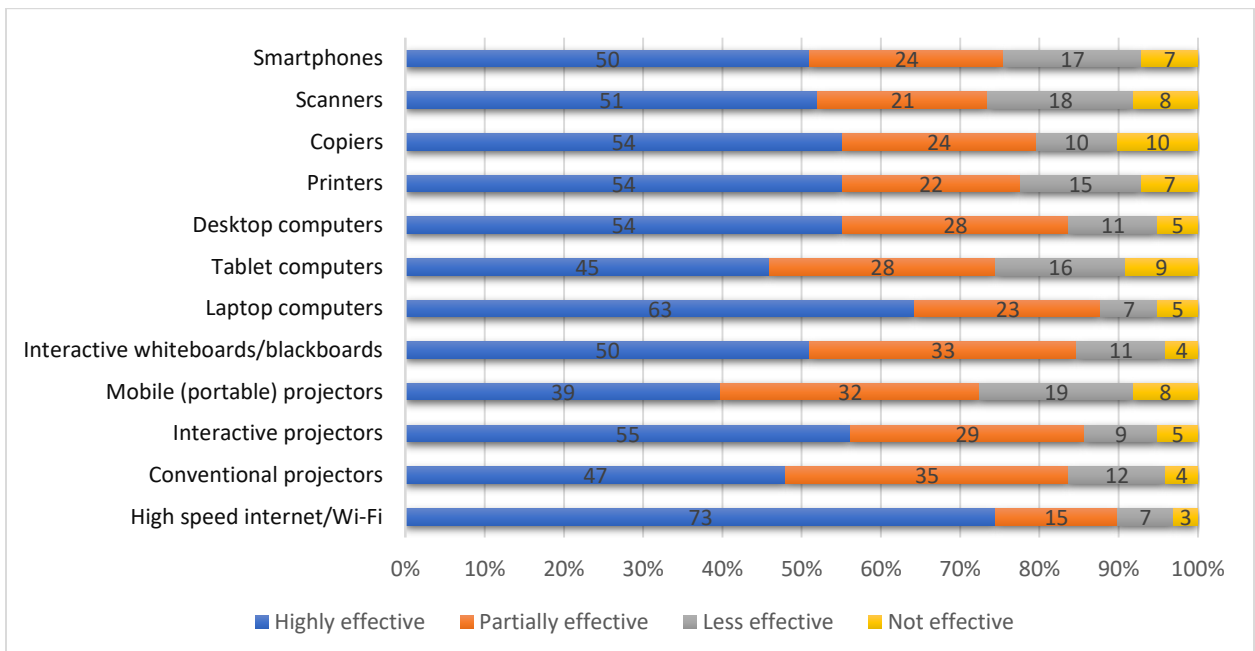
Figure 24: Please select the facilities listed below, which are used to support your learning.



The surveyed teachers largely repeated the trend and identified that they use the same facilities (i.e. “High speed internet/Wi-Fi” and “Desktop computers”) to support their teaching. However, students and teachers diverged concerning “Smartphones”. Nearly half of the surveyed students said they used this technology for learning while only few teachers mentioned that they applied this device for teaching (see **Figures 11 and 24).** ,

Students rated “High speed internet/wi-fi” and “Laptop computers” as highly effective facilities that would support their learning. They identified “Copier” as most ineffective facility (see **Figure 25).**

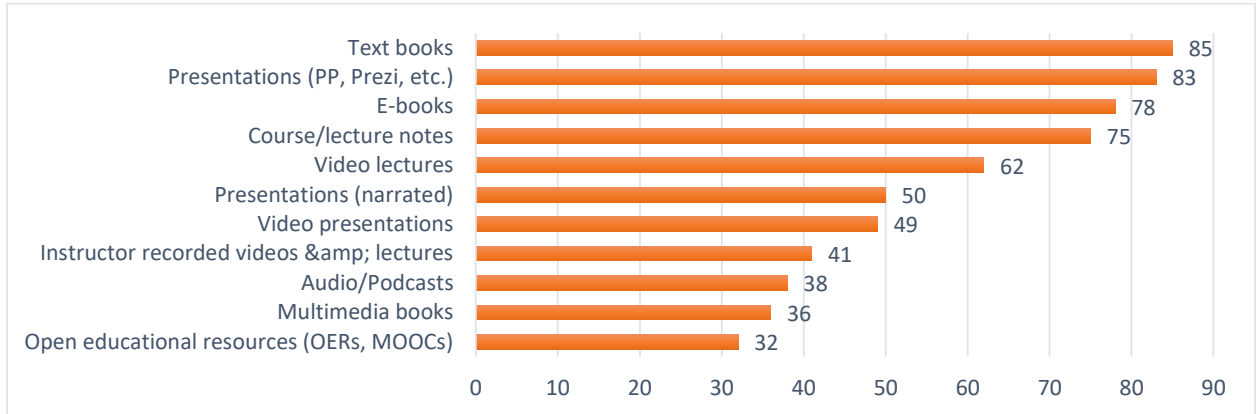
Figure 25: Please rate the facilities listed below which would support your learning best from "Not effective" to "Highly effective".



Teacher survey revealed the similar trend as teachers said that “High speed internet/wi-fi” would support their teaching most effectively (see **Figure 12**). Apart from students, the teachers named “Smartphones” as least effective technology for their teaching. .

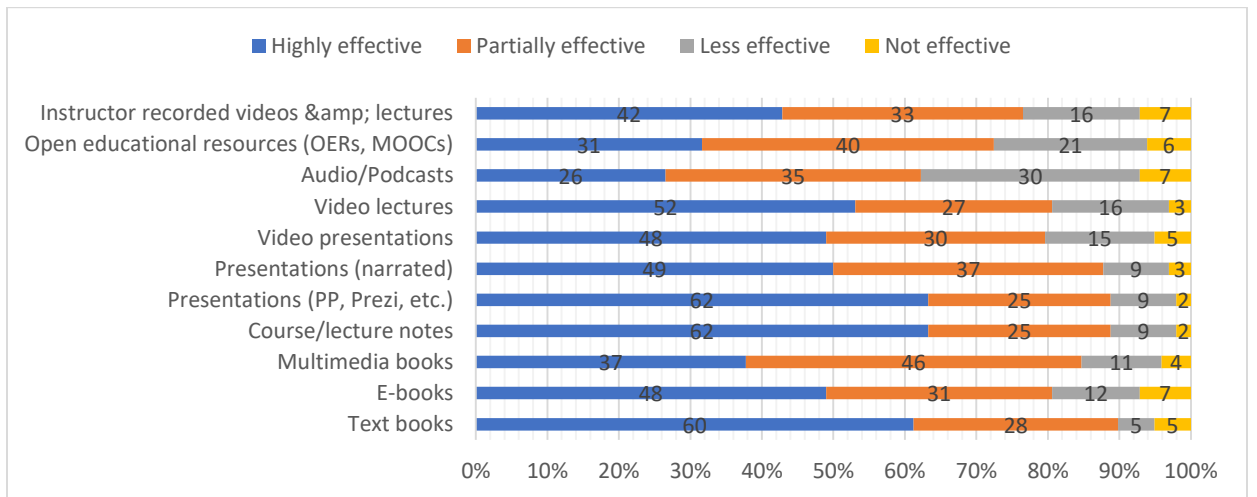
The majority of surveyed students currently use such learning materials, as “Text books” and “Presentations (PP, Prezi, etc.)”. “Open educational resources (OERs, MOOCs)” are used by smallest number of students (see **Figure 26**).

Figure 26: What kind of learning materials listed below are currently used by you?



According to students, highly effective forms of learning materials are “Presentations (PP, Prezi, etc.)”, “Course/lecture notes”, “Textbooks” and “E-books”; less effective are Audio/Podcasts (see **Figure 27**).

Figure 27: Please rate the learning materials listed below which would support your learning best from "Not effective" to "Highly effective".



The teachers identified largely the same priorities. They mostly used “Text books”, “Course/lecture notes”, “E-books” and “Presentations (PP Preze, etc)” while very few of them used Audio/Podcasts (see **Figure 13**). In the same vein, teachers rated “Text books”,

“Course/lecture notes” and “Presentations (PP Preze, etc) as highly effective while effective Audio/Podcasts as least effective (see **Figure 14**).

Recommendations

Students had an opportunity to express their thoughts, suggestions and ideas through open ended questions.

Few of them have mentioned various recommendations in their responses. They are as follows:

- Differentiated methods of teaching;
- Different forms of facilities;
- Debates and discussions;
- More practice;
- Less theory;
- More exchange programs;
- More books;
- More plagiarism control;
- Equipments.

We provide some quotes from student responses below. Style retained.

“I like when the teacher gives us the opportunity to participate in debates and discussion. As well as, always use social media for communication and sharing ideas”.

“I think, that in our university we have very good enviroment, equipments and situation to learn comfortably. In my opinion, it would be better if we concentrate on practice. It would be more effective”.

“More investment in education, more plan and globalization”.

“Doing more exchange programs abroad will definitely help students to broaden their horizons, that will positively affect on educational system”.

“I'm glad to have a chance express my idea”.

“As I mentioned up earliar, I want more books and wish there will not plagiary, administration don't control plagiarism in facebook groups!”

Conclusions and Recommendations

The teacher and student survey results provided by ISU within the framework of the PRINTeL project's objectives allows to come to the following general conclusions and recommendations:

1. The innovative and technology-enhanced teaching and learning methods and approaches that are needed to be introduced at ISU are:
 - Research based teaching;
 - Experience based learning;
 - Active Learning;
 - E-Teaching/Web or Multimedia Enhanced teaching;
 - Flipped Classroom;
 - Problem-based Learning;
 - Project based learning;

Concerning assessment methods of student performance, the survey results clearly demonstrated the need for introduction of such methods as self-evaluation, portfolio and student-to-student (peer) evaluation.

Importantly, students highlighted their need for more diversified methods of teaching and learning. They clearly demonstrated their preference for the use of new technologies in educational processes.

2. The technologies and facilities supporting teaching and learning necessary to be present at ISU are:
 - Interactive whiteboards/smart boards;
 - Learning Management systems (Google for education/Microsoft Office 365/Moodle/Blackboard etc);
 - Communities of e-learners"
 - "Multimedia tools"
 - High speed internet/Wi-Fi;
 - Conventional projectors;
 - Laptop computers;
 - Desktop computers;
3. As the survey results demonstrated, both students and teachers concurred in their preference for E-books. The study also revealed that both students and teachers tend to use predominately conventional teaching and learning materials (textbooks, course/lecture

notes, etc.); they are less likely to use OERs, MOOCs or Multimedia books. They mostly appraise these resources as partially effective in teaching and learning.

While practicing traditional forms of teaching and learning, and using conventional resources, teachers expressed their need to become better introduced to innovative teaching and learning materials and their application for effective instruction.

As the study clearly identified that innovative approaches in education should be further encouraged within the university academic community. Teachers should be provided with ample opportunities to become better acquainted with such up-to-date teaching and learning resources and explore possibilities to integrate them in classrooms for effective technology-driven instruction. This need is well supported by student readiness to exploiting new technologies while learning.