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SMART PL

Project Name:
Students' Personalised Learning Model, Based on the Virtual Learning Environment of Intellectual Tutoring "Learning with No Limits"

Benchmarking of the European and Ukrainian practice of applying a personalized approach to learning

Deliverable 2.1

Project Name: Students' Personalised Learning Model, Based on the Virtual Learning Environment of Intellectual Tutoring "Learning with No Limits" – SMART-PL

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The SMART-PL consortium consists of the following partners:

No.	Role	Short Name	Legal Name	Country
1	COO	TalTech	TALLINNA TEHNIKAÜLIKOO	EE
2	BEN	KU Leuven	KATHOLIEKE UNIVERSITEIT LEUVEN	BE
3	BEN	PWR	POLITECHNIKA WROCLAWSKA	PL
4	BEN	IFNUL	IVAN FRANKO NATIONAL UNIVERSITY OF LVIV	UA
5	BEN	KRNU	KRYVORIZKYJ NATIONALNYJ UNIVERSYTET	UA
6	BEN	KKNU	V. N. KARAZIN KHARKIV NATIONAL UNIVERSITY	UA
7	BEN	KHNU	KHMELNITSKY NATIONAL UNIVERSITY	UA
8	BEN	ONPU	ODESSA NATIONAL POLYTECHNIC UNIVERSITY	UA
9	BEN	IHE OF NAESU	INSTITUTE OF HIGHER EDUCATION OF THE NATIONAL ACADEMY OF EDUCATIONAL SCIENCES OF UKRAINE	UA
10	BEN	KSU	KHERSON STATE UNIVERSITY	UA
11	BEN	NAHEQA	NATIONAL AGENCY FOR HIGHER EDUCATION QUALITY ASSURANCE	UA
12	BEN	UKRSEITSOC	PUBLIC ORGANIZATION "UKRAINIAN SCIENTIFIC AND EDUCATIONAL IT SOCIETY"	UA
13	BEN	FFUTURE	KRYVYI RIH FOUNDATION OF THE FUTURE	UA

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Introduction

The Report is prepared on the basis of:

- the information received from the European universities – Project' partners (including information from the universities' sites) about the practices of personalized learning (PL);
- the information from the Ukrainian universities – Project' partners (including surveys of staff and students) to describe the current state / situation, to understand the existing gaps and to define the tasks for the process of implementing the Project.

Request to the European universities – Project' partners was oriented to get information about their achievements in realization of PL in higher education including the following directions:

- Key features of the PL model in the university.
- Institutional policies and PL.
- Infrastructure, environment, tools, technologies, LMS, digitalization etc. for PL.
- University departments and staff responsible for PL.
- QA system in the university and PL.
- Students and PL: individual need; individual learning pathways / trajectories; elective courses / modules; formative assessment; support and tutoring; community of learners; engagement and active role in education process; collaboration with teachers; impact into study content and methods etc.
- University teachers and PL: innovative methods of teaching and learning; pedagogic strategies for PL; training and support for university teachers on PL; PL and personalized teaching (PT) etc.
- Management and PL: reflection, feedback, evaluation and decision-making on PL.
- Inclusion in education process.
- Other important experience.

Request to the Ukrainian universities – Project' partners had 2 parts.

- the 1st – General questions about implementation of PL in the university;
- the 2nd – Questionnaire for surveying staff and students.

Part 1 – General information about implementation of PL in the university

1. Full name of a higher education institution (HEI)
2. HEI website address
3. Number of students
4. Number of academic staff
5. Number of students who took part in the survey
6. Number of academic staff who took part in the survey
7. Which documents of your HEI reflect the implementation of a personalized approach to learning?
8. What procedures, prerequisites and criteria are used to implement an individual learning pathway / trajectory (individual study schedule, academic mobility, non-formal learning, elective courses, accompaniment and support, etc.) at your HEI?
9. What conditions to ensure an inclusion in higher education are implemented at your HEI?



Part 2 – Questionnaire for surveying staff and students

1. Which of the following is implemented in the educational process of your HEI?

- Lectures-discussions
- Individual assignments / practical tasks
- Master classes with participation of professionals-practitioners
- Case studies / situational analyses
- Individual projects
- Group projects
- Individual research assignments
- Group research assignments
- Video lectures
- Virtual training equipment
- Digital laboratories
- Interactive textbooks / manuals / study guides
- Virtual simulators
- Electronic tests
- Interactive games

2. How are student individual educational / learning needs identified at your HEI?

- Anonymous inquiry / student survey
- Students' requests submitted to a relevant university department
- Focus group survey
- Communicating requests to a course leader, group curator
- Individual educational / learning needs are not identified
- Other (specify) _____
- Difficult to answer

3. How are students informed about the content of elective courses at your HEI?

- The list of elective courses on HEI's website
- Elective courses' syllabi are available in open access on HEI's website
- Presentations of elective courses are available in open access on HEI's website
- Presentations of elective courses are conducted directly by teachers who will teach the above courses
- Other (specify) _____
- Difficult to answer



4. How are student individual learning pathways implemented at your HEI?

- Students are offered elective courses only within the chosen educational / study programme
- Students are offered elective courses within other educational / study programmes of the same higher education level
- Elective courses are offered among different higher education levels within the HEI
- Students take courses at other HEIs within academic mobility programmes
- Students are offered compensatory courses – additional courses to improve students' learning outcomes
- Social projects, volunteering as components of the educational / study programme
- Student internship / placement outside HEI
- On-the-job training as a dual form of higher education
- Learning outcomes of MOOCs (open online courses such as Prometheus, Edx etc.) are recognized by the educational / study programme
- Other (specify) _____
- Difficult to answer

5. Does your HEI offer tests of different complexity levels depending on students' educational / learning attainment?

- Yes
- No
- It is difficult to answer

6. Which of the practices listed below are implemented in your HEI?

- Students are involved in the assessment / evaluation of teaching quality
- Students are involved in the development of educational / study programmes
- Students are involved in reviewing / updating of educational / study programmes
- Students are involved in defining the course content
- Students are involved in defining the assignments' content
- Students are involved in defining teaching and learning methods and techniques within a course
- Other (specify) _____
- Difficult to answer

7. What types of support does your HEI provide to students to improve their learning outcomes, attainment?

- Tutors' / curators' support
- Individual consultations by teachers
- Organizational / instructional support provided by relevant HEI units or departments: Dean's Office, Chairs, Academic Office etc.
- Psychological support by relevant university services
- Peer support provided by students
- Social support by relevant university services
- Other (specify) _____
- Difficult to answer



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8. Which of the digital tools listed below does your HEI use to organize / support student learning?

- Individual student cabinet
- Digital student portfolio
- Digital class schedule
- Digital communication on the organization of educational process
- Digital performance / success record
- Digital survey on teaching quality
- Digital survey on the quality of organizational and instructional support
- Digital voting
- Other (specify) _____
- Difficult to answer

9. Which of the tools / methods / approaches listed below are used to assess students' learning attainment at your HEI?

- Electronic self-assessment tests
- Peer assessment of learning outcomes – students assess other students
- 360-degree assessment method
- Psychological tests (to assess behavioural qualities acquired during learning)
- None of the above
- Difficult to answer



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1. Tallinn University of Technology

(1) General information about TalTech

Tallinn University of Technology (TalTech) ¹ operates under:

- the Tallinn University of Technology Act ²,
- the Higher Education Act ³,
- the Organisation of Research and Development Act ⁴,
- the Statutes of Tallinn University of Technology ⁵,
- the Strategic Plan of Tallinn University of Technology 2021–2025 ⁶,
- and other legislation ⁷,

which is structured by the following directions: General Management, Teaching and Learning, Research Activities, Business Activities, Support Activities.

Quality Concept of Tallinn University of Technology ⁸ has the following chapters: Quality, Quality management principles, Organisational structure, Liability, Key components of the monitoring system, Management of the developments and changes of administrative support processes.

The quality system consists of various external and internal requirements set out based on the goals and long-term targets laid down in the university's Strategic Plan and it is improved through regular self-assessments and external evaluations. The requirements for study programmes, attestation of academic staff, quality requirements for support services, etc. provide an important input (quality requirements and definitions) for the quality system. The key quality monitoring mechanisms include external evaluations, audits, feedback from various target groups, regular monitoring, etc.

The whole system of study and learning at Taltech places a strong focus on social inclusion, digital transitions and promoting young people's participation in democratic life, combining study and work with entrepreneurial activities.

Personalized approach of mobility opportunities, entrepreneurial and work experience parallel to studies give a positive effect on educational, social, personal and professional development. It improves employability, helps confidence building, independence, and builds a sense of societal belonging.

¹ TalTech. <https://taltech.ee/en>

² Tallinn University of Technology Act. <https://www.riigiteataja.ee/en/eli/503062019002/consolide>

³ Higher Education Act. <https://www.riigiteataja.ee/en/eli/529082019022/consolide>

⁴ Organisation of Research and Development Act. https://www.riigiteataja.ee/en/compare_original/511112013011

⁵ Statutes of Tallinn University of Technology. https://haldus.taltech.ee/sites/default/files/2019-10/Statutes_of_Tallinn_University_of_Technology_2019_0.pdf?_ga=2.88308059.1530322156.1681655508-1995675877.1680793984

⁶ Strategic Plan of Tallinn University of Technology 2021–2025. https://haldus.taltech.ee/sites/default/files/2021-03/Strategic%20Plan%20of%20Tallinn%20University%20of%20Technology%202021-2025.pdf?_ga=2.88308059.1530322156.1681655508-1995675877.1680793984

⁷ <https://oigusaktid.taltech.ee/en/legislation/>

⁸ Quality Concept of Tallinn University of Technology. https://oigusaktid.taltech.ee/en/quality-management/?_ga=2.81645268.2140560830.1683295639-1995675877.1680793984



(2) Student Mobility

Erasmus+ student physical mobility for studies⁹ in one of the TalTech partner universities¹⁰ within the Member States of the European Union and Third countries associated to the Programme (North Macedonia, Serbia, Iceland, Liechtenstein, Norway and Turkey):

- Courses has to be corresponding to TalTech ones
- 15 ECTS per semester is required
- Duration 2-12 months
- Tuition fee is waived in the host university

Erasmus+ scholarship for internships (traineeships, work placements)¹¹:

- Duration – 2-6 months per one level of study (Bachelor / Master / PhD)
- Participation as a student or as an intern
- Internship has to be related to student's studies
- Students have to find a placement by themselves
- Students must get ECTS in TalTech for internship

Blended short-term mobility, combining a virtual period with a physical short-term mobility:

- Contains 5-30 days of physical presence
- Virtual period (doesn't apply for PhD students) before or after the physical mobility
- Students must receive at least 3 ECTS
- Blended Intensive Programme (BIP) organized by one of the partner universities of TalTech
- Host university must be TalTech's partner university within the Erasmus+ framework

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Writing thesis abroad:

- Host university must be TalTech's partner university within the Erasmus+ framework
- Two supervisors are needed: one from TalTech and one from the host university
- Students have to find a supervisor from the host university individually
- Students can discuss their plans with the Programme Director and/or a thesis supervisor in TalTech
- The minimum period that can be funded is 2 months

⁹ Erasmus Studies. <https://taltech.ee/en/erasmus-studies>

¹⁰ TalTech partner universities. <https://taltech.ee/en/erasmus-partner-universities>

¹¹ Erasmus Internship. <https://taltech.ee/en/internshipabroad>



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(3) Student bodies

The Student Body of Tallinn University of Technology¹² (Student Body) is an institution which exercises the right of the students to self-government – to decide on and manage independently, pursuant to law and legislation issued on the basis thereof, issues of student life based on the interests, needs, rights and obligations of students.

The Student Union (SU), as the representative body of the TalTech Student Body, represents all the students of the university with its activities and stands for their rights. The views are formed based on the wishes and needs of the wider Student Body and the feedback received. This makes the Student Union a bridge between the students and the university. The focus of the Student Union is to support the development of students in both formal and non-formal education¹³.

The mission of Student Union (SU) is to serve as the guardianship authority to all TalTech students and stand for the quality of education, high-quality learning environment, and student life that is full of opportunities. For instance, Student bodies are co-organizers of the Võti Tulevikku (Key to the Future)¹⁴ is Estonia's largest student-focused career event at TalTech.

¹² Statutes of the Student Body. <https://oigusaktid.taltech.ee/en/statutes-of-the-student-body/>

¹³ Strategic Plan of Taltech Student Body 2021-2025. https://haldus.taltech.ee/sites/default/files/2021-03/2020.12.08%20%C3%9C%C3%B5pilaskonna%20arengukava%202021-2025_EN%20%282%29.pdf?_ga=2.19654769.890991615.1683482741-1995675877.1680793984

¹⁴ Võti Tulevikku. <https://www.vt.ee/en/>



(4) Counselling services

The Student Counselling Office provides general academic counselling, career counselling, psychological counselling, counselling of students with special needs and admissions counselling services. It also mediates internship and job offers.

Buddies – peer support in Taltech¹⁵

Buddies are older course students who help new international students at TalTech with questions concerning life in Estonia, studies etc.

Academic Counselling¹⁶

The Dean's office consults on issues concerning academic affairs. The student counsellors provide advice to students in all matters related to studies, e.g.:

- individual study plan / declaration
- completing the study load of a semester / an academic year
- certificates concerning studies at the university
- transcript of records
- academic leave
- application for main field of study / speciality
- accreditation of prior and experiential learning (APEL)
- applications for study allowances
- changes in personal data
- tuition fees and invoices
- completing a study programme
- application for a graduation thesis/declaring a thesis topic
- switching study programmes
- studies abroad
- internship

The Programme Director provides assistance in substantive matters related to the study programme:

- structure of the study programme
- selecting the main field of study / speciality
- thesis topic
- opportunities for further studies in the chosen field
- assessment of suitability of the courses for studies abroad

¹⁵ Buddies peer support. <https://taltech.ee/en/buddies-peer-support-taltech>

¹⁶ Academic Counselling. <https://taltech.ee/en/academic-counselling>



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(5) Study programmes

Special attention is paid on the introduction of problem-based and project-based learning, learner-centred teaching methods and combining practical training with theoretical studies. In 2021, project and problem-based learning is used as a teaching method in 48% of courses; 123 courses are fully based on a project- and problem-based approach.

The university considers project- and problem-based learning important and recognises the teaching staff, who apply it and who share best practice, and encourage other teachers to use it.

TalTech also organizes professional competitions (e.g. BRICO bridge competition, Robotex in the School of Engineering; IT Innovation Festival in the School of IT; CFA and moot court competitions in the School of Business and Governance) and encourages students and their teams to participate more in competitions with their projects.

A working group has been formed at the university to develop the indicators and measures for the wider use of project-based learning in courses¹⁷.

¹⁷ Self-Evaluation Report for Institutional Accreditation 2021. https://haka.ee/wp-content/uploads/TalTech_IA_SER_FINAL_070721_uus.pdf



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(6) Engineering Pedagogy

Engineering Pedagogy (EP) is an interdisciplinary essential element of the science-based system of engineering education. The aim of EP is to implement integral thinking in terms of Science as Art, combining the science of teaching with the art of the teacher, i.e. with the teacher's personality, which inspires teaching and adds creativity in the instruction process.

The methodology of EP is the science of the most common laws, principles and methods of scientific and technical knowledge, search for new ideas and theories and their realisation, the contents and structure of engineering activities. The object of EP is the pedagogical system of training engineers, the subject is described as designing and realising of professional training contents, organisation forms, methods, the process of specialist's personality formation. The basic notions and categories are the same as in general pedagogy: aims, principles, organisation form, etc, enriched with new contents taking into account the objectives of engineering education. The categories specific for EP are scientific and technical knowledge, engineering activity, specialist's personality and communication in the process of professional activity.

Taltech is hosting the Estonian Centre for Engineering Pedagogy (ECEP)¹⁸, which is the only representative office of International Society for Engineering Education (IGIP) in Estonia and in the Baltic region, and accredited by IGIP as Engineering Education Training Centre for International Educators. Activities of ECEP serve as best practice case of teacher training. ECEP coordinates research and development in the field of engineering and technology education in TalTech and implements the research results into the education of technical teachers in Estonia.

¹⁸ Estonian Centre for Engineering Pedagogy. <https://taltech.ee/en/engineering-pedagogy>



(7) Digitalization

TalTechDigital¹⁹ was launched in four lines of action: updating the digital infrastructure, digital teaching, supporting research, and convening a digital forum.

The main e-learning environment used at TalTech until 2019 was HITSA Moodle administered by the Information Technology Foundation for Education. In 2019 all courses were migrated to TalTech's own e-learning environment TalTech Moodle. The environment was enhanced during the year (user interface development, Uni-ID interface, preparations for the migration of courses from ained.ttu.ee) in order to make the environment more user-friendly and to make preparations for interfacing Moodle to the Study Information System (SIS)²⁰. E-support has been provided to 1,198 mandatory courses, i.e. 85% of all mandatory courses²¹.

The individual development and motivation of students is also supported by their involvement in research projects and the digital collection of the library. The organisation of distance learning is supported by MS Teams and Moodle BigBlueButton, hybrid learning is supported by auditoriums supplied with Echo360 video recording systems. In addition, portable cameras, tablets, 360-degree cameras and microphones are used in teaching. The teaching staff can test and apply innovative teaching and learning scenarios in the Teaching and Learning Lab, in the Mektory XR Center and independently record videos in the newly equipped²².

TalTech Educational Technology Centre

The aim of the TalTech Educational Technology Centre (ETC)²³ is the distribution of e-learning information and the introduction of new technological solutions. Main activities include among others:

- TalTech Moodle learning environment management and advising of users
- Offering multimedia services
- Enhancing digital skills and competences of the teaching staff
- Offering support for the creation of different e-learning materials
- Assessing compliance of a course to the e-learning levels

The TalTech ETC offers services and training for the creation of e-learning materials. Educational technological and multimedia services:

- Assistance in the creation of e-courses and learning objects
- E-learning technical advice
- Creation of learning objects
- Video and audio recording, processing
- Video conference support
- Trainings

¹⁹ TalTechDigital. URL: <https://taltech.ee/en/taltechdigital>

²⁰ Study Information System. https://ois2.ttu.ee/uusois/uus_ois2.tud_leht

²¹ Annual Report 2019. https://haldus.taltech.ee/sites/default/files/2021-04/taltech_2019_annual_report.pdf?ga=2.86889176.1530322156.1681655508-1995675877.1680793984

²² Self-Evaluation Report for Institutional Accreditation 2021. https://haka.ee/wp-content/uploads/TalTech_IA_SER_FINAL_070721_uus.pdf

²³ TalTech Educational Technology Centre. <https://taltech.ee/en/educational-technology-centre>



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(8) Feedback

The university values feedback from different target groups and stakeholders, on the basis of which activities are initiated to improve study programmes, teaching, support services and expand development opportunities and increase staff satisfaction.

The most important regular feedback surveys and questionnaires are the following (see the link) ²⁴.

Student feedback survey on teaching, courses and organisation of studies, conducted once a semester in SIS with the aim to obtain input to different aspects of teaching and learning and thereby provide an opportunity for students to be involved in the development of the field. Students are informed about development activities through the programme advisory boards and the annual feedback report, which is a part of the internal evaluation of study programmes (the report is available to students in SIS).

The feedback survey is totally anonymous. The results are presented only in aggregate form. The feedback process is governed by the "Procedure for requesting and taking into account feedback on teaching and courses".

Graduate satisfaction survey, seeks feedback on the completed study programme, the quality of teaching, organisation of studies and supervision.

Alumni employment and satisfaction survey, conducted every two years by the Ministry of Education and Research with the aim to obtain feedback on the after-graduation activities of the university's alumni who have graduated up to 3 years ago, their competitiveness and how knowledge and skills acquired at the university meet labour market requirements.

Feedback and input from employers for development is received from the programme advisory boards, which include representatives of various interest groups (incl. relevant companies and professional associations). The supervisors at internship host organisations provide feedback on the level of the knowledge and skills of their interns.

²⁴ Self-Evaluation Report for Institutional Accreditation 2021. https://haka.ee/wp-content/uploads/TalTech_IA_SER_FINAL_070721_uus.pdf



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2. Katholieke Universiteit Leuven

Katholieke Universiteit Leuven ²⁵

(1) Introduction

The inclusion of computer technology in education has led to increased attention for personalized learning and instruction. By means of personalized learning, or adaptive learning, learners are given instruction and support directly, adjusted to their cognitive and noncognitive needs. In order to provide this, relevant learner and learning characteristics need to be measured or inferred and incorporated in learner models.

These learner models provide the basis from which personalization can occur and have to be considered as the core of personalized learning environments. In order to provide dynamic personalized learning, learner models need to be adjusted and updated with new information about the learner's knowledge, affective states, and behaviour. To do so, the fields of artificial intelligence and educational data mining provide advanced technologies that can be applied for fine-grained learner modelling.

First, the field of artificial intelligence in education has largely supported the development of intelligent tutoring systems.

Second, educational data mining is indispensable for providing information about the learning process and learner behaviour. The integration of artificial intelligence and educational data mining in the learner modelling research provides a firm basis for effectiveness research on personalized systems. Educational technologists are encouraged to use advanced technologies as a method to support personalized learning and not as a goal when developing adaptive learning environments ²⁶.

²⁵ <https://www.kuleuven.be/kuleuven/>

²⁶ Handbook of research on educational communications and technology; 2014; pp. 425 – 437; © Springer Science Business Media New York 2014



(2) Key features of the PL model in the university: the possible study paths

There are three ways to obtain all the credits of the program over the years:

- via the standard study path ²⁷;
- via a flexible study path ²⁸;
- via a flexible study path with additional exceptions regarding the credit limits ²⁹.

The standard study path

Each program offers at least one standard study path in the program guide ³⁰ explaining how to obtain a degree within a predefined period of time. Each standard study path is divided into program stages ³¹, the size of which is expressed in credits.

In other words, the standard study path structures the program: it shows when and in what order is preferably to take the courses of the program in Individual Study Program (ISP) ³² and how long it will take to graduate provided that an academic progress goes as it should.

Although a standard study path is offered for each program, students are not obliged to complete the studies within the predefined period of time of a program. It is possible at KU Leuven to re-register for the same program each year until students have obtained enough credits in order to graduate. However, it should consider potential course prerequisites and academic progress requirements ³³. In addition, it has to be complied with the academic progress provisions³⁴.

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The standard study path of a program is followed if individuals complete one entire program stage each year, which implies that they obtain a credit for each course in that stage (possibly combined with being deliberated or using tolerance credits ³⁵). In this case, the study path reflects a complete academic progress within the predefined period of time. It is also possible to follow the standard study path in a part-time version, which means that it takes only half of one program stage each year.

An essential part of the standard study path is that ISP always contains courses from only one program stage. If to follow this standard study path, it will normally receive a feasible class schedule for all compulsory courses and students are guaranteed to receive an examination schedule with no more than one exam per day.

To register for a bachelor's program for the first time, it is obliged to follow the standard study path of the program (full-time or part-time), unless there were granted exemptions or are admitted to follow a flexible study path. In subsequent registrations, it is possible for all students to follow a flexible study path for that same bachelor's program.

²⁷ <https://www.kuleuven.be/english/education/student/Learningpath#modeltraject>

²⁸ <https://www.kuleuven.be/english/education/student/Learningpath#geindividualiseerdtraject>

²⁹ <https://www.kuleuven.be/english/education/student/Learningpath#geindividualiseerdtrajectafwijking>

³⁰ <https://onderwijsaanbod.kuleuven.be//opleidingen/e/index.htm>

³¹ <https://www.kuleuven.be/english/education/student/Learningpath/stage>

³² <https://www.kuleuven.be/english/education/student/Learningpath/stage>

³³ <https://www.kuleuven.be/english/education/student/academicprogress/order-isp>

³⁴ <https://idp.kuleuven.be/idp/profile/SAML2/POST/SSO?execution=e1s2>

³⁵ <https://www.kuleuven.be/english/education/student/academicprogress/tolerances>



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A flexible study path

It is possible to choose to go through the studies a little faster or slower than the standard study path prescribes, or to apply for exemptions ³⁶ from courses for which students have already acquired the qualifications or competences elsewhere. Another possibility is that someone has failed a course and that person was not deliberated and was unable (or unwilling) to use any tolerance credits.

The individual study program will then consist of courses from multiple program stages at the same time, which implies that it no longer follows the standard study path, but a flexible one.

A flexible study path with additional exceptions regarding the credit limits

In case of a flexible study path, there are also rules on the minimum and maximum size of the ISP ³⁷ for students in a bachelor's, bridging or preparatory program.

To have a particular status ³⁸ or special individual circumstances ³⁹ means that it is possible to request, by way of accommodation ⁴⁰, admission to a deviation from the rules regarding the size of your ISP ⁴¹ and, for example, take less than 25 credits per year or deviate from the standard study path when registering for a bachelor's program for the first time.

³⁶ <https://www.kuleuven.be/english/education/student/academicprogress/tolerances>

³⁷ <https://www.kuleuven.be/english/education/student/academicprogress/number-of-credits>

³⁸ <https://www.kuleuven.be/english/education/student/target-groups/special-target-groups>

³⁹ <https://www.kuleuven.be/english/education/student/target-groups/special-target-groups>

⁴⁰ <https://www.kuleuven.be/english/education/student/target-groups/special-target-groups>

⁴¹ <https://www.kuleuven.be/english/education/student/target-groups/deviating-credit-limits>



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(3) Key features of the PL model in the university: The Individual Study Program (ISP)

The Individual Study Program (ISP) is an application in KU Loket ⁴² that allows to register for the courses that follow during the academic year. Students can also have an exchange program ⁴³ approved through this channel. Exemptions ⁴⁴ will also end up in the ISP. However, it must be requested those exemptions via a separate application in KU Loket.

A number of ISP coordinators are assigned to each program to review, adjust, accept or reject study program and exemption requests. This is done according to the regulations of the program (s) for which students are enrolled. Individuals can also contact these ISP coordinators in case they have any questions about their study program.

The ISP is closely related to the Individual Examination Schedule (IES) ⁴⁵. When students register for the courses, they already have to choose examination times as well.

The Individual Study Program (ISP) becomes available on 13 September at the earliest and provided that students have actively registered at KU Leuven. For students who register after 13 September, the ISP will be available the day after the registration. Once the ISP is opened for students, they will be invited by email to decide on their individual year program. Please note: the ISP appears at a later date for some faculties. When this is the case, students will be informed about it by their faculty. Moreover, if individuals registered for more than one program ⁴⁶, they will receive a different ISP for each of them.

Tips for Individual Study Program

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In the clip ⁴⁷, students can take a look at how to fill out their ISP and have a look at the checklist ⁴⁸ when deciding on their individual year program.

During an information session at their faculty students will get additional information on how to determine their individual year program.

Students will find an overview of all-important dates concerning the opening of the ISP and IES on this page⁴⁹. They will be able to consult their class schedule as soon as their ISP has been saved. One day after, all selected courses will appear automatically on the electronic learning platform Toledo ⁵⁰.

The deadline for determining and submitting the individual year program (and examination schedule) is the third Wednesday of the academic year. After this date, the application will be closed for students and they will no longer be able to adjust yourself; only their ISP coordinator will be able to make changes at that moment. The name of student's ISP coordinator can be found in the ISP application.

⁴² <https://idp.kuleuven.be/idp/profile/SAML2/Redirect/SSO?execution=e1s1>

⁴³ <https://idp.kuleuven.be/idp/profile/SAML2/POST/SSO?execution=e1s2>

⁴⁴ <https://www.kuleuven.be/english/education/student/Learningpath/exemptions>

⁴⁵ <https://www.kuleuven.be/english/education/student/Learningpath/exemptions>

⁴⁶ <https://www.kuleuven.be/english/education/student/Learningpath/combination-of-contracts>

⁴⁷ <https://www.kuleuven.be/english/education/student/Learningpath/combination-of-contracts>

⁴⁸ <https://www.kuleuven.be/english/education/student/Learningpath/isp#checklist>

⁴⁹ <https://www.kuleuven.be/english/education/student/Learningpath/isp#checklist>

⁵⁰ <https://toledo.kuleuven.be/english/index.php>



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The official approval of the program occurs in the weeks after students have submitted their program, 15 November at the latest. Students will be personally informed about that by email. In case they have not received a confirmation by 15 November, make sure to contact ISP coordinator. In exceptional cases, the ISP will be approved by 30 November at the latest. After approval, an overview of the program and an individual class schedule can be found in KU Locket⁵¹.

Just before the start of the second semester (on 10 February 2023), the ISP will be reopened until the third Wednesday of that semester so that all students are able to make changes for the second semester if desired. It is not possible at that moment, however, to adjust the program of the first semester (including full-year courses).

Rules for choosing the course

Every student has to consider and follow some rules in choosing the course:

- 1) the guidelines of the program they registered for (e.g. compulsory courses and course prerequisites⁵²);
- 2) a number of university-wide rules explained in the Regulations on Education and Examinations⁵³ aimed at the advancement and monitoring of the academic progress⁵⁴ (e.g. how many credits students are allowed to take);
- 3) the program stage⁵⁵ that students are in. These rules are automatically checked when saving ISP and individuals will receive a message if they did not follow them correctly. In case students have any further questions about this, they can contact their ISP coordinator or learning path counsellor.

⁵¹ <https://idp.kuleuven.be/idp/profile/SAML2/Redirect/SSO?execution=e2s1>

⁵² <https://www.kuleuven.be/english/education/student/academicprogress/order-isp>

⁵³ <https://www.kuleuven.be/education/regulations/2022/>

⁵⁴ <https://idp.kuleuven.be/idp/profile/SAML2/POST/SSO?execution=e2s1>

⁵⁵ <https://idp.kuleuven.be/idp/profile/SAML2/POST/SSO?execution=e2s1>



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(4) Institutional Policy and PL

Building on university-wide strategic choices, KU Leuven wants to give direction to four central dimensions in the education:

- 1) the (academic) learning itself,
- 2) the focus on the individual student,
- 3) the study programs,
- 4) the management and quality assurance of these programs.

Forming education (and learning)

Building on the KU Leuven's educational vision, which aims for research-driven and society-oriented education that stimulates personal development, it focuses on future-oriented, innovative education and the development of a powerful learning environment implementing a smart use of educational technology. It stimulates active participation and collaborative learning by students and adjust the assessment policy accordingly. With the establishment of Leuven Learning Lab, a university-wide network for innovation and co-creation, aims towards a concrete implementation of the projects Future-oriented Education and Going Digital.

Paying attention to the individual student

A wide range of interventions for smooth orientation and guidance of incoming students in all their diversity should lead to a positive study experience and personal development story for each student. By coordinating education and academic career counselling even better, university strives to create a stronger student counselling framework, tailored to the student, including those from disadvantaged groups or with a disability.

Broadening education in complementarity with the discipline

KU Leuven wants to support students in forming their own view of the world and stimulate their social commitment and solidarity, with attention to interdisciplinary cooperation; for example, in the exploration of sustainability issues. As a research-intensive university, it wants to invite students to pursue their own research interests and to develop skills regarding entrepreneurship and innovation. With the realization of MOOCs and Micro Masters, university also offers international students a first step towards international study programs. As an entrepreneurial university we want to further expand the life-long learning framework in all its aspects.

Focusing on quality education

KU Leuven wants to strengthen the attention, appreciation and recognition for education for all staff and teaching staff members. It is building a quality culture embedded in quality assurance system COBRA. Organizing an optimal quality assurance system requires excellent leadership from the student representation association, from the Program Committees with the program directors as key figures, and from the Education Council.

Creating the necessary preconditions

The realization of the ambitions set out in the strategic plan and the policy plan for education depends on a number of preconditions. These preconditions apply not only to a number of topics regarding students, staff and teaching staff members, but also to organizational, infrastructural and financial aspects.



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(5) Infrastructure. Toledo

Toledo is short for "Testing and Learning Effective Support", or to efficiently support testing and learning. Toledo is the web-based virtual learning environment at the Association KU Leuven. Thanks to Toledo students get access to a broad range of online course materials like course texts, slides, use cases, example materials, links to useful websites, exercises, graphics and multimedia content.

Toledo also offers a wide variety of communication tools between students and instructors: electronic valves, mail, announcements, discussion for and much more. In the digital learning environment, students can also actively manage their learning process through electronic tests, assignments, groups and an electronic portfolio.



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(6) University departments and staff responsible for PL

In each department the ISP responsible is the final responsible for Personalized learning. He or she decides on the individual study program, considering the general university principles as indicated above. Apart from this, there are some general services taking care of the development of all learning tools in the university and coordinating all assistance given to staff.



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(7) KU Leuven Learning Lab

KU Leuven Learning Lab's principles

Key KU Leuven Learning Lab's principles are:

- 1) Excelling in education together;
- 2) Networking structure;
- 3) University-wide, locally embedded contact point;
- 4) All entities;
- 5) Cooperation;
- 6) Collaborative learning;
- 7) Quality assurance.

Excelling in education together

KU Leuven Learning Lab's main stakeholders are the staff members and students that shape education together. Based on KU Leuven's educational vision⁵⁶, they strive for excellence in education across study programs, where innovation and quality assurance are mutually reinforcing.

Networking structure

KU Leuven Learning Lab is not a separate unit, but a learning network that extends both at centralized and decentralized level. People taking a leading role in KU Leuven Learning Lab are still connected to one of the existing units.

University-wide, locally embedded contact point

KU Leuven Learning Lab is a flexible network. KU Leuven Learning Lab is a university-wide, locally embedded contact point for all staff members who want to optimize their teaching practices. It is a combination of university-wide coordination and local contact points.

All entities

KU Leuven Learning Lab unites staff members from all departments (central services, groups, faculties), all study programs and all campuses.

Collaborative learning

KU Leuven Learning Lab combines observations from real-life practice and (in vivo) research, and focuses on co-construction and collaborative learning based on these observations. This way, bottom-up initiatives⁵⁷ on education and learning are stimulated and included in KU Leuven Learning Lab.

⁵⁶ <https://www.kuleuven.be/english/education/policy/vision-policy/vision>

⁵⁷ <https://www.kuleuven.be/english/education/policy/vision-policy/vision>



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Cooperation

KU Leuven Learning Lab promotes cooperation in a collegial spirit, with mutual respect and appreciation for each person's approach and individual character. KU Leuven Learning Lab encourages teaching staff and teaching teams to experiment, embracing the corresponding successes and failures.

Quality assurance

KU Leuven Learning Lab strives to structurally embed quality assurance⁵⁸ in their initiatives, anchoring quality assurance systematically.

Focus: educational technology and innovating teaching methods

In 2018-2021, KU Leuven Learning Lab's main focus was on:

- Optimal use of educational technology,
- Innovative teaching methods (activating course formats, blended and online education).

KU Leuven Learning Lab's priorities

KU Leuven Learning Lab unites educational expertise within faculties and services. By doing so, university helps to shape the *Future-oriented Education*⁵⁹ and *Going Digital*⁶⁰ policy priorities:

- 1) Curricula of the future;
- 2) A holistic supervision of the students;
- 3) Physical and digital education go hand in hand;
- 4) Very important: interdisciplinarity.

Future-Oriented Education has six goals such as:

- 1) Components to support and preconditions for active learning;
- 2) A holistic approach to supporting students;
- 3) Social engagement and broad education for all students;
- 4) Curricula of the future;
- 5) An integrated approach to higher education;
- 6) Appreciation of teaching commitments within sustainable study programs.

⁵⁸ <https://www.kuleuven.be/english/education/quality>

⁵⁹ <https://www.kuleuven.be/english/education/quality>

⁶⁰ <https://www.kuleuven.be/english/about-kuleuven/strategic-plan/going-digital>



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Policy priorities of Future-Oriented Education

Curricula of the future

The proud of KU Leuven are the programs, which are continually inspired by the latest scientific findings. This is how university prepare students to take social responsibility. That society challenges university to train people who can forge connections between different fields of science beyond the boundaries of their field.

KU Leuven committed to a robust renewal of the program offerings, in line with social evolutions. This occurs not just in terms of design, but above all in terms of content and beyond the more traditional disciplines. Consider, in particular, developments in healthcare, where technological advances and far-reaching digitization go hand in hand with personalized treatment. In Humanities and Social Sciences, university are renewing the programs to respond to the increasing importance of data processing. On the international front, KU Leuven are shaping new programs that take place within the European university Una Europa, within which KU Leuven has a strong partnership with 10 other top universities.

A holistic supervision of the students

Offering students every opportunity in their studies and personal development, university increasingly does this from a holistic approach that takes the student's learning and life into consideration. The focus on the mental well-being of the students, the importance of social cohesion and interaction between students but also between the professors, researchers and students has increased, partly reinforced by the Covid-19 pandemic. KU Leuven wants to further evolve in a guidance model that suits on-campus education and leads to a stimulating and positive living and learning climate. Together with the emphasis it places on activating education and educational innovation, this also benefits academic progress and academic success. After all, well-being and resilience go hand in hand with motivated and deep learning. They reinforce each other.

Therefore, KU Leuven is integrating supervision in the areas of 'living' and 'learning' into a guidance model in which the student is central and student career counsellors together with the university-wide student guidance team work together in an interdisciplinary manner via local hubs on campus, in close proximity to the student. University is building a support continuum for mental well-being, ranging from a preventative approach to therapeutic offerings, and it is committed to peer-to-peer activities between students. KU Leuven also uses digital tools such as learning dashboards with personalized and data-based feedback on (their) academic outcomes, which give students more insight into their academic situation and facilitate reflection and ownership regarding their educational career.

Going Digital has five goals such as:

- 1) Integration of blended learning;
- 2) Integration of blended assessment;
- 3) Digital transformation of learning spaces;
- 4) Digital transformation of Lifelong Learning (LLL);
- 5) Digital transformation of educational innovation through KU Leuven Learning Lab.



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Policy priorities of Going Digital

Physical and digital education go hand in hand

In recent years, KU Leuven has invested heavily - accelerated in part by the Covid-19 pandemic - in the targeted use of technology in the education. Moreover, it was forced to temporarily switch to digital first and even digital only in coronavirus times.

Based on the lessons learned from this, university now wants to evolve towards an optimal combination of physical and digital education. Face-to-face instruction will, of course, retain its rightful place. We stay human. However, at the same time, it will be using technology in a targeted way to take the next steps in quality blended education, and from now on, for both learning and evaluation. Integration and flexibility are central to this.

To this end, KU Leuven wants thoroughly revamp the digital learning environment and develop it further with additional functionalities for intelligent feedback and interactive and collaborative learning as well as for online evaluation. In the physical teaching and learning spaces, there are also developing technology to facilitate interactive and collaborative learning as well as multi-location learning as much as possible.

To achieve a true digital transformation of the education, it will simultaneously redesign the educational organization. To this end, KU Leuven is committed, among other things, to flexible support and professionalization opportunities for the entire staff by strengthening the KU Leuven Learning Lab learning network, which has already made a difference during the pandemic. Technology in education is here to stay at KU Leuven. Albeit in a balanced combination with physical education. University is going for the best of both worlds.

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Very important: interdisciplinarity

Within the KU Leuven Learning Lab network, employees from various central services, faculties and groups are joining forces to take the education to a higher level.

Certain initiatives are permanent in nature and are an aspect of the overall functioning of KU Leuven Learning Lab. Other initiatives are temporary in nature and are aimed at the realization of current priorities. In everything that is done, the starting point is to involve these people within the organization who are effectively involved in the field. In this way, university shapes educational innovation and the educational practice of the future in co-creation.



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(8) Leuven Engineering & Science Education Center (LESEC)

This is a community of researchers and practitioners contributing to the advancement of education in the Science, Engineering & Technology group. More particularly the focus is on science, technology, engineering, arts and mathematics (= STEAM)

They focus on discipline-related aspects of learning. Specifically, Center is interested in students' understanding of concepts, students thinking skills (e.g., critical thinking) on the one hand and, on the other hand, teaching practices and ideas from (discipline-based) education research that can improve both. They translate insights from educational research (both from literature and own research) to the context of STEAM education in higher education (and occasionally secondary education).



(9) Quality assurance at KU Leuven and personalized learning

Principles central to the vision on quality assurance are the following:

- subsidiarity;
- appreciative approach and verified trust;
- introduction of the external view into quality assurance.

A first principle is that of *subsidiarity*. This means that actions take place at the most appropriate level and the care for good education is with those people who make education a reality every day: students, teachers and employees represented in the (P)OC. Actions that do not fall within the competence of the (P)OC, that fall outside the scope of the (P)OC or that require additional cooperation, are scaled up to another level.

The next two principles are those of the *appreciative approach and verified trust*. The vision on quality assurance assumes that there is quality (appreciative approach) and that those directly involved are given the confidence to take responsibility for the quality of education and to assess the quality of education themselves (trust). In doing so, they are asked to account for the choices they made in a transparent way (verified).

Another essential principle is the *introduction of the external view into quality assurance*. It concerns external stakeholders who are involved as critical friends and who bring in an external view on the quality of the program. They act as a sounding board, rather than as assessors, to help reflect on the strengths and points of attention of the program.

University applies all these principles within and between every level of the university, namely at the course level, the level of the study program, the faculty and the university. For example, programs are given the confidence to ensure that the quality of education is in line with faculty requirements, but at the same time they also provide input to the faculty board, which in turn also gains the confidence to help shape the common, university-wide frameworks and support.

COBRA

COBRA stands for Cooperation, Reflection and Action, with attention for Checks & Balances. These principles enable KU Leuven to develop and improve the quality of its study programs continuously. With COBRA, students, teaching staff, staff and external peers; all contribute to the quality of education at three levels of the institution.

Educational quality at different levels

With the vision on education and learning ⁶¹ as a starting point, KU Leuven develops the vision on quality assurance ⁶², with the concept of 'quality culture' as a key element. KU Leuven stimulates a quality culture at each institutional level, where students, teaching staff, staff members and policy-makers all contribute to the quality of education. The conduct for educational quality assurance ⁶³ translates this vision on quality assurance into concrete actions, processes and tools within the context of this quality culture.

⁶¹ <https://www.kuleuven.be/english/about-kuleuven/strategic-plan/going-digital>

⁶² <https://www.kuleuven.be/english/education/quality/quality-assurance>

⁶³ <https://www.kuleuven.be/english/education/quality/501-i71-2-bk-conduct-for-educational-quality.pdf>



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University level

In order to keep developing, monitoring and strengthening the educational quality throughout the university, the faculties and the study programs, KU Leuven applies its own quality assurance method: COBRA ⁶⁴.

External quality assessment

The institutional review ⁶⁵ evaluates the educational policy conducted at KU Leuven and the way in which the institution safeguards the educational quality (cf. COBRA). Some faculties use domain-specific assessment and accreditation systems ⁶⁶ for an additional evaluation, on their own initiative.

Program level

The POC ⁶⁷ plays a crucial role in the programs' quality assurance. KU Leuven provides programs and POCs with various tools ⁶⁸ to work on their educational quality. One example is the blueprint ⁶⁹, which describes the profile and vision of the program and provides info on how this profile and vision will be achieved. A program action plan ⁷⁰ determines action points and priorities, timing, responsibilities and the allocation of duties. The actions resulting from the COBRA process are also included in the action plan. The POC also pays attention to the eight quality characteristics ⁷¹ that represent a study program of good educational quality. Programs also involve external stakeholders ⁷² in the assessment of their educational quality. New programs have to undergo an Initial Accreditation ⁷³ and a program accreditation ⁷⁴.

Course level

The quality of the courses is monitored and optimized by continuous and systematic reflection. Specific feedback is gathered from the student evaluation of teaching ⁷⁵ or from personal surveys. This allows teaching staff and teaching teams to gain more insight into their strengths, to continue their personal development and to keep improving their teaching and their courses ⁷⁶.

⁶⁴ <https://www.kuleuven.be/english/education/quality/501-i71-2-bk-conduct-for-educational-quality.pdf>

⁶⁵ <https://www.kuleuven.be/english/education/quality/institutional-review/institutionalreview>

⁶⁶ <https://www.kuleuven.be/english/education/quality/institutional-review/institutionalreview>

⁶⁷ <https://www.kuleuven.be/english/education/poc>

⁶⁸ <https://www.kuleuven.be/english/education/poc>

⁶⁹ <https://www.kuleuven.be/english/education/quality/instruments#bp-pap>

⁷⁰ <https://www.kuleuven.be/english/education/quality/instruments#bp-pap>

⁷¹ <https://www.kuleuven.be/english/education/quality/quality-characteristics-at-kuleuven/quality-characteristics>

⁷² <https://www.kuleuven.be/english/education/quality/quality-characteristics-at-kuleuven/quality-characteristics>

⁷³ <https://www.kuleuven.be/english/education/quality/initial-accreditation>

⁷⁴ <https://www.kuleuven.be/english/education/quality/initial-accreditation>

⁷⁵ <https://www.kuleuven.be/english/education/quality/instruments#survey>

⁷⁶ <https://www.kuleuven.be/english/education/quality/instruments#survey>



(10) Student evaluation

General principles

University-wide surveys allow us to gather data in a systematic and standardized way. These data provide both the study programs and the university as a whole with information on several aspects of education.

All courses are evaluated with the student evaluation of teaching ⁷⁷.

The program evaluation ⁷⁸ surveys graduating bachelor's and master's students on the quality of their study program and the framework of preconditions necessary to provide this study program.

Every two years, the alumni survey ⁷⁹ gathers information from students who graduated from the master's program, about their study program and their career. At that moment, the alumni have been graduated for about one year.

Students who deregister from a program during an academic year are asked to fill out a deregistration survey about the period in which they made their choice of study, the extent to which they participated in study counselling initiatives, the reason for their deregistration, and their further plans.

Students who obtain their bachelor's degree at KU Leuven, but do not register at the university in the following year, are asked about their current activities and their reasons for leaving KU Leuven.

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The student evaluation of teaching is used university-wide for course evaluations. The evaluation is organized every year, and the different courses' evaluations are spread over a three-year period.

Objective

These evaluations aim to demonstrate to which degree high quality education is offered within a specific context, with the following objectives:

- To make sure that these evaluations can become one element in a set of data which can support decisions related to staff policy, and in which education needs to play a role;
- To make sure that, on the one hand, good practices are known, acknowledged and rewarded, and that, on the other hand, possible straits can be remedied.

Procedure

- 1) After every semester students are offered a number of surveys through their KU Loket.
- 2) After the January exams students are offered surveys on a part of the courses of the first semester.
- 3) After the June exams they are offered surveys on a part of the courses of the second semester and, potentially, on courses which have run the whole year.

⁷⁷ <https://idp.kuleuven.be/idp/profile/SAML2/POST/SSO?execution=e1s2>

⁷⁸ <https://idp.kuleuven.be/idp/profile/SAML2/POST/SSO?execution=e2s1>

⁷⁹ <https://idp.kuleuven.be/idp/profile/SAML2/POST/SSO?execution=e2s1>



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The most important characteristics of the online student evaluation are:

- Students are surveyed electronically through open-ended and closed-ended questions;
- The separate faculties draw up the questionnaires and consider the specificity of the education they provide. In drawing up the questionnaires the faculties can make use of a validated set of questions;
- After the period of evaluation, the analysed data are released in phases through KU Loket;
- The results of the evaluation are always contextualized. In the first place, the teacher contextualizes the results by adding his/her interpretation. The (P)OC-sub-commission further contextualizes the results by making a general estimation of the quality of the provided education.

Finally, the contextualized results of the evaluation⁸⁰ are automatically integrated into the teachers' personnel files.

⁸⁰ <https://idp.kuleuven.be/idp/profile/SAML2/POST/SSO?execution=e3s1>



(11) Student evaluation in practice

Course survey

The student evaluation of teaching is organized every year, and the course survey is spread over a three-year period. This implies that every course is evaluated at least every three years, and that students are only asked to evaluate part of the courses they have taken.

Courses which were evaluated as "adjustments required" need to be surveyed again the following academic year. New courses or courses with a new instructor will be surveyed in the academic year in which they are first taught.

Faculties can elaborate a strategy for the application of a more frequent survey for other specific course groups, if they deem it advisable.

Evaluation of study programs and courses

- All bachelor's, master's and advanced master's degrees, preparatory programs, bridging programs and shortened programs, postgraduate and honors programs.
- All (KU Leuven) courses of these study programs with at least five students in them (except for dissertations and internships).

Exceptional cases:

- 1) exclusion of a course with justification (for example when there is an unclear relationship between the student, the course and the instructor in courses with many instructors);
- 2) exclusion of an entire study program in exceptional cases (for example in some inter-university study programs), provided that the vice rector of educational policy approves.

Evaluation of instructors

Essentially, the instructors who have actually taught the course are evaluated. The evaluation results are integrated into the staff files. Dependent on the specific situation of the course, it may be advisable to locate the evaluation at the level of:

- individual instructors (ZAP and/or AAP/BAP) (ZAP = professor; AAP/BAP= teaching assistant);
- titular's coordinators (for example, in courses with many instructors);
- only instructors registered in SAP.

Participation of students in the survey

- All students of the before mentioned study programs who have registered for the courses through their ISP's.
- Students on diploma contracts.
- students on credit contracts.
- incoming Erasmus students.



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Not participation of students in the KU Loket evaluation

- students on exam contracts;
- students from other (Flemish) institutions who are not registered here, for example students taking inter-university study programs.

Only the answers of students who have taken the exams of these courses are used in the reports. Data are used anonymously.

Frequently Asked Questions

Every faculty has to draw up the questions for their courses. The questionnaires are made up of both closed-ended and open-ended questions.

Closed-ended questions:

In drafting the closed-ended questions the faculty relies on a validated set of questions. Differentiation is possible, depending on the level of the course (bachelor/master/advanced master).

Starting from 2016-2017 one closed-ended question about the time students spend on the course is asked for all courses.

Open-ended questions:

Two open-ended questions are asked. They gauge the better and lesser aspects of the course.

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Dissemination of the information to the students

In an attempt to get a maximum degree of participation, the following initiatives are taken:

- e-mails (and reminders) sent to students with active questionnaires reminders on Toledo a campaign in collaboration with Stura (= general board of KU Leuven student associations);
- awareness campaigns through student groups;
- a call to participate at the formal ceremony, specifically for graduating (master's) students;
- oral appeals to students, for example by student representatives, instructors, program directors and / or the vice dean, etc. during lectures.

Consultation on the evaluation results

During the reporting and inspection period (following process) the evaluation results can be consulted through the reporting application on KU Loket. A manual ⁸¹ for the reporting application is presented on the site.

When the final reports are integrated into the staff files (beginning of January), all evaluation results of the reporting application are archived. The archive (also accessible through KU Loket) contains, besides the final reports, more detailed reports per "survey unit" (= teacher's share within a course).

⁸¹ <https://idp.kuleuven.be/idp/profile/SAML2/POST/SSO?execution=e4s1>



Inspection of the evaluation results

The inspection of the evaluation results is phased:

- 1) First, the instructor can inspect the results (open-ended and closed-ended questions) and can add an interpretation to the results.
- 2) After this, the chairman of the educational commission responsible and the (campus) vice dean for education can inspect the results:
 - the chairman of the commission (OC, POC) responsible for the course can inspect the results (open-ended and closed-ended questions) and the instructor's interpretation. After the deliberation of the (P)OC-sub-commission the chairman of the commission responsible can add an interpretation and a final evaluation.
 - the chairman of the commission responsible, the program director of the hierarchically superior POC's and the (campus) vice-dean for education can also inspect the results. They can also add an interpretation and a final evaluation, after deliberation.

This flexibility allows the faculty to decide at which level the final evaluation is registered: at the lowest level (for example the OC); at the level in between, the campus (for example the sub-faculty POC); at POC level; or at the highest level (for example the faculty POC).

- 3) Finally, the dean of the faculty and the campus dean/campus chairman can inspect the results.

The dean can inspect the results (not the answers to the open-ended questions), the instructor's and (P)OC chairmen's interpretations, and the final evaluations. The faculty dean can exclude results from being integrated into the staff file, in exceptional cases.

The campus dean/campus chairman can also inspect the results, the instructor's and the (P)OC chairman's interpretations, and the final evaluations. They can only inspect the results concerning their own campus.

Integration of the evaluation results into staff files

Only the final report is integrated into the staff file. The final report is a report concerning all courses of an instructor corresponding to one (P)OC and contains the following data:

- a list of the relevant courses;
- the average scores of all the questions of all these courses;
- the degree of participation per course;
- the interpretations added by the instructor and/or the POC sub-commission;
- the final evaluation of the POC sub-commission, which is a general estimation of the quality of the provided education. Students' answers to the open-ended questions are not integrated in the final report.



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(12) Students and Personalized Learning

The study career guidance policy of KU Leuven.

Study career guidance

Moving to higher studies means gaining many new experiences. University wants to guide students as best it can to maximize their chances of success. It offers support in any questions about the approach to their studies, about study route or about factors that prevent from studying efficiently.

The approach is low-threshold and very student-friendly.

After all, a personal approach is very important to the university.

Study skills

Studying at university also means having a good set of study skills.

Subject-specific guidance

If the students have questions about a certain part of the theory or are stuck working out an exercise, they can contact their lecturer/assistant first (they will always find them in the ECTS sheet in the study programs). Students can also contact the monitorate for group sessions and/or an individual conversation.

Study progress

If the students have questions, doubts or important choices to make after an exam period, they can always ask for a help in the university.

Studying with facilities

Everyone has the right to good success rates and to study successfully. To give everyone equal opportunities, some students may receive facilities for their classes, internships or exams. University considers top athletes, working students, artists and students with a learning disability or functional impairment. All general information about the conditions and facilities can be found on the site of the university.

Educational mediator

If the students have a problem with their timetable due to conflicts of course units from different years, have a conflict with a lecturer or have a disagreement with the supervisor of their master's thesis, they can contact the educational mediator with all their questions concerning teaching and guidance activities.

Exam mediator

If the students have questions or problems regarding the exam period, then they can contact the exam mediator of their program.



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Confidential counsellor

If the students are bothered by transgressive behavior such as bullying, sexual harassment, stalking, then they can contact the confidential counsellor to tell the story in complete confidence. This person will listen and explore with the student what steps can be taken.

Student facilities

To know more about student facilities, they can contact the social student services such as:

- Accommodation, food, transport
- Study costs & social status
- Student life, relaxation & meeting up
- Well-being & health
- Student job & work experience



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(13) University teachers and Personalized learning

Online coaching: group and tutorial sessions

While it was all a bit uncomfortable at first, in recent months, we have become experts in finding inventive online alternatives to physical meetings. On this page, student counsellors and tutors share their experiences. Below, teachers can also find an overview of the tools they used, along with some useful links to documentation pages and additional information. This way, university teachers are equipped with everything they need to keep in touch with their students through digital group and discussion sessions.

Practical examples and tips

- Tips to optimize online conversations ⁸²
- Tips for an efficient chat session with students ⁸³
- Making notes on a writing tablet during Skype sessions ⁸⁴
- Webcams for online tutorial or study coaching sessions ⁸⁵
- Quarantine to ask your questions: an original format for Q&A sessions at the Faculty of Arts ⁸⁶
- An additional monitor for your tablet or smartphone ⁸⁷

Online Tools for Teaching

- Tools for online teaching sessions ⁸⁸
- Tools for online exercises ⁸⁹

⁸² <https://www.kuleuven.be/english/education/leuvenlearninglab/supporting-students/online-coaching#collapseOne>

⁸³ <https://www.kuleuven.be/english/education/leuvenlearninglab/supporting-students/online-coaching#collapseTwo>

⁸⁴ <https://www.kuleuven.be/english/education/leuvenlearninglab/supporting-students/online-coaching#collapseThree>

⁸⁵ <https://www.kuleuven.be/english/education/leuvenlearninglab/supporting-students/online-coaching#collapseFour>

⁸⁶ <https://www.kuleuven.be/english/education/leuvenlearninglab/supporting-students/online-coaching#collapseSix>

⁸⁷ <https://www.kuleuven.be/english/education/leuvenlearninglab/supporting-students/online-coaching#collapseSeven>

⁸⁸ <https://www.kuleuven.be/english/education/leuvenlearninglab/support/toolguide/all-categories/interaction/online-teaching-session>

⁸⁹ <https://www.kuleuven.be/english/education/leuvenlearninglab/support/toolguide/all-categories/assessment-and-feedback/exercices-and-tests>



Useful information about digital teaching

- Devices that support digital teaching ⁹⁰
- Tips for interaction with students ⁹¹

University teachers can make use of four tools during an online teaching session: Blackboard Collaborate, Skype for Business, Microsoft Teams and Live stream in an auditorium. Have a look at the classroom matrix ⁹² to find out which tools to use in the different types of classrooms for a synchronous session or during a livestream such as:

- Blackboard Collaborate ⁹³
- Skype for Business ⁹⁴
- Microsoft Teams ⁹⁵
- Livestream in auditorium ⁹⁶

Blackboard Collaborate, Skype for Business, Microsoft Teams Tools for Teaching

Teachers can take a look at this table of comparison ⁹⁷ with the most important functionalities of these tools:

- Tips for Blackboard Collaborate ⁹⁸
- Tips for Skype for Business ⁹⁹
- Teaching scenario ¹⁰⁰
- Requesting and options for video conferencing equipment ¹⁰¹

⁹⁰ <https://www.kuleuven.be/english/education/leuvenlearninglab/support/asynchronous-synchronous/devices-onlineteaching>

⁹¹ <https://www.kuleuven.be/english/education/leuvenlearninglab/support/online-interaction/how-can-i-facilitate-online-interaction>

⁹² <https://www.kuleuven.be/english/education/leuvenlearninglab/support/technology-in-the-classrooms/technology-in-the-classroom-overview-of-options#classroom-matrix>

⁹³ <https://www.kuleuven.be/english/education/leuvenlearninglab/support/toolguide/all-categories/interaction/online-teaching-session#collapseTwo>

⁹⁴ <https://www.kuleuven.be/english/education/leuvenlearninglab/support/toolguide/all-categories/interaction/online-teaching-session#collapseOne>

⁹⁵ <https://www.kuleuven.be/english/education/leuvenlearninglab/support/toolguide/all-categories/interaction/online-teaching-session#collapseFiveteen>

⁹⁶ <https://www.kuleuven.be/english/education/leuvenlearninglab/support/toolguide/all-categories/interaction/online-teaching-session#collapseLivestream2>

⁹⁷ <https://www.kuleuven.be/english/education/leuvenlearninglab/support/toolguide/compare-collaborate-skype-teams>

⁹⁸ <https://www.kuleuven.be/english/education/leuvenlearninglab/support/toolguide/all-categories/interaction/online-teaching-session#collapseFour>

⁹⁹ <https://www.kuleuven.be/english/education/leuvenlearninglab/support/toolguide/all-categories/interaction/online-teaching-session#collapseThree>

¹⁰⁰ <https://www.kuleuven.be/english/education/leuvenlearninglab/support/toolguide/all-categories/interaction/online-teaching-session#collapseLessscenario>

¹⁰¹ <https://www.kuleuven.be/english/education/leuvenlearninglab/support/toolguide/all-categories/interaction/online-teaching-session#collapseAanvraag>



Blackboard Collaborate Tool for Online Teaching

In response to the current need for online communication possibilities, Blackboard Collaborate Ultra is being introduced. This is a real-time videoconferencing tool with a strong focus on education. The Collaborate tool is integrated in every Toledo course and community so it is immediately available to teaching staff and students without having to install additional software first.

It's simple to use:

- Post a link to Collaborate in your Toledo course for your students.
- Use the virtual course room, or create a new session.
- Start your virtual class.

This tool helps teachers to:

- share files and applications with the students,
- use a virtual whiteboard,
- record the class in one click,
- have students work together in small groups (breakout rooms).

Recommendations for using Blackboard Collaborate with students

- Blackboard recommends using Collaborate with Chrome or Firefox. Other browsers ¹⁰² might cause some functionalities to work differently, or not work at all.
- Teachers can use Collaborate for a group of maximum 250 people. Unless someone is sharing their screen, academic staff will see the video (or profile picture) of 4 participants. Blackboard is working on a 'video wall' which would allow you to see more people at the same time, but this functionality is not yet available.)
- Switch off the guest access option if there are no external parties joining the session. This way, teachers can be sure only students enrolled in their Toledo course can join the session.
- To be well-prepared for the first classes in Collaborate, teachers can try out its functionalities beforehand, for instance with some colleagues. If something doesn't work, academic staff might want to try a different browser ¹⁰³.
- Give the students some time to discover the new tool at the start of a new class.
- The general tips for organizing an online class with Skype for Business ¹⁰⁴ also apply to an online class organized with Collaborate.
- Recommendation: make a recording ¹⁰⁵ of each class, so students who could not attend (part of) the class due to special circumstances can watch the recording.
- Teachers can consult or download a report of each session stating who joined the session at what time.
- Blackboard Collaborate for remote teaching ¹⁰⁶ by KU Leuven Learning Lab is licensed ¹⁰⁷.

¹⁰² <https://www.class.com/support/collaborate/moderator/Get-Started/Browser-Support>

¹⁰³ <https://www.class.com/support/collaborate/moderator/Get-Started/Browser-Support>

¹⁰⁴ <https://www.kuleuven.be/onderwijs/learninglab/ondersteuning/asynchroon-synchroon/screencasts-met-interactie>

¹⁰⁵ <https://www.class.com/support/collaborate/moderator/recordings/>

¹⁰⁶ <https://www.kuleuven.be/english/education/leuvenlearninglab/support/asynchronous-synchronous/blackboard-collaborate/interactive-teaching-with-blackboard-collaborate>

¹⁰⁷ <https://creativecommons.org/licenses/by-nc/4.0/?ref=chooser-v1>



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(14) Management and Personalized Learning

Educational Council

The educational council gives advice to the Academic Council for all matters regarding education. Students are represented in this council.

Composition of Educational Council

In accordance with Article 14 of the Common Regulations concerning the structure of the university, the Academic Council ¹⁰⁸ establishes an Education Council that provides advice on education.

The Chair of the Education Council is appointed by the Rector for a term which coincides with the Rector's term of office. The vice rectors of Educational Policy and Student Affairs are members of the Education Council.

The faculties of the KU Leuven are represented by the Vice Dean of Education. The term of office coincides with the mandate of vice dean. The academic programs outside Leuven are represented by one representative of each group of programs that fall under the responsibility of an academic director. This regional representative (ZAP or OP3 member) is nominated by the ' Council Academic courses. The mandate has the same duration as that of vice dean.

Furthermore, the Education Council is composed of one educational expert, one representative of the AAP BAP per group and five student representatives.

The head of the Unit Educational Policy and Quality is secretary of the Education Council.

Depending on the topics to be discussed, ad hoc members are invited.

Duties and authorities

The Education provides advice to the Academic Council on matters relating to teaching and learning. This opinion is formulated at the request of the Academic Council, the Executive Board and relevant vice deans or on the own initiative of the Education Council.

¹⁰⁸ <https://admin.kuleuven.be/raden/en/academic-council>



(15) Inclusion in education process

Inclusion in education process concerns the facilities for students with disabilities, special status and exceptional individual circumstances.

Guidelines on examination accommodations for students with disabilities

If the student has the status of student with a disability, it is possible to follow the guidelines below to apply for exam accommodations. If students have another special status and would like to apply for exam accommodations, they can consult the webpage about special statuses ¹⁰⁹.

To apply for accommodations ¹¹⁰, students should take these two important deadlines into account:

- the deadline of the Disability Office ¹¹¹ to get the status of student with a disability and to apply for exam accommodations certificate;
- the campus specific faculty deadline to apply for exam accommodations.

Disability student status and certificate

Recommendations to achieve student status and certificate:

- 1) Before students can apply for exam accommodations ¹¹² at the faculty, they must get the disability student status from their disability officer.
- 2) To apply for the status, students should follow the Disability Office's procedure ¹¹³.
- 3) Students should contact the disability officer ¹¹⁴ on their campus before the Disability Office's deadline ¹¹⁵.
- 4) The disability officer will request some documentation ¹¹⁶ to verify student's recognition.

Certificate of exam accommodations

Once students have received the disability student status, their disability officer will discuss student's needs with them to match it with the existing educational requirements. If necessary, they will get advice about suitable exam accommodations ¹¹⁷. Students will receive their certificate of exam accommodations from their disability officer.

Students should check that their certificate of exam accommodations is still valid. Contact the disability officer if this is no longer the case. It's crucial for students to know that they can only apply for exam accommodations at their faculty if they received a certificate of exam accommodations from the Disability Office.

¹⁰⁹ <https://www.kuleuven.be/english/education/student/target-groups/special-target-groups>

¹¹⁰ <https://www.kuleuven.be/english/stuvo/studentswithadisability/exams/index.html>

¹¹¹ <https://www.kuleuven.be/english/stuvo/studentswithadisability/index.html>

¹¹² <https://www.kuleuven.be/english/stuvo/studentswithadisability/exams/index.html>

¹¹³ <https://www.kuleuven.be/english/stuvo/studentswithadisability/recognition/procedure>

¹¹⁴ <https://www.kuleuven.be/stuvo/functiebeperving/contact>

¹¹⁵ <https://www.kuleuven.be/stuvo/functiebeperving/deadlines>

¹¹⁶ <https://www.kuleuven.be/stuvo/functiebeperving/vereiste-documenten>

¹¹⁷ <https://www.kuleuven.be/english/stuvo/studentswithadisability/exams/index.html>



Recommendations on the behaviour before and during the exam

- 1) Check the examination room the day before the exam. Because of student's accommodations, they may take the exam in a different room than the one originally communicated.
- 2) Make sure to arrive at the examination room in time.
- 3) Bring the certificate of exam accommodations to every exam/continuous assessment and announce yourself to the supervisor(s) before the start of the exam. The (exam) ombudsmen will inform the supervisors and lecturers about the exam accommodations student requested. In case of doubt, the supervisors or lecturers can consult the certificate of exam accommodations to check which exam accommodations they can use.
- 4) Only use reading software at the exam if students are familiar with the program.
- 5) If students use a laptop with reading software for the exam, do not forget to bring own earphones or headphones.
- 6) If students decide not to take an exam, make sure to unroll for that exam in individual exam schedule (if applicable). If students requested any accommodations for this exam, student should inform (exam) ombudsmen via email that he/she will not participate. Make sure to do this the day before at the latest.
- 7) If students do not take an exam due to illness and they are entitled to reschedule exams, students should inform their (exam) ombudsmen before the start of the exam at the latest. Together, they will discuss possibilities to postpone the exam to a moment outside the examination period.
- 8) If students are allowed to postpone an exam, the (exam) ombudsmen will look for a new examination moment. Students should make sure to determine whether they can make it to catch-up exam, to avoid being absent.

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All special statuses in the university are the following:

- Student athlete status.
- Working student status.
- Student artist status.
- Student with a disability.

At KU Leuven, student's status can be officially recognized, which makes student eligible for several accommodations¹¹⁸. In order to get the status recognized, students have to submit a request via the KU Loket application in Toledo. Navigate in KU Loket¹¹⁹ to Registrations & Requests > Request Status / Accommodations.

Student athlete status

Students can request this status via KU Loket¹²⁰. The recognition of the student athlete status¹²¹ is done by the coordinator for student athletes.

¹¹⁸ <https://www.kuleuven.be/english/education/student/target-groups/accommodations>

¹¹⁹ <https://idp.kuleuven.be/idp/profile/SAML2/POST/SSO?execution=e1s2>

¹²⁰ <https://idp.kuleuven.be/idp/profile/SAML2/POST/SSO?execution=e2s1>

¹²¹ <https://www.kuleuven.be/sport/eng/offer/students/top-level-sports/top-level-sports>



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Working student status

Students can request this status via KU Loket¹²². The recognition of the working student status¹²³ is done by the manager of Teaching and Learning Processes. Students can find a detailed step-by-step plan on how to request the working student status here¹²⁴.

Student artist status

The recognition of the student artist status is done by the coordinator for student artists¹²⁵. In order to be able to request accommodations, students have to request the working student status via the application in KU Loket¹²⁶ as well. It is sufficient to add a copy of the admission decision of the coordinator for student artists as a supporting document.

Student with a disability

Student can request this status via KU Loket¹²⁷. The recognition of the student with a disability status¹²⁸ will be processed by the Disability Office¹²⁹. Students can find an overview of the procedure and required documents here¹³⁰.

Exceptional individual circumstances

KU Leuven can recognize that students have an exceptional individual circumstance. This the case when, for example, students suddenly suffer from a serious illness, pregnant or if a death occurs in the immediate family (e.g., parent or sibling). In that case, student may request accommodations¹³¹ through the application 'Request Status / Accommodations' in KU Loket¹³². A step-by-step plan on how to submit the request can be found here¹³³. The severity of the situation will be considered to decide on the necessity to receive a certain accommodation

¹²² <https://idp.kuleuven.be/idp/profile/SAML2/POST/SSO?execution=e3s1>

¹²³ <https://www.kuleuven.be/english/education/student/target-groups/working-student-status>

¹²⁴ <https://www.kuleuven.be/english/education/student/target-groups/application-working-student-step-by-step>

¹²⁵ <https://www.kuleuven.be/wieiswie/en/person/00007214>

¹²⁶ <https://idp.kuleuven.be/idp/profile/SAML2/POST/SSO?execution=e4s1>

¹²⁷ <https://idp.kuleuven.be/idp/profile/SAML2/POST/SSO?execution=e5s1>

¹²⁸ <https://www.kuleuven.be/english/stuvo/studentwithadisability/index.html>

¹²⁹ <https://www.kuleuven.be/english/stuvo/studentwithadisability/index.html>

¹³⁰ <https://www.kuleuven.be/english/stuvo/studentwithadisability/recognition>

¹³¹ <https://www.kuleuven.be/english/education/student/target-groups/accommodations>

¹³² <https://idp.kuleuven.be/idp/profile/SAML2/POST/SSO?execution=e6s1>

¹³³ <https://www.kuleuven.be/english/education/student/target-groups/application-accommodations-special-individual-circumstances>



(16) Publications

- journal-article
Van den Eynde, Sofie; Goedhart, Martin; Deprez, Johan; De Cock, Mieke; 2023. [Role of Graphs in Blending Physical and Mathematical Meaning of Partial Derivatives in the Context of the Heat Equation](#). International Journal of Science and Mathematics Education; 2023; Vol. 21; iss. 1; pp. 25 - 47
- chapter
De Schrijver, Jelle; Blancke, Stefaan; Cornelissen, Eef; Sermeus, Jan; Dunlop, Lynda; 2022. [Are we allowed to tinker with \(human\) DNA? Addressing socio-scientific issues through philosophical dialogue - the case of genetic engineering](#). Learning evolution through socio-scientific issues; 2022; pp. 197 - 216 *Publisher: UA Editora, Universidade de Aveiro*
- conference
Mikhridinova, Nargiza; Ngereja, Bertha Joseph; Sastoque Pinilla, Leonardo; Wolff, Carsten; Van Petegem, Wim; 2022. [Developing and improving competence profiles of project teams in engineering education](#). SEFI Annual Conference; 2022; pp. 1388 - 1398 *Publisher: Universitat Politècnica de Catalunya · BarcelonaTech (UPC); Barcelona, Spain*
- journal-article
Bekaert, Hans; Van Dooren, Wim; Van Winckel, Hans; Steegen, Anna; Nicolini, Marco; Sippel, Anna C; Staikidis, Christos; Thiering, Inge; De Cock, Mieke; 2022. [Students' knowledge of the apparent motion of the Sun and stars across four European countries](#). Astronomy Education Journal; 2022; Vol. 2; iss. 1; pp. 1 - 14
- thesis-dissertation
Craps, Sofie; 2022. [Breaking through stereotypes: professional roles for future engineers. A validated competency-based framework supporting professional awareness and making well informed career choices](#)
- conference
Craps, Sofie; Cannaerts, Mieke; Veldman, Jenny; Draulans, Veerle; van Laar, Colette; Langie, Greet; 2022. [Enhancing \(future\) students' sense of belonging to increase diversity and inclusion in engineering](#). SEFI Proceedings 2022; 2022; pp. 215 - 224 *Publisher: SEFI*
- conference
Van den Broeck, Lynn; Craps, Sofie; Beagon, Una; Naukkarinen, Johanna; Langie, Greet; 2022. [Lifelong learning as an explicit part of engineering programmes: what can we do as educators? A scoping review](#). SEFI Proceedings 2022; 2022; pp. 774 - 781 *Publisher: SEFI*
- conference
Carthy, Darren; Craps, Sofie; Langie, Greet; Gaughan, Kevin; Bowe, Brian; 2022. [A situational judgment test for engineers to evaluate their professional strengths and weaknesses](#). SEFI Proceedings 2022; 2022; pp. 160 - 170 *Publisher: SEFI*
- conference
Van Dyck, Annelies; Koppen, Els; Van den Broeck, Lynn; Langie, Greet; 2022. [Student perceptions of student support services for first-year engineering students](#). SEFI Proceedings 2022; 2022; pp. 1741 - 1750 *Publisher: SEFI*



- conference
Langie, Greet; Craps, Sofie; Van den Broeck, Lynn; 2022. [Students' perception of a major engineering curriculum reform](#). SEFI Proceedings 2022; 2022; pp. 478 - 486 *Publisher: SEFI*
- thesis-dissertation
Tefera, Bekalu Ferede; 2022. [Determinants of Instructors' Educational ICT use in Higher Education in Developing Countries: Evidence from Ethiopian Higher Education](#)
- presentation
Van den Broeck, Lynn; Langie, Greet; 2022. [Self-regulation as a core competency for lifelong learning – Survey validation for engineering students](#)
- conference
Bosman, Jan Petrus; Van Petegem, Wim; De Laet, Tinne; Tshuma, Nompilo; 2022. [Edubots as academic advisers: A speculative social science fiction thought-experiment](#). Dortmund International Research Conference 2022 Proceedings; 2022; pp. 90 - 97 *Publisher: Dortmund Fachhochschule; Dortmund*
- chapter
De Laet, Tinne; 2022. [Learning Dashboards for Academic Advising in Practice](#). Practicable Learning Analytics; 2022; pp. - *Publisher: Springer*
- journal-article
Tefera, Bekalu Ferede; Elen, Jan; Van Petegem, Wim; Hunde, Adula Bekele; Goeman, Katie; 2022. [A structural equation model for determinants of instructors' educational ICT use in higher education in developing countries: Evidence from Ethiopia](#). Computers & Education; 2022; Vol. 188; iss. October 2022; pp. 1 - 14
- conference
Mikhridinova, Nargiza; Ngereja, Bertha Joseph; Hussein, Bassam; Van Petegem, Wim; Otegi-Olaso, Jose Ramon; Wolff, Carsten; 2022. [Competence-based Support for Project-based Learning in Virtual Settings](#). Learning in the Age of Digital and Green Transition. ICL 2022. Lecture Notes in Networks and Systems; 2022; Vol. 634; pp. 246 - 257 *Publisher: Springer, Cham*
- presentation
Naukkarinen, Johanna; Van den Broeck, Lynn; Craps, Sofie; Beagon, Una; 2022. [The role of lecturers in engineering students' personal development process and the promotion of lifelong learning competencies](#)



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3. Politechnika Wrocławska

Politechnika Wrocławska (Wrocław Tech) ¹³⁴ has a number of activities aimed at best matching educational offerings to various types of the needs of key stakeholders, including students and employers. These activities are carried out within the framework of university launched programmes and departments focused on the students with special educational needs:

1. The general programme Tutoring at Wrocław Tech.
2. A special support programme for gifted bachelor students (with the best secondary school results) selected at the admission stage and supported for their first year at university through special individual tutors.
3. Mentoring programme for students.
4. Activities carried out by Department of Accessibility and Support for Persons with Disabilities.
5. The laboratory of Tyfloinformatics.
6. Faculty coordinators / leaders of wider accessibility, including digital and architectural infrastructure.

(1) Key features of the PL model in the university

Tutoring at Wrocław Tech

The university offers two programmes in which students can receive support from experienced, specially trained academic teachers:

- Semester Tutoring Programme
- and Tutoring for the Exceptionally Talented / Gifted first year students.

Tutoring in both programmes is considered as two-way relationship between a tutor (academic teacher) and a student (or in some cases a small group of students). It is used to support the personal student's development in the broadest sense, and above all, it is about improvement of the academic / self-improvement competences of young people.

Students can take advantages of two forms of support:

- academic tutoring
- and developmental tutoring (which can be carried out as separate developmental courses).

These two aspects will intermingle, as intellectual and personal development are very strongly linked. In addition, Wrocław Tech's tutoring offer includes foreign language tutoring.

¹³⁴ Politechnika Wrocławska. <https://pwr.edu.pl/>



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Examples of benefits for participating students:

- Networking of new contacts,
- Development of new skills,
- Knowledge and experience of mentors,
- Opportunity to revise your ideas,
- Taking a look at your goals,
- Verbalizing your own expectations,
- Thinking together about your professional and educational future.

Accessibility and Support for Persons with Disabilities

At Wrocław Tech, the idea of a “barrier-free” university open and friendly to young people with disabilities has been implemented for more than a dozen years. The university creates a space to sure that a student feels safe and completes the educational programme without unnecessary obstacles.

Directory of support services are:

- Individualization of the study programme, credits, exams, distribution of workload,
- Priority during enrolment in courses/subjects in given semester(s),
- Possibility of renting university equipment and assistive devices for given educational stages,
- Adaptation of teaching materials for special needs of students,
- Educational assistants available for students,
- Special Scholarship from the Wrocław Tech Alumni Association¹³⁵ in order to cover additional requirements (mobility, special devices, scientific activities etc.)
- Additional, individual language trainings organized in cooperation with university language department
- Psychological support (also remotely)
- Trainings and workshops for academic teachers
- Training and integration camp during holiday

Wrocław Tech carries out these forms of support independently or with the help of external services

¹³⁵ Stowarzyszenie Absolwentów Politechniki Wrocławskiej.

<https://pwr.edu.pl/uczelnia/absolwenci/stowarzyszenie-absolwentow-politechniki-wroclawskiej>



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The laboratory of Tyfloinformatics

The list of main activities of Tyfloinformatics university lab are the following:

- Research on making technical content accessible to people with disabilities, in particular the blind, developing techniques for the efficient adaptation of materials to an accessible form.
- Work on methods of universal design and implementation of e-learning and web systems with a view to their use by persons with disabilities.
- Work on the use of state-of-the-art technologies assisting people with various disabilities, e.g.: techniques – 3D printers, haptic technologies (using mechanical communication with users through the sense of touch by means of changing forces, vibrations and movements), devices recognising and analysing images.
- Development of new solutions related to mobile devices (e.g., Android, iOS); for example, development of software for writing in Braille on a touchscreen, pedestrian navigation, mathematical applications.
- Work to make new technical courses available for visually impaired, blind students to study.



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(2) Institutional policies and PL.

Wrocław Tech mission

Through research, teaching and interaction we inspire and support the development of individuals who, based on knowledge and ethical standards, being sensitive to social needs and global challenges, shape the future with courage and responsibility. As a European technical university affirming freedom, truth, curiosity and the joy of learning, we conduct interdisciplinary research and educate to meet the expectations of society and the economy.

The values

Excellence

Working for progress and sustainability, we foster personal development based on the highest standards in education, research and innovation.

Interaction

Nurturing academic, economic and social partnerships, we combine talents and commitment to effectively achieve individual and social goals.

Openness

Being open to new ideas and challenges, drawing on the diverse experiences and aspirations of members of the academic community, we respond flexibly to changes, treating them as inspiration and motivation to actively participate in the development of science, economy and society.

Students can choose from 60 different fields of study under the first and second cycle (bachelor and master) degree programmes, many of which are delivered in English. The educational offer allows students to learn according to standard curricula as well as under individual educational programmes.



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(3) Infrastructure, environment, tools, technologies, LMS, digitalization etc. for PL

Wrocław Tech is located in the heart of Lower Silesia – Wrocław. The infrastructure includes:

- 119 buildings for staff and students, with modern laboratories, libraries, multimedia-equipped teaching rooms
- 791 teaching laboratories
- 253 research laboratories
- 585 lecture and seminar rooms, including teaching laboratories
- University sports centre.

Modern work systems are made possible by the digitalization of teaching methods conducted by the E-learning Department of PWr ¹³⁶.

The primary resources are:

- Open Educational Resources – The Open Educational Resources Portal ¹³⁷ contains video courses in Mathematical Analysis and Physics, as well as online course materials on Cloud Computing topics. The portal is successively enriched with new courses.
- PWr e-Portal – the university-wide e-learning platform is based on the open-source e-learning platform Moodle, enriched with adapted to the needs of local students (engineering fields) solutions. With the help of the components of the aforementioned platform, it is possible to prepare, collect and share teaching materials, run a forum/wiki, organize online consultations, conduct competence tests, as well as conduct full statistics and control of the teaching and learning process. All employees and students of the university have access to the PWr e-Portal.
- E-learning health and safety training – information page Occupational health and safety training for students beginning their studies at Wrocław Tech is conducted in the form of a course on the university-wide e-learning platform e-Portal PWr. The website ¹³⁸ contains detailed information about the training and its schedule.
- A site ¹³⁹ describing the remote education tools available to PWr students and employees.

¹³⁶ E-learningna Politechnice Wrocławskiej. <https://del.pwr.edu.pl/>

¹³⁷ Open Educational Resources. <https://oze.pwr.edu.pl/>

¹³⁸ <http://szkoleniebhp.pwr.edu.pl>

¹³⁹ <http://zdalne.pwr.edu.pl>



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(4) University departments and staff directly responsible for PL

- Team to develop a model for tutoring at Wroclaw Tech
- Mentoring programme by Career Bureau of Wroclaw Tech
- Plenipotentiary of the Rector of Wroclaw Tech for Persons with special educational needs
- Department of Accessibility and Support for Persons with Disabilities
- Tyfloinformatics Laboratory
- Accessibility coordinators
- Departmental leaders of accessibility and inclusion



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(5) QA system in the university and PL

All procedures and frameworks / schemes for activities of a university-wide nature (including personalized education) must gain the approval of the Wrocław Tech Quality Assurance in Higher Education Council.

The quality assurance policy of Wrocław Tech provides the general framework for execution of University's intentions, resulting from the University Development Plan (institutional strategy), aimed at meeting the expectations of internal and external stakeholders, as well as consistently striving to exceed these expectations in accordance with the concept of comprehensive management through quality. For Wrocław Tech, the terms involved stakeholder include: students and doctoral students, employers, state and local authorities, employer organizations, chambers of commerce, trade unions, economic, social and cultural organisations, external educational institutions etc.

The quality policy stems from the following adopted by the Senate of Wrocław Tech: mission, vision and development strategy, which provide a framework for establishing quality objectives. It refers to all priorities set by the University in the areas of:

- scientific and research activities,
- teaching,
- organisation and infrastructure.

For each of the areas mentioned in the Development Strategy of Wrocław Tech, measurable strategic goals are formulated, setting quality objectives.



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(6) Students and PL

Within the university, students have the opportunity to personalize their formal educational path in several ways:

- by choosing elective courses from the university general course offerings (mainly soft skills for engineers and management). This option is included in every curriculum (for example, the course "Entrepreneurship" is available to all students at the university).
- participate in tutoring programmes as tutee (masters of didactics, tutoring at the university),
- work with an appointed mentor,
- work with a tutor / mentor assigned individually according to the needs of a student (on student's request or dean's request),
- work with an "Accessibility Leader", i.e., a person selected from the university's employees willing to get involved in promoting the idea of accessibility. The task of these people is also to support people with special needs in the units of Wrocław Tech.

For particular note is the fact that the "Tutoring at Wrocław Tech" programme is co-created by both teachers and students. Students take an active part not only as tutees, but also contribute to the community and help both in promoting the tutoring offer and in recruiting new students.

Students and graduates of Wrocław Tech can also enter the job market by co-work with a mentor: the university trainer/ advisor who is directly cooperating with selected employers.

Wrocław Tech organizes events and meetups that give both communities the opportunities to connect and to learn each other. Students and alumni are aware of their capacity and have opportunity to build career's path in accordance to the specific requirement of labour market.

Wrocław Tech is seen as a university which prepares well educated graduates and valuable employees, whose scientific knowledge and professional approach have a positive impact on their surrounding environments.



(7) University teachers and PL

Wrocław Tech teachers / educators benefit from a variety of training courses. The following trainings have been implemented in the university:

- Trainings organized by units of Wrocław Tech (Language department, IT department, E-learning Department).
- Innovative Didactic Skills (UD) trainings: "Innovation in adult education", "Methodology of forecasting and innovation management".
- "The art of voice emission".
- Training in Information Literacy (UI): "Basics of using the e-learning platform and electronic whiteboard", "Advanced use of the e-learning platform in the educational process", "Good practices in programming", "New techniques in parallel programming", "IT infrastructure of science", "Digital certificates and electronic signature".
- "Group work services".
- Information Management (I/M) training courses: "Secure Data Storage and Sharing", "Data Processing on Computing Resources", Teaching in Foreign Languages: "Advanced Academic English", "Advanced Translation Academy", "American Academic English and British Academic English", "Academic Writing", Intensive summer conversational English course, English with elements of technical language, English C1 course, English and German C1 level course.

Training provided by external entities

- Innovative teaching skills: Professional workshop of an academic teacher, Action Learning workshop – or how to actively teach, School of Academic Tutors, Gamification and IT tools (in academic education)
- Design thinking, Learning by doing – learning by doing i.e., active methods of working with students, Innovative teaching methods in the work of an academic lecturer increasing the quality of didactics.
- Professional public speaking, Techniques for dealing with student aggression and own emotions in difficult situations, Coaching as an effective method of working with students, Assertiveness, enforcement and defence against manipulation, Stress management and anti-stress training.
- Computer skills: Operation of computer software using BIM technology, Applications of Visual ModFlow Flex, Applications of UnSat Suite Plus, Operation of Waterloo Hydrogeologic: related AquaChem and PHREEQCI programmes, Origin: Basics of data analysis in the programme environment, Autodesk Inventor advanced, MicroStation for advanced, SOLIDWORKS (Certified SOLIDWORKS Associate), PREZI training on creating presentations.
- CompTIA Cloud+ Training.

Training provided by external (foreign) entities

- Python for Everybody,
- Full Stack Web Development Specialization,
- iOS App Development with Swift Specialization,
- Cybersecurity Specialization.



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(8) Management and PL: reflection, feedback, evaluation and decision-making on PL

In 2020, a study was conducted on the topic of evaluating the effectiveness of education in the context of tutoring. The main conclusions of the qualitative analysis are:

- Tutoring evokes rather positive associations; it is associated with the relationship master-student, development and modern education.
- A relatively high sense of pride in studying at PWr, as well as a sense of participation in the academic community.
- Relatively high usefulness of active forms – such as research projects, case studies, workshops, but also going outside the University (visits, internships).
- The greatest support in studying is their group of peers: fellow students and friends and family members.

In the survey, factors were identified as key to be implemented by the university:

- A clear and fair grading system
- Treating students with respect
- Clear expectations from teachers
- Transmitted knowledge adapted to the labour market
- Involvement of teachers in education
- High professional level of teachers
- Openness of teachers
- Inspiration on the part of teachers
- Improvement of competence by teachers
- High ethical level of teachers

On the basis of the research carried out, a list of recommendations was created, which has been regularly implemented since 2020, resulting, for example, in the programme “tutoring at Wroclaw Tech”.



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(9) Inclusion in education process

Inclusion at Wrocław Tech is implemented as a part of student-centred learning processes. This is a mandatory element for the university educational services in line with the ESG 2015.

The realisation of the inclusiveness policy of higher education is enforced by the accreditation system for higher education in Poland through the activities of the Polish Accreditation Committee¹⁴⁰.

In the day-to-day operations of the university, matters relating to inclusion in education are under constant review of internal quality assurance system. From the perspective of the individual university student, problem with inclusion or any shortcomings regarding inclusion in education can be picked up immediately through periodical surveys, class inspection's system, an IT system for anonymous reporting of student comments, remarks etc.

On the faculty level supervision on the inclusion process is the part of Dean (Vice-Dean) activities.

Another important aspect concerning inclusion processes is the monitoring and rules governing this process in the wider academic community in Wrocław Tech. The Rector's Plenipotentiary for Anti-Discrimination is the person in charge of the inclusion processes in the level of academic community.

If a student or an employee of Wrocław Tech has experienced or witnessed discrimination at the university, he or she can take part in the complaint procedure and contact directly to the Equal Wrocław Tech team.

58

Special support is offered for persons with special educational needs by The Department of Accessibility and Support for People with Disabilities at Wrocław Tech. This department provides a wide range of support to both students and staff with disabilities.

Psychological support for students and employees is also provided by professional psychological team, trained in providing help in emergency situations at The Centre for Psychological Counselling and Mediation which has been launched as a part of the "The New Opportunities for the University" project.

The Equality Plan for Wrocław Tech 2022-2024 is the main document relating to academic community in Wrocław Tech¹⁴¹.

¹⁴⁰ Polska Komisja Akredytacyjna. <https://pka.edu.pl>

¹⁴¹ Plan Równości dla Politechniki Wrocławskiej na lata 2022–2024.

https://rowna.pwr.edu.pl/fcp/aGBUKOQtTKlQhbx08SlkAWgVeUTgtCgg9ACFDC1dCVm8PVhQsRgNtRzkSCQ/191/public/docs/planrowno SCIPWR_2021_.pdf



4. Ivan Franko National University of Lviv

Part 1 – General information about implementation of PL in the university

1. Full name of a higher education institution: Ivan Franko National University of Lviv (IFNUL)
2. HEI website address: <https://lnu.edu.ua/>
3. Number of students: 20 520
4. Number of academic staff: 2 664
5. Number of students who took part in the survey: 105
6. Number of academic staff who took part in the survey: 101
7. ***Which documents of your HEI reflect the implementation of a personalized approach to learning?***
 - The Regulation on the educational process organization at Ivan Franko National University of Lviv ¹⁴²
 - The Regulation on the students transfer procedure to vacant places of the state order ¹⁴³
 - The Temporary Regulation on the Procedure for organizing academic mobility of higher education applicants at Ivan Franko National University of Lviv ¹⁴⁴
 - The Regulation on academic mobility participants' learning outcomes recognition and re-enrolment at Ivan Franko National University of Lviv ¹⁴⁵
 - The Regulation on the procedure for ensuring students' free choice of academic disciplines at IFNUL ¹⁴⁶
 - The Procedure for recognition of learning outcomes obtained in non-formal and informal education at Ivan Franko National University of Lviv ¹⁴⁷
 - The Regulation on the students, employees, teachers, graduates and employers' survey on the quality of the educational process ¹⁴⁸
8. ***What procedures, prerequisites and criteria are used to implement an individual learning pathway / trajectory at your HEI?***
 - Individual study schedule, academic mobility, informal study, elective courses, support and assistance / accompaniment, students' involvement in research (research student society) are used among above-mentioned procedures at Ivan Franko National University of Lviv.
9. ***What conditions to ensure an inclusion in higher education are implemented at your HEI?***
 - Ensuring inclusion in the university is one of the areas of development and improvement. Infrastructural conditions are created to provide inclusion (installation in buildings of ramps and elevators) at the university. In addition, the educational process within a framework of educational program, where it is needed, is provided with necessary educational and methodological materials, information and communication technologies.

¹⁴² <https://lnu.edu.ua/wp-content/uploads/2018/06/S22C-6e18062115060-1.pdf>

¹⁴³ <https://lnu.edu.ua/wp-content/uploads/2023/02/Polozhennia-pro-poriadok-perevedennia-studentiv-na-vakantni-mistsia-derzhavnoho-zamovlennia-nova-redaktsiia.pdf>

¹⁴⁴ https://lnu.edu.ua/wp-content/uploads/2016/01/ifnul_academic_mobility.pdf

¹⁴⁵ <https://lnu.edu.ua/wp-content/uploads/2019/09/reg-academic-mobility.pdf>

¹⁴⁶ https://lnu.edu.ua/wp-content/uploads/2020/09/reg_free-choice.pdf

¹⁴⁷ https://lnu.edu.ua/wp-content/uploads/2020/01/reg_inf-educations-results.pdf

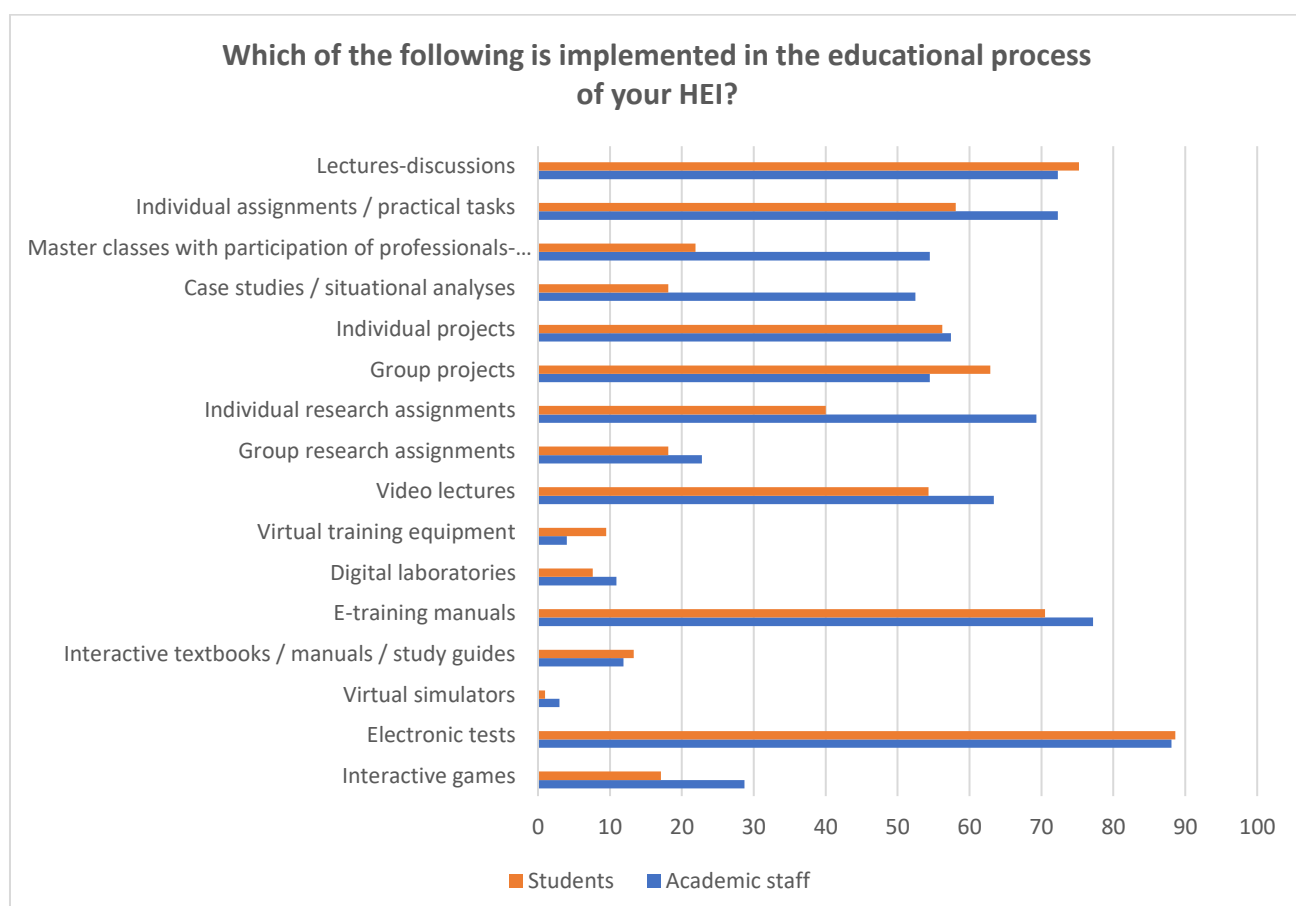
¹⁴⁸ https://lnu.edu.ua/wp-content/uploads/2019/01/reg_survey_quality.pdf



Part 2 – Questionnaire for surveying staff and students

1. Which of the following is implemented in the educational process of your HEI?

	Academic staff (101)		Students (105)	
	Persons	%	Persons	%
Lectures-discussions	73	72,3	79	75,2
Individual assignments / practical tasks	73	72,3	61	58,1
Master classes with participation of professionals-practitioners	55	54,5	23	21,9
Case studies / situational analyses	53	52,5	19	18,1
Individual projects	58	57,4	59	56,2
Group projects	55	54,5	66	62,9
Individual research assignments	70	69,3	42	40
Group research assignments	23	22,8	19	18,1
Video lectures	64	63,4	57	54,3
Virtual training equipment	4	4	10	9,5
Digital laboratories	11	10,9	8	7,6
E-training manuals	78	77,2	74	70,5
Interactive textbooks / manuals / study guides	12	11,9	14	13,3
Virtual simulators	3	3	1	1
Electronic tests	89	88,1	93	88,6
Interactive games	29	28,7	18	17,1

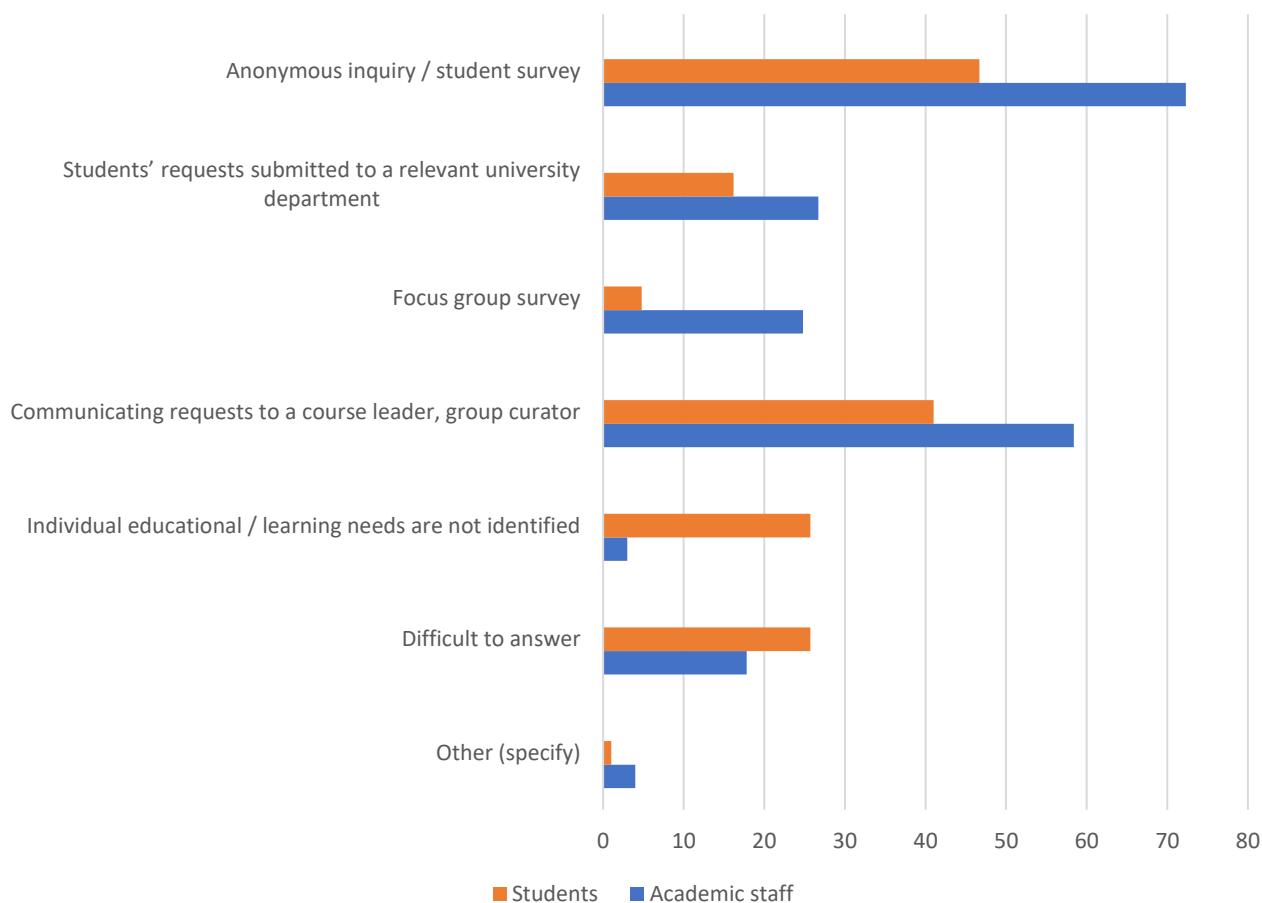




2. How are student individual educational / learning needs identified at your HEI?

	Academic staff (101)		Students (105)	
	Persons	%	Persons	%
Anonymous inquiry / student survey	73	72,3	49	46,7
Students' requests submitted to a relevant university department	27	26,7	17	16,2
Focus group survey	25	24,8	5	4,8
Communicating requests to a course leader, group curator	59	58,4	43	41
Individual educational / learning needs are not identified	3	3	27	25,7
Difficult to answer	18	17,8	27	25,7
Other (specify)	4	4	1	1

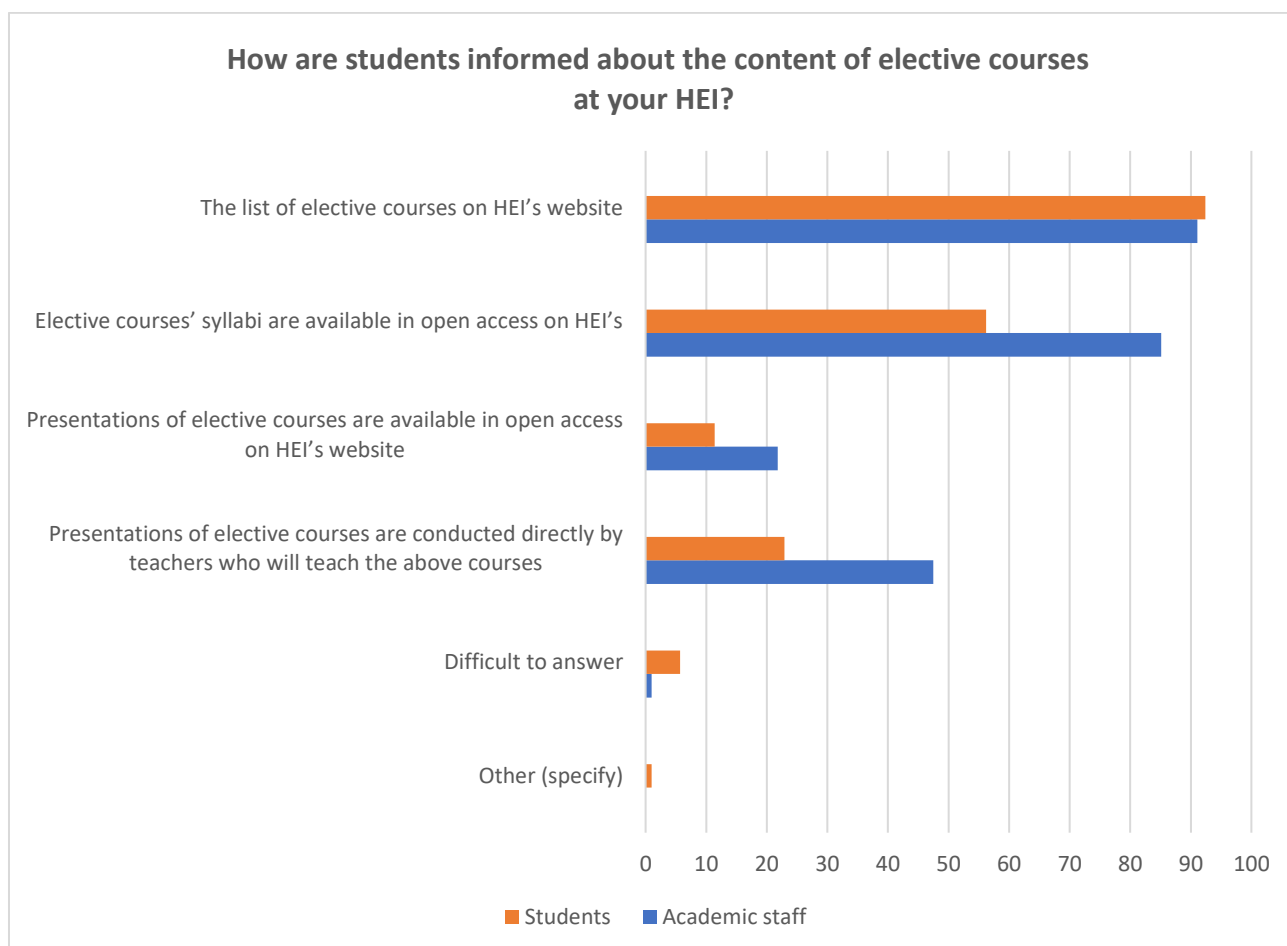
How are student individual educational / learning needs identified at your HEI?





3. How are students informed about the content of elective courses at your HEI?

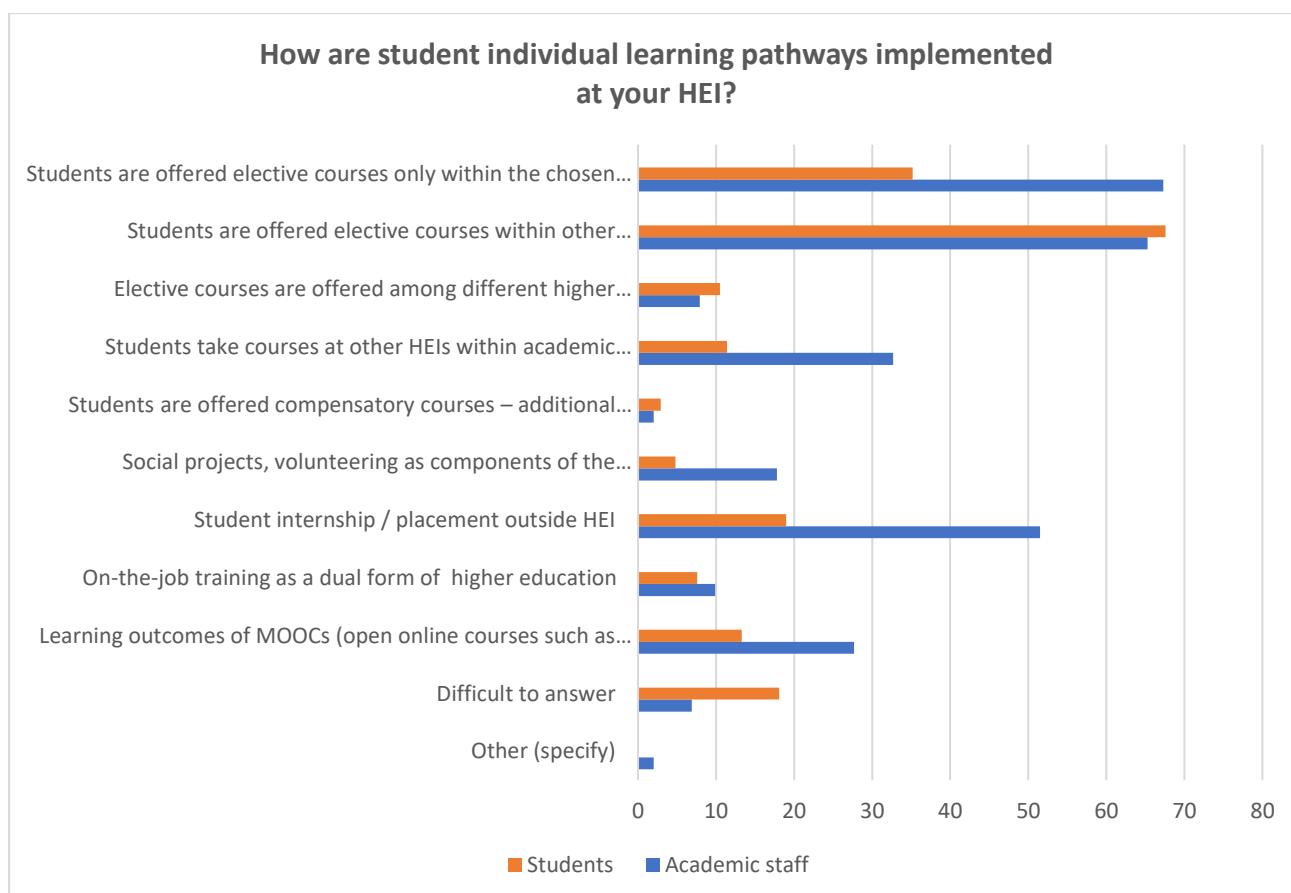
	Academic staff (101)		Students (105)	
	Persons	%	Persons	%
The list of elective courses on HEI's website	92	91,1	97	92,4
Elective courses' syllabi are available in open access on HEI's	86	85,1	59	56,2
Presentations of elective courses are available in open access on HEI's website	22	21,8	12	11,4
Presentations of elective courses are conducted directly by teachers who will teach the above courses	48	47,5	24	22,9
Difficult to answer	1	1	6	5,7
Other (specify)	0	0	1	1





4. How are student individual learning pathways implemented at your HEI?

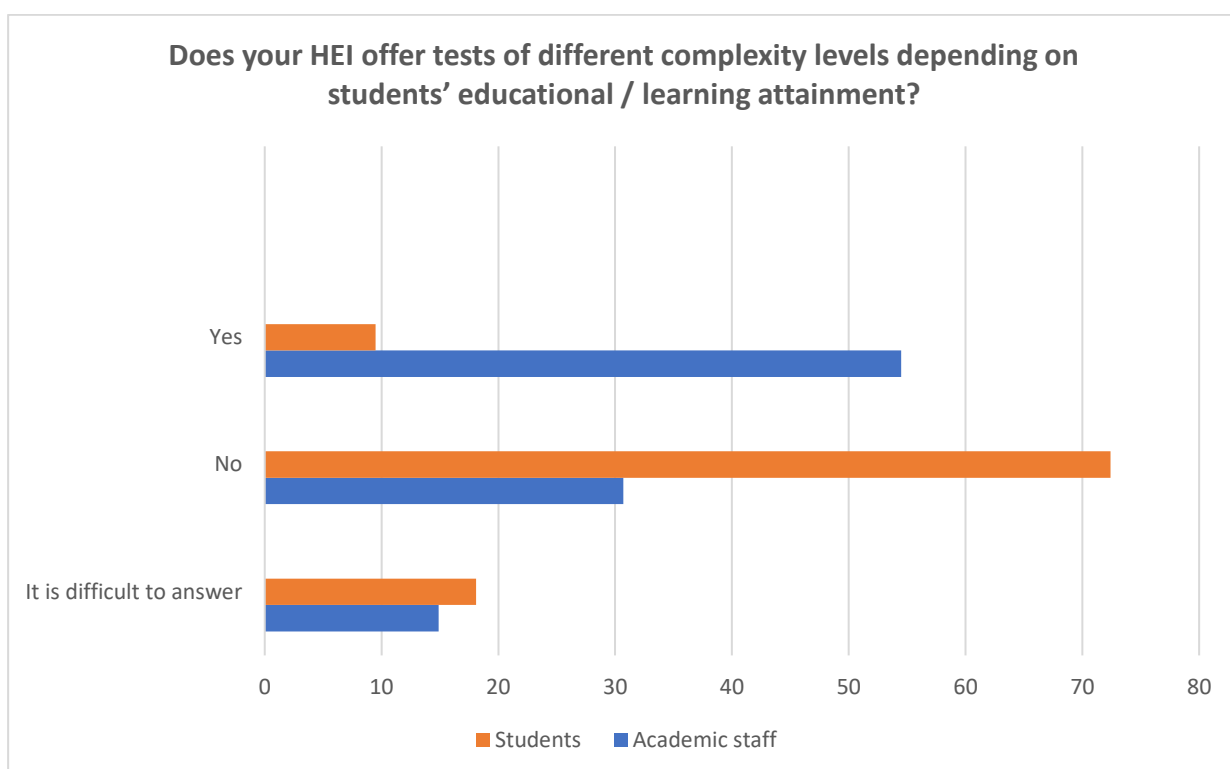
	Academic staff (101)		Students (105)	
	Persons	%	Persons	%
Students are offered elective courses only within the chosen educational / study programme	68	67,3	37	35,2
Students are offered elective courses within other educational / study programmes of the same higher education level	66	65,3	71	67,6
Elective courses are offered among different higher education levels within the HEI	8	7,9	11	10,5
Students take courses at other HEIs within academic mobility programmes	33	32,7	12	11,4
Students are offered compensatory courses – additional courses to improve students' learning outcomes	2	2	3	2,9
Social projects, volunteering as components of the educational / study programme	18	17,8	5	4,8
Student internship / placement outside HEI	52	51,5	20	19
On-the-job training as a dual form of higher education	10	9,9	8	7,6
Learning outcomes of MOOCs (open online courses such as Prometheus, Edx etc.) are recognized by the educational / study programme	28	27,7	14	13,3
Difficult to answer	7	6,9	19	18,1
Other (specify)	2	2	0	0





5. Does your HEI offer tests of different complexity levels depending on students' educational / learning attainment?

	Academic staff (101)		Students (105)	
	Persons	%	Persons	%
Yes	55	54,5	10	9,5
No	31	30,7	76	72,4
It is difficult to answer	15	14,9	19	18,1

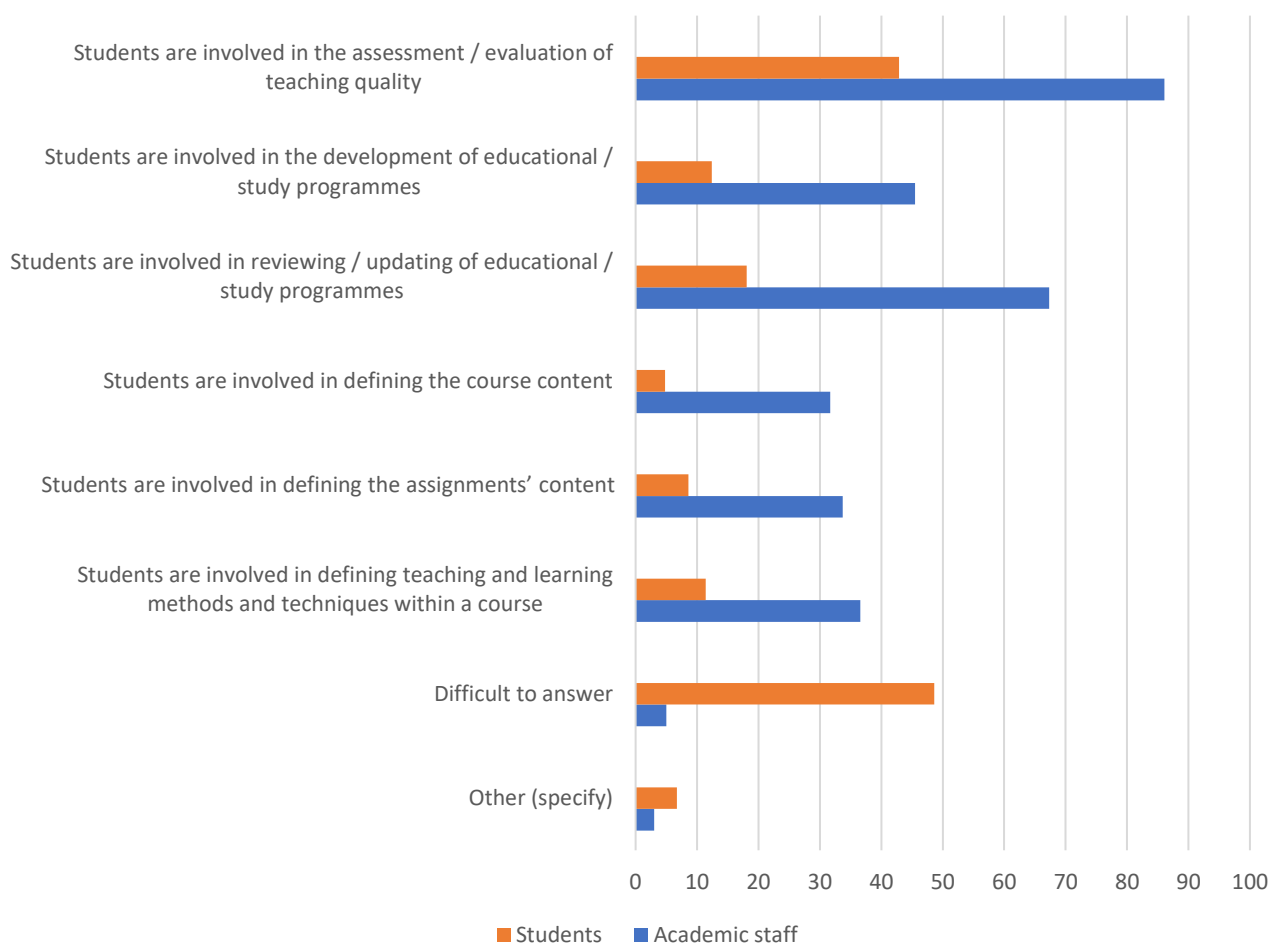




6. Which of the practices listed below are implemented in your HEI?

	Academic staff (101)		Students (105)	
	Persons	%	Persons	%
Students are involved in the assessment / evaluation of teaching quality	87	86,1	45	42,9
Students are involved in the development of educational / study programmes	46	45,5	13	12,4
Students are involved in reviewing / updating of educational / study programmes	68	67,3	19	18,1
Students are involved in defining the course content	32	31,7	5	4,8
Students are involved in defining the assignments' content	34	33,7	9	8,6
Students are involved in defining teaching and learning methods and techniques within a course	37	36,6	12	11,4
Difficult to answer	5	5	51	48,6
Other (specify)	3	3	7	6,7

Which of the practices listed below are implemented in your HEI?

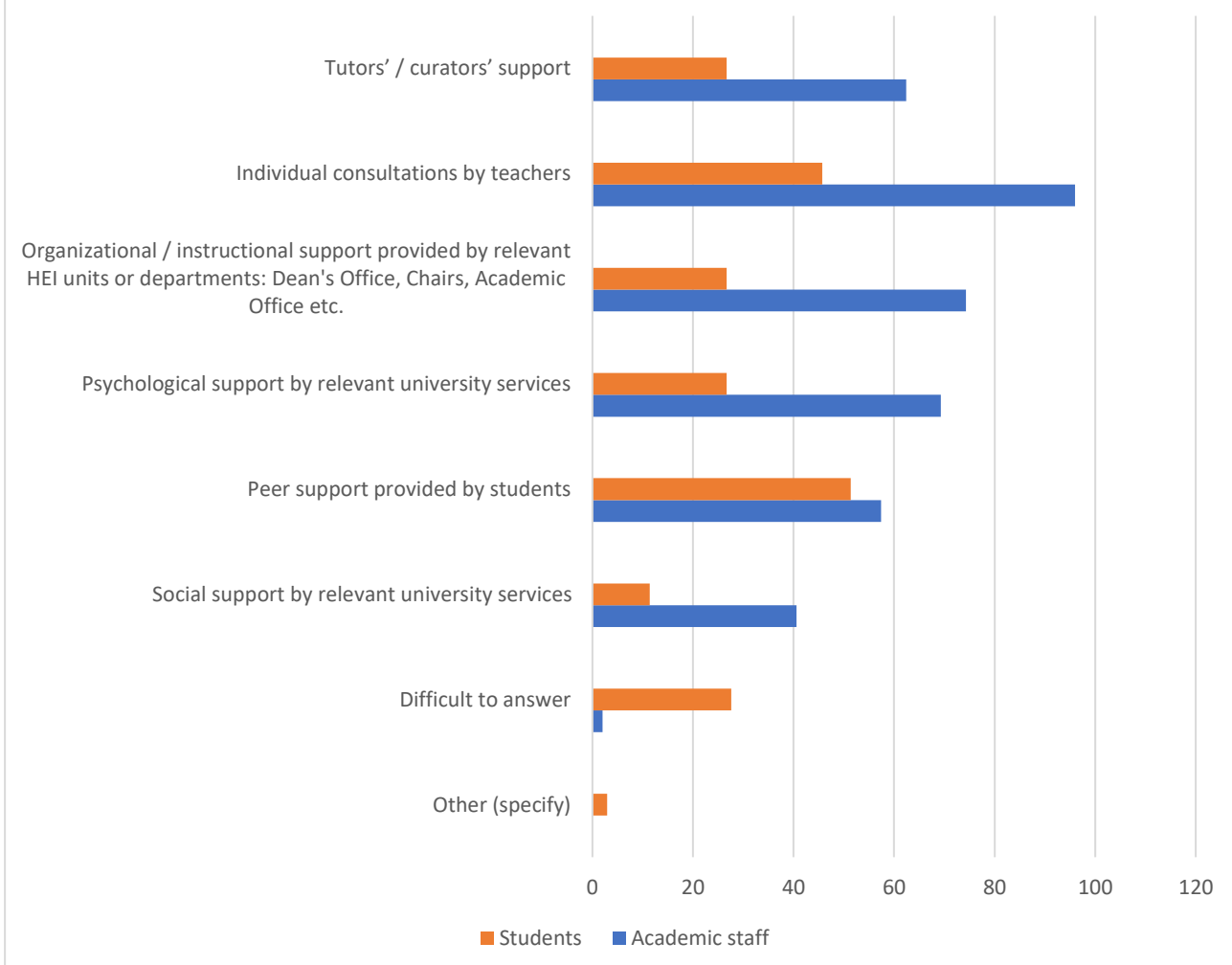




7. What types of support does your HEI provide to students to improve their learning outcomes, attainment?

	Academic staff (101)		Students (105)	
	Persons	%	Persons	%
Tutors' / curators' support	63	62,4	28	26,7
Individual consultations by teachers	97	96	48	45,7
Organizational / instructional support provided by relevant HEI units or departments: Dean's Office, Chairs, Academic Office etc.	75	74,3	28	26,7
Psychological support by relevant university services	70	69,3	28	26,7
Peer support provided by students	58	57,4	54	51,4
Social support by relevant university services	41	40,6	12	11,4
Difficult to answer	2	2	29	27,6
Other (specify)	0	0	3	2,9

What types of support does your HEI provide to students to improve their learning outcomes, attainment?





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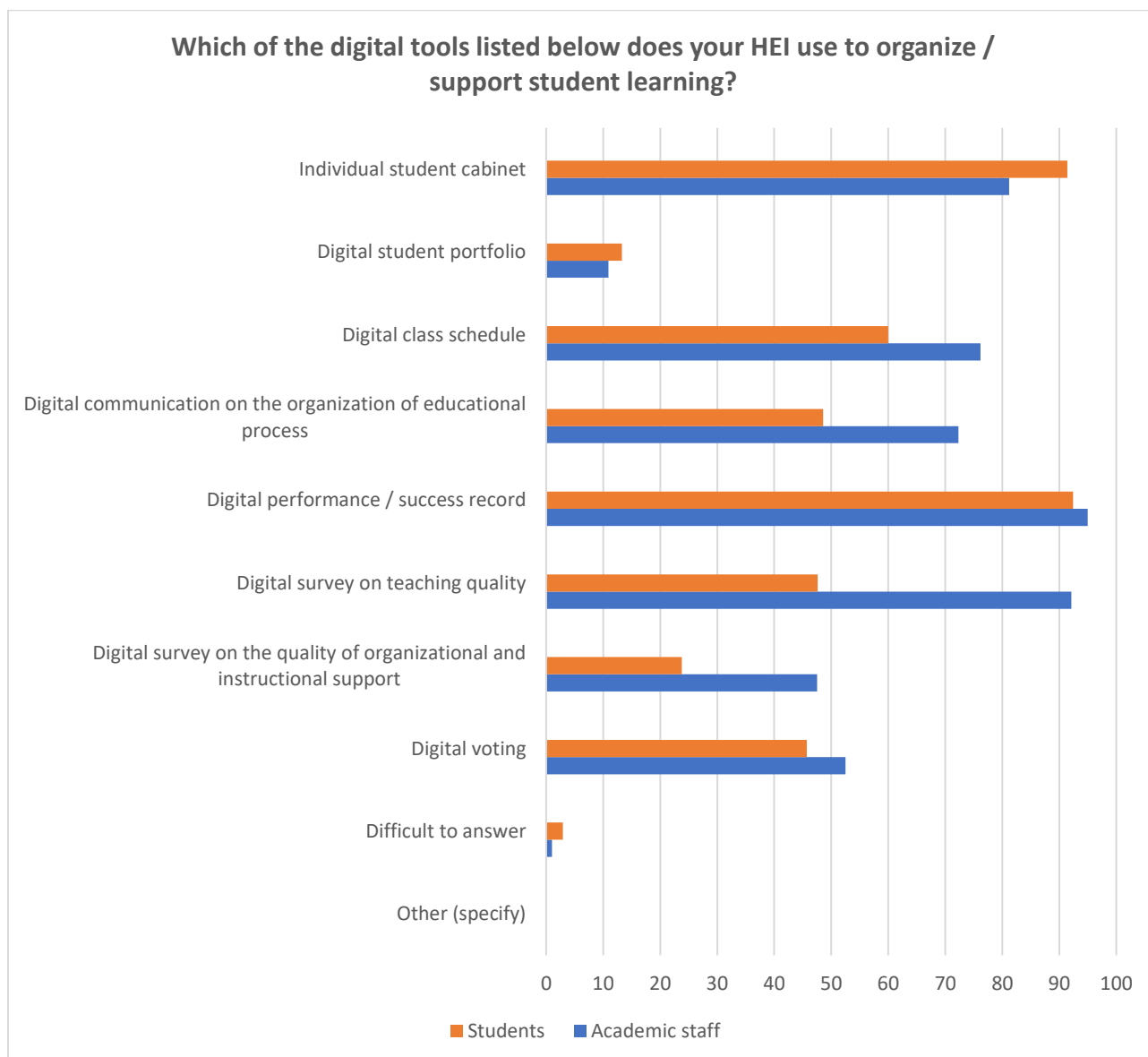
This Project has received funding from the European Commission ERASMUS+ Programme under grant agreement no. 101082928.



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Students' Personalised Learning Model, Based on the Virtual Learning Environment of Intellectual Tutoring "Learning with No Limits"

8. Which of the digital tools listed below does your HEI use to organize / support student learning?

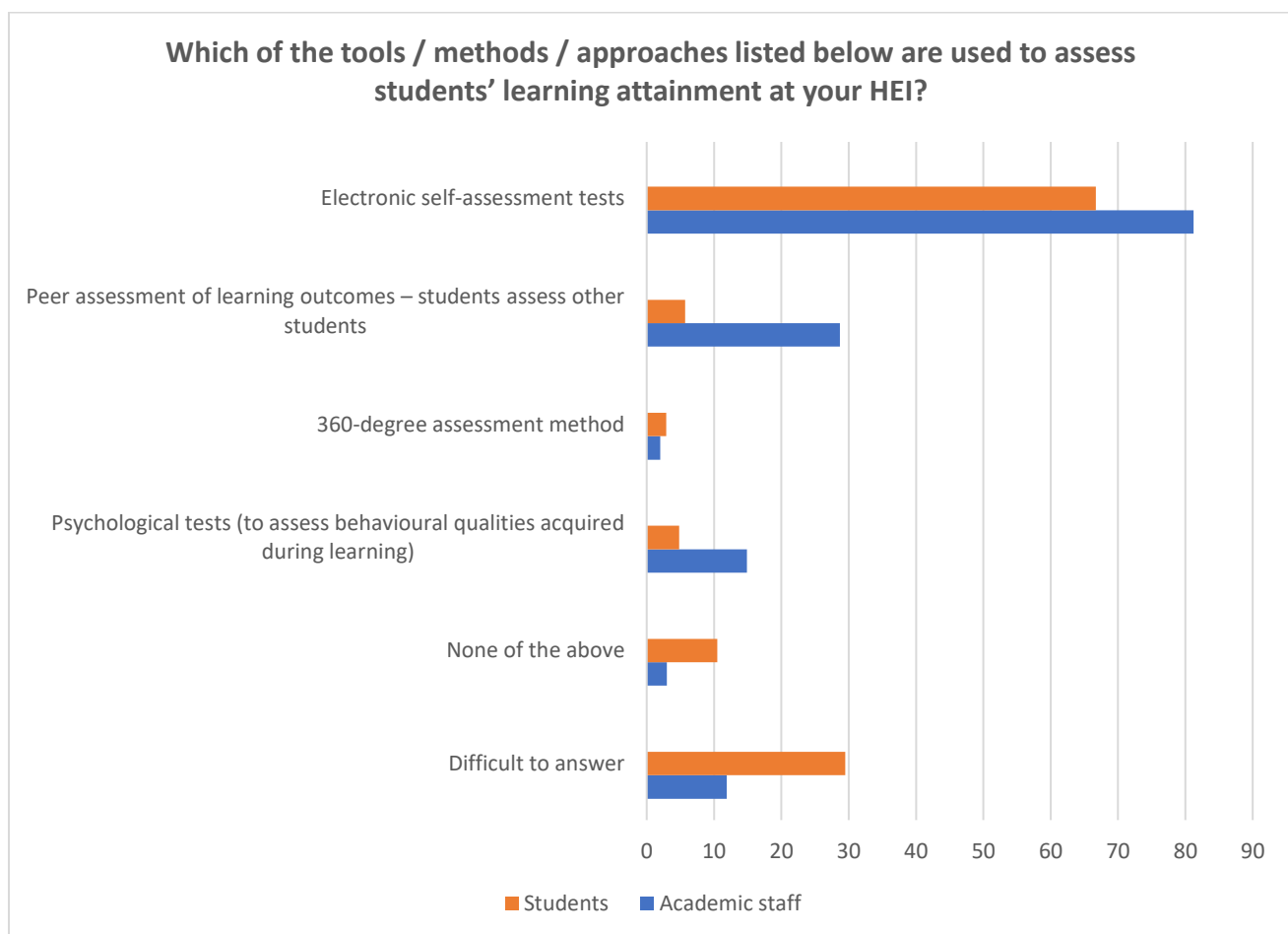
	Academic staff (101)		Students (105)	
	Persons	%	Persons	%
Individual student cabinet	82	81,2	96	91,4
Digital student portfolio	11	10,9	14	13,3
Digital class schedule	77	76,2	63	60
Digital communication on the organization of educational process	73	72,3	51	48,6
Digital performance / success record	96	95	97	92,4
Digital survey on teaching quality	93	92,1	50	47,6
Digital survey on the quality of organizational and instructional support	48	47,5	25	23,8
Digital voting	53	52,5	48	45,7
Difficult to answer	1	1	3	2,9
Other (specify)	0	0	0	0





9. Which of the tools / methods / approaches listed below are used to assess students' learning attainment at your HEI?

	Academic staff (101)		Students (105)	
	Persons	%	Persons	%
Electronic self-assessment tests	82	81,2	70	66,7
Peer assessment of learning outcomes – students assess other students	29	28,7	6	5,7
360-degree assessment method	2	2	3	2,9
Psychological tests (to assess behavioural qualities acquired during learning)	15	14,9	5	4,8
None of the above	3	3	11	10,5
Difficult to answer	12	11,9	31	29,5





5. Kryvyi Rih National University

Part 1 – General information about implementation of PL in the university

1. Full name of a higher education institution: Kryvyi Rih National University
2. HEI website address: <http://www.knu.edu.ua>
3. Number of students: 3 629
4. Number of academic staff: 293
5. Number of students who took part in the survey: 235
6. Number of academic staff who took part in the survey: 94
7. ***Which documents of your HEI reflect the implementation of a personalized approach to learning?***
 - The Regulation on organization of the educational process at Kryvyi Rih National University (Order № 50 dated 06.02.2020) ¹⁴⁹
 - The Regulation on the procedure for students' learning according to an individual study schedule at the Kryvyi Rih National University (Order № 53 dated 30.01.2018 p.)
8. ***What procedures, prerequisites and criteria are used to implement an individual learning pathway / trajectory (individual study schedule, academic mobility, non-formal learning, elective courses, accompaniment and support, etc.) at your HEI?***
 - The following categories of students have a possibility to use an individual learning pathway: who are employed by their specialty; who participate in research work; students-sportsmen; are parents of children under six; have a disability and are unable to attend an educational institution; have internship in other educational institutions; study in small groups. This list is not exhaustive.
 - To obtain permission to have an individual learning pathway, student submits to the Dean's office an application (of the prescribed format), copies of documents (that confirm the grounds for obtaining such permission).
 - A student who received such permission must agree with the teachers on the time of the lessons he / she will attend and the time of consultations.
 - Dean of a faculty approves the student's application and the individual learning pathway.
 - After signing the order on a permission, student is learning according to an individually established schedule and undertakes to follow the procedure determined by this document.
 - The individual schedule is usually approved for one semester.
9. ***What conditions to ensure an inclusion in higher education are implemented at your HEI?***
 - The goal of inclusive education in the university is to provide equal access to high-quality education for persons with special educational needs through organizing their learning based on the application of personalised learning methods taking into account their individual characteristics. Creating of conditions for a person with special educational needs to obtain a high-quality education at the university is aimed at: spreading access to high-quality higher education using modern information technologies; implementation of an individual approach to the learning process in accordance with the characteristics and capabilities of each such type student; expanding the university's resource capabilities to improve the quality of education; formation of university students' positive attitude towards persons with special educational needs.

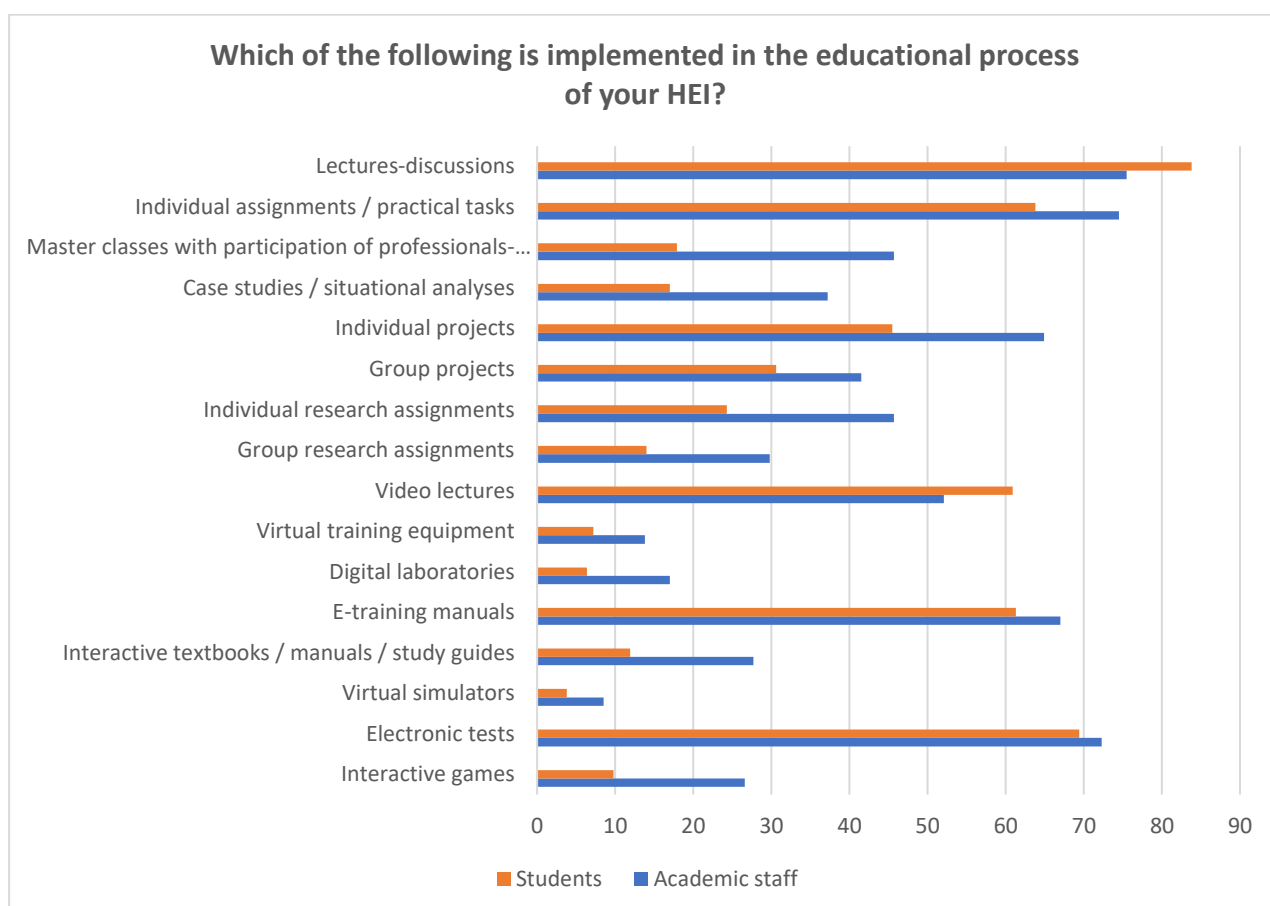
¹⁴⁹ <http://www.knu.edu.ua/normatyvna-baza/polozhennya-pro-navchal-nyy-proces>



Part 2 – Questionnaire for surveying staff and students

1. Which of the following is implemented in the educational process of your HEI?

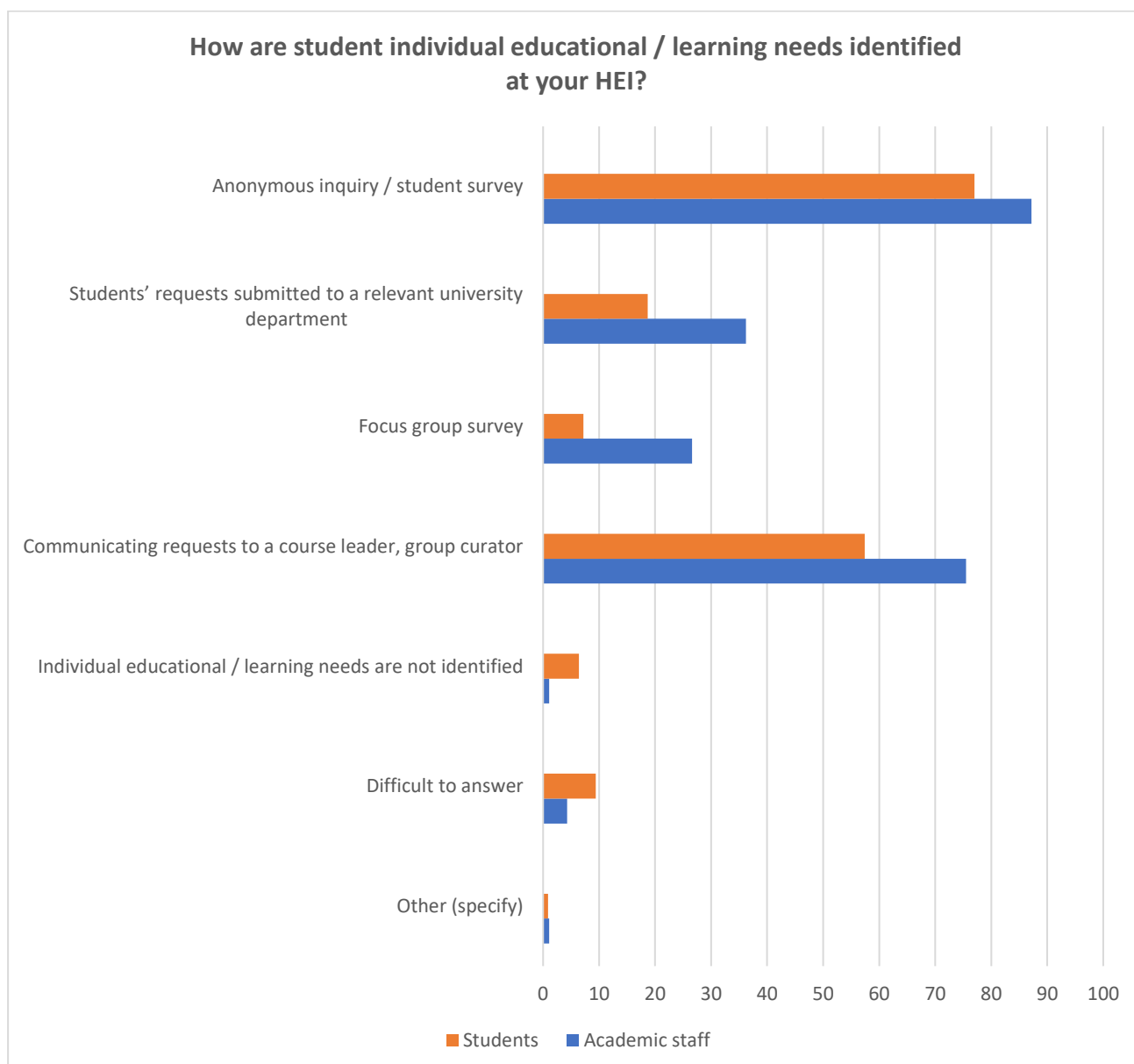
	Academic staff (94)		Students (235)	
	Persons	%	Persons	%
Lectures-discussions	71	75,5	197	83,8
Individual assignments / practical tasks	70	74,5	150	63,8
Master classes with participation of professionals-practitioners	43	45,7	42	17,9
Case studies / situational analyses	35	37,2	40	17
Individual projects	61	64,9	107	45,5
Group projects	39	41,5	72	30,6
Individual research assignments	43	45,7	57	24,3
Group research assignments	28	29,8	33	14
Video lectures	49	52,1	143	60,9
Virtual training equipment	13	13,8	17	7,2
Digital laboratories	16	17	15	6,4
E-training manuals	63	67	144	61,3
Interactive textbooks / manuals / study guides	26	27,7	28	11,9
Virtual simulators	8	8,5	9	3,8
Electronic tests	68	72,3	163	69,4
Interactive games	25	26,6	23	9,8





2. How are student individual educational / learning needs identified at your HEI?

	Academic staff (94)		Students (235)	
	Persons	%	Persons	%
Anonymous inquiry / student survey	82	87,2	181	77
Students' requests submitted to a relevant university department	34	36,2	44	18,7
Focus group survey	25	26,6	17	7,2
Communicating requests to a course leader, group curator	71	75,5	135	57,4
Individual educational / learning needs are not identified	1	1,1	15	6,4
Difficult to answer	4	4,3	22	9,4
Other (specify)	1	1,1	2	0,9

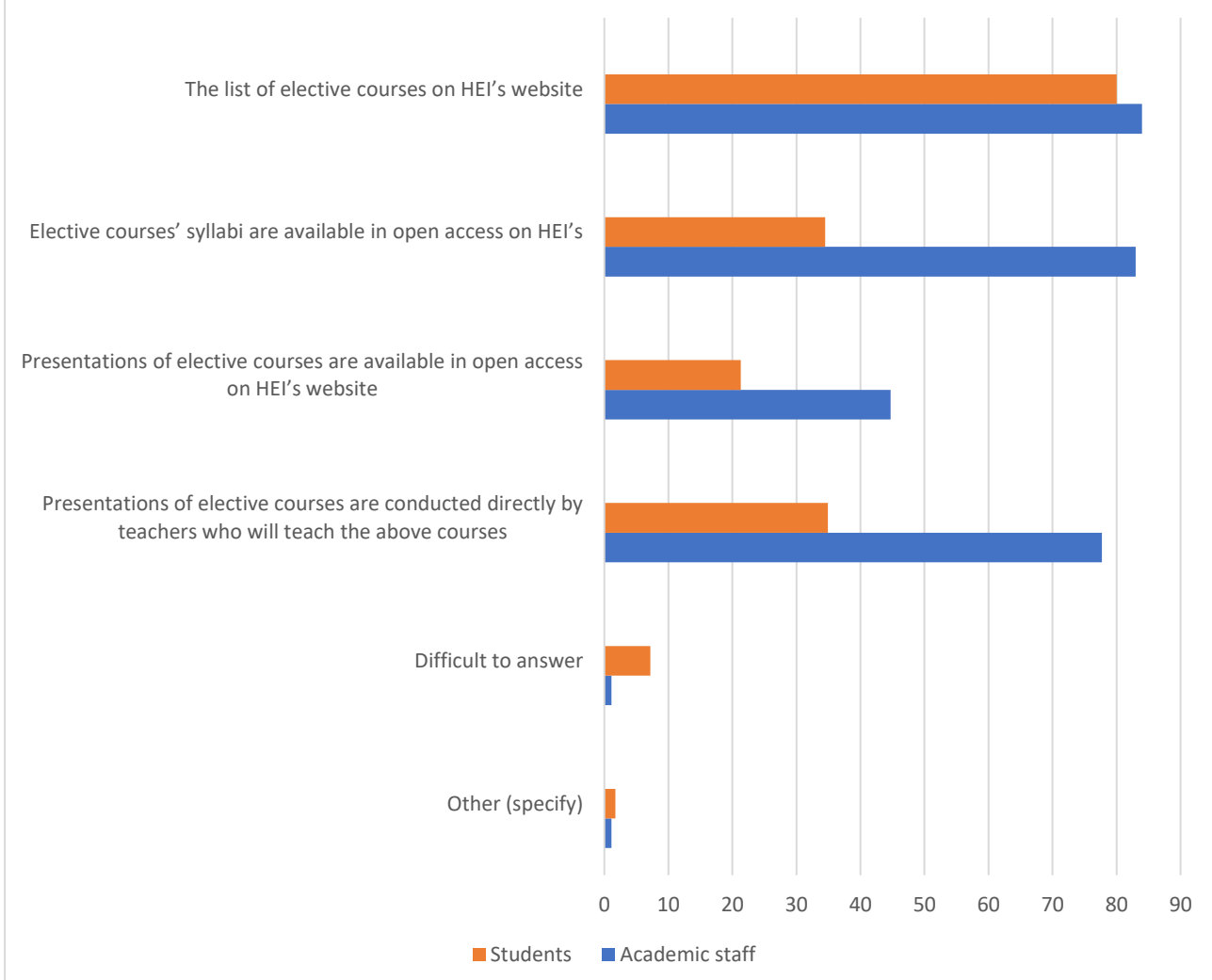




3. How are students informed about the content of elective courses at your HEI?

	Academic staff (94)		Students (235)	
	Persons	%	Persons	%
The list of elective courses on HEI's website	79	84	188	80
Elective courses' syllabi are available in open access on HEI's	78	83	81	34,5
Presentations of elective courses are available in open access on HEI's website	42	44,7	50	21,3
Presentations of elective courses are conducted directly by teachers who will teach the above courses	73	77,7	82	34,9
Difficult to answer	1	1,1	17	7,2
Other (specify)	1	1,1	4	1,7

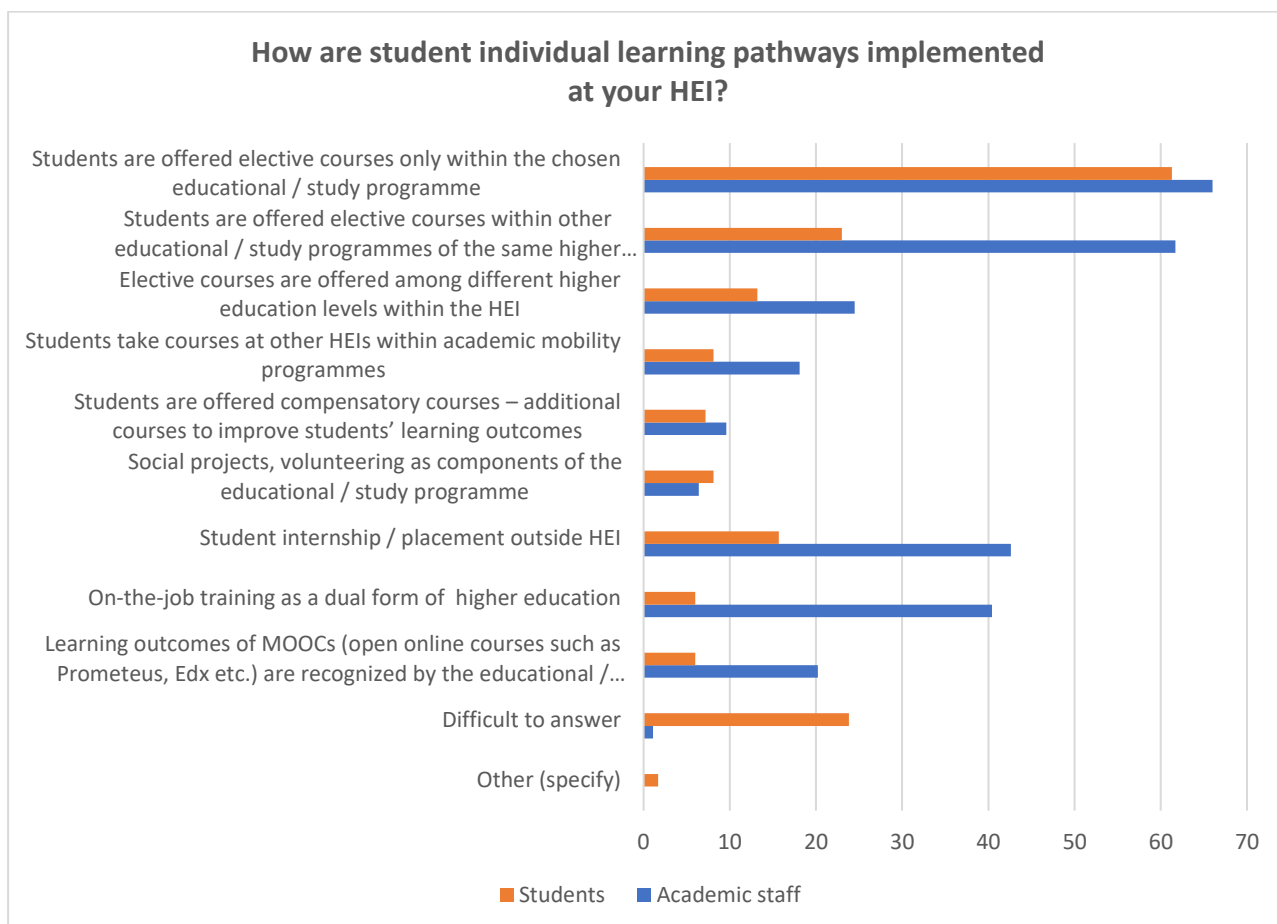
How are students informed about the content of elective courses at your HEI?





4. How are student individual learning pathways implemented at your HEI?

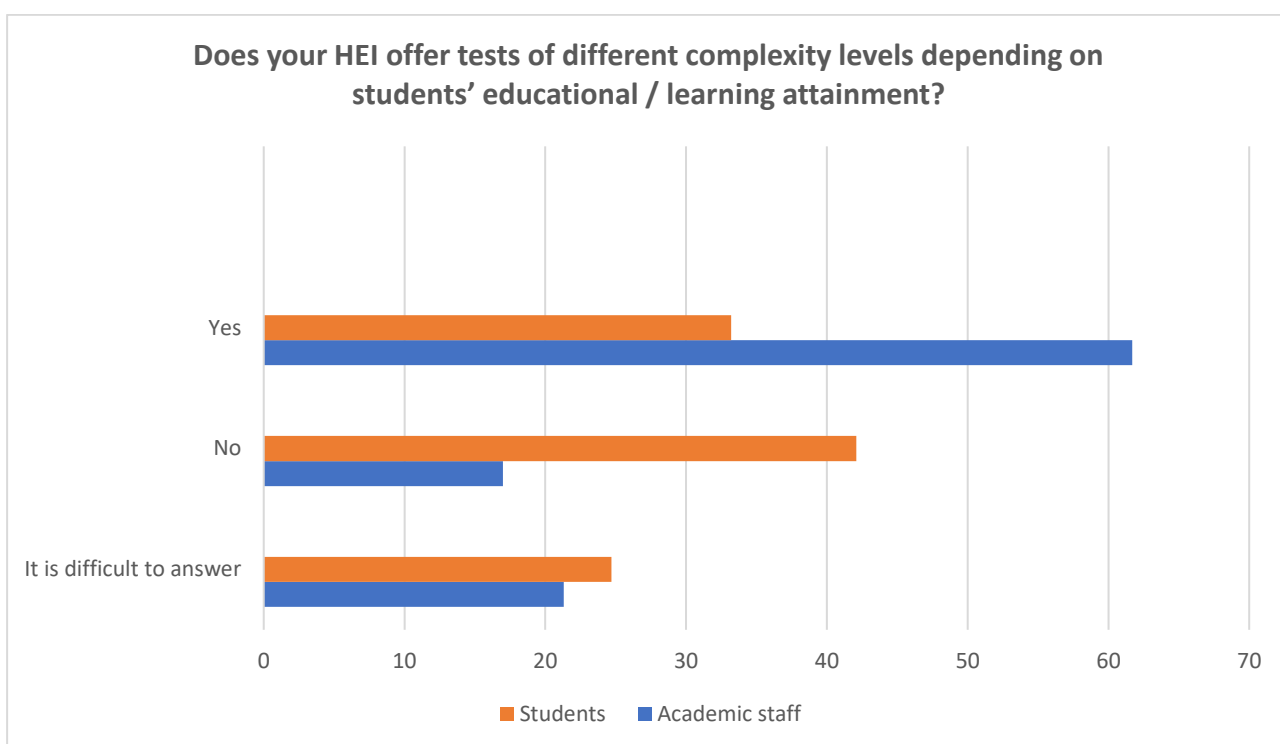
	Academic staff (94)		Students (235)	
	Persons	%	Persons	%
Students are offered elective courses only within the chosen educational / study programme	62	66	144	61,3
Students are offered elective courses within other educational / study programmes of the same higher education level	58	61,7	54	23
Elective courses are offered among different higher education levels within the HEI	23	24,5	31	13,2
Students take courses at other HEIs within academic mobility programmes	17	18,1	19	8,1
Students are offered compensatory courses – additional courses to improve students' learning outcomes	9	9,6	17	7,2
Social projects, volunteering as components of the educational / study programme	6	6,4	19	8,1
Student internship / placement outside HEI	40	42,6	37	15,7
On-the-job training as a dual form of higher education	38	40,4	14	6
Learning outcomes of MOOCs (open online courses such as Prometheus, Edx etc.) are recognized by the educational / study programme	19	20,2	14	6
Difficult to answer	1	1,1	56	23,8
Other (specify)	0	0	4	1,7





5. Does your HEI offer tests of different complexity levels depending on students' educational / learning attainment?

	Academic staff (94)		Students (235)	
	Persons	%	Persons	%
Yes	58	61,7	78	33,2
No	16	17	99	42,1
It is difficult to answer	20	21,3	58	24,7

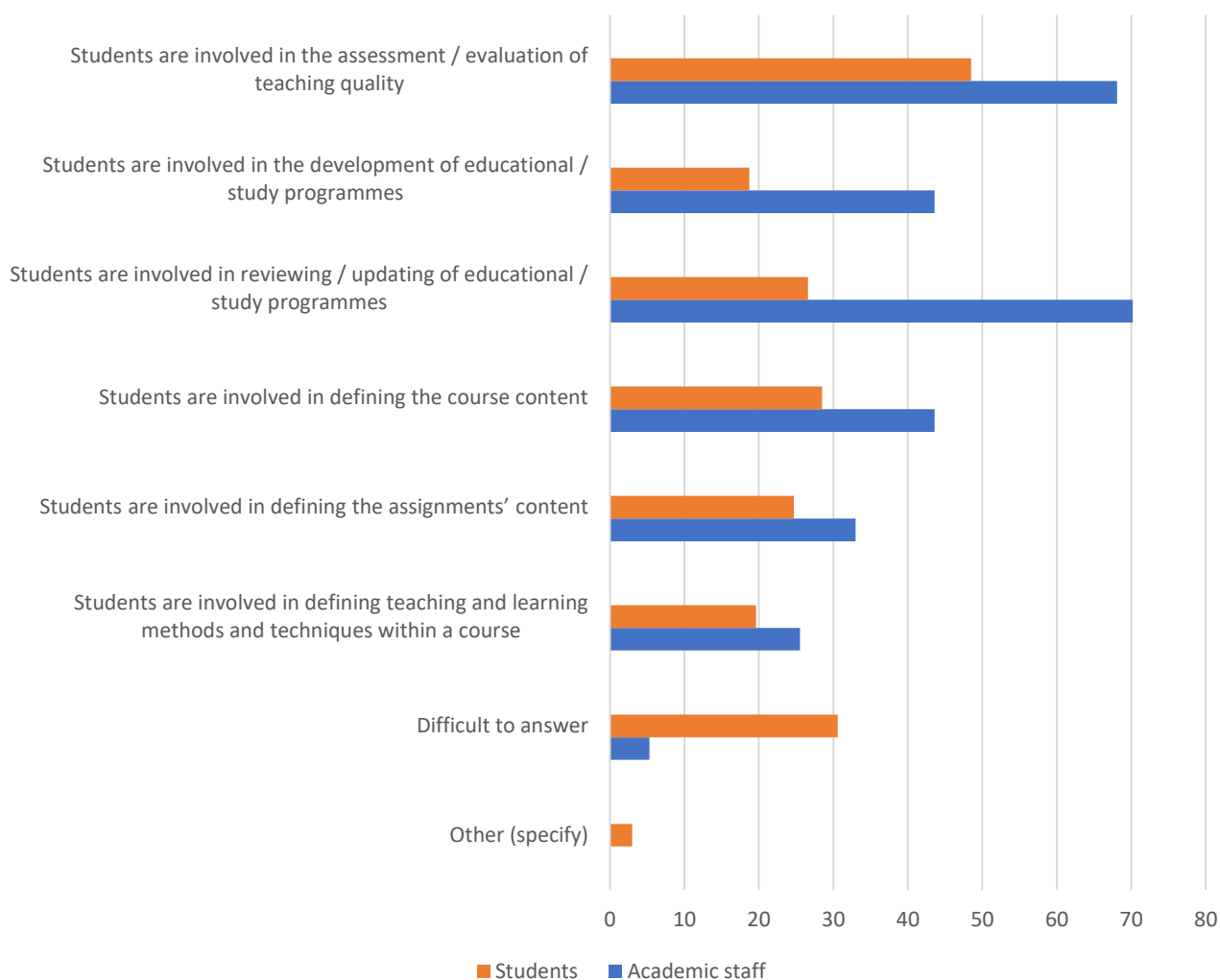




6. Which of the practices listed below are implemented in your HEI?

	Academic staff (94)		Students (235)	
	Persons	%	Persons	%
Students are involved in the assessment / evaluation of teaching quality	64	68,1	114	48,5
Students are involved in the development of educational / study programmes	41	43,6	44	18,7
Students are involved in reviewing / updating of educational / study programmes	66	70,2	63	26,8
Students are involved in defining the course content	41	43,6	67	28,5
Students are involved in defining the assignments' content	31	33	58	24,7
Students are involved in defining teaching and learning methods and techniques within a course	24	25,5	46	19,6
Difficult to answer	5	5,3	72	30,6
Other (specify)	0	0	7	3

Which of the practices listed below are implemented in your HEI?





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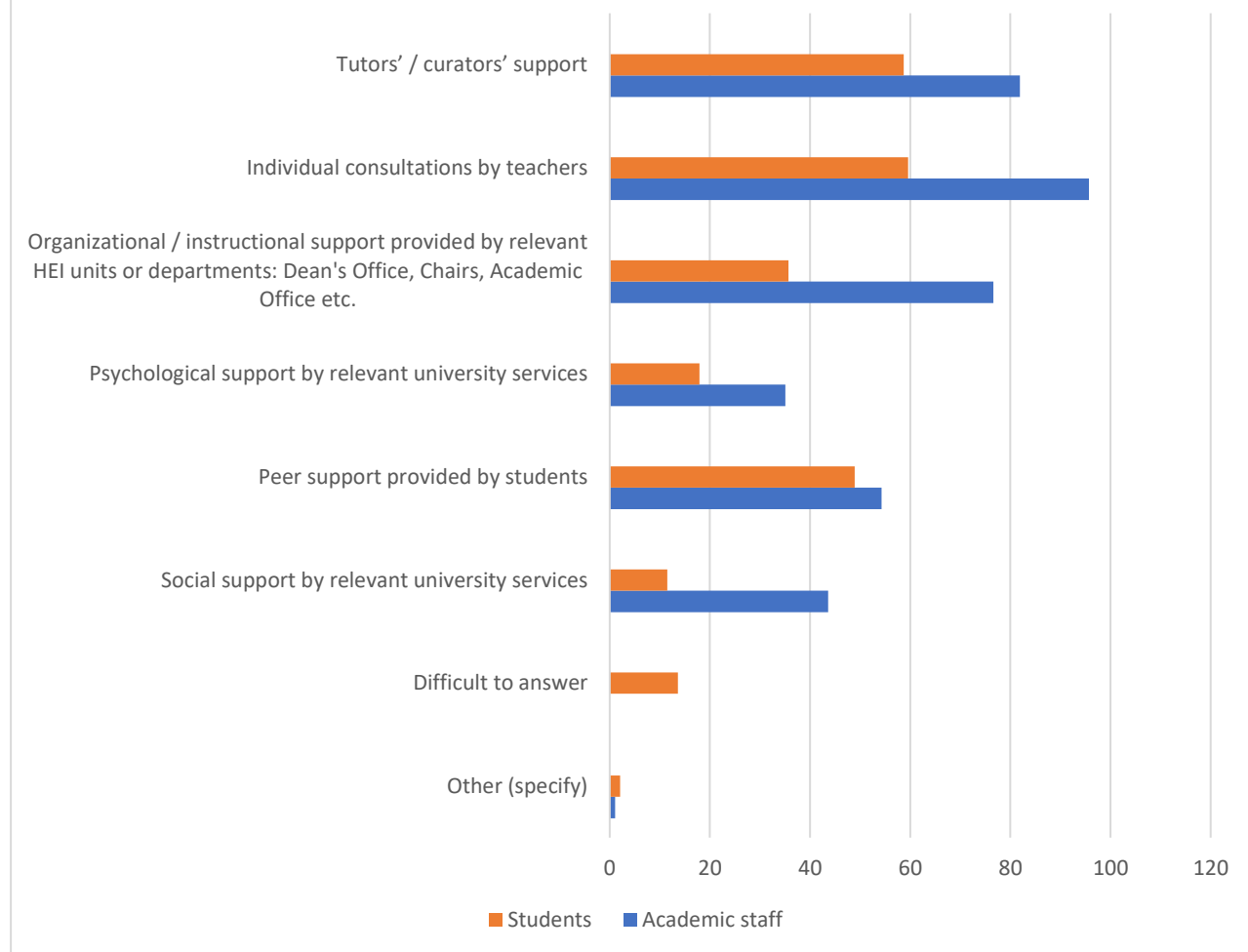


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Students' Personalised Learning Model, Based on the Virtual Learning Environment of Intellectual Tutoring "Learning with No Limits"

7. What types of support does your HEI provide to students to improve their learning outcomes, attainment?

	Academic staff (94)		Students (235)	
	Persons	%	Persons	%
Tutors' / curators' support	77	81,9	138	58,7
Individual consultations by teachers	90	95,7	140	59,6
Organizational / instructional support provided by relevant HEI units or departments: Dean's Office, Chairs, Academic Office etc.	72	76,6	84	35,7
Psychological support by relevant university services	33	35,1	42	17,9
Peer support provided by students	51	54,3	115	48,9
Social support by relevant university services	41	43,6	27	11,5
Difficult to answer	0	0	32	13,6
Other (specify)	1	1,1	5	2,1

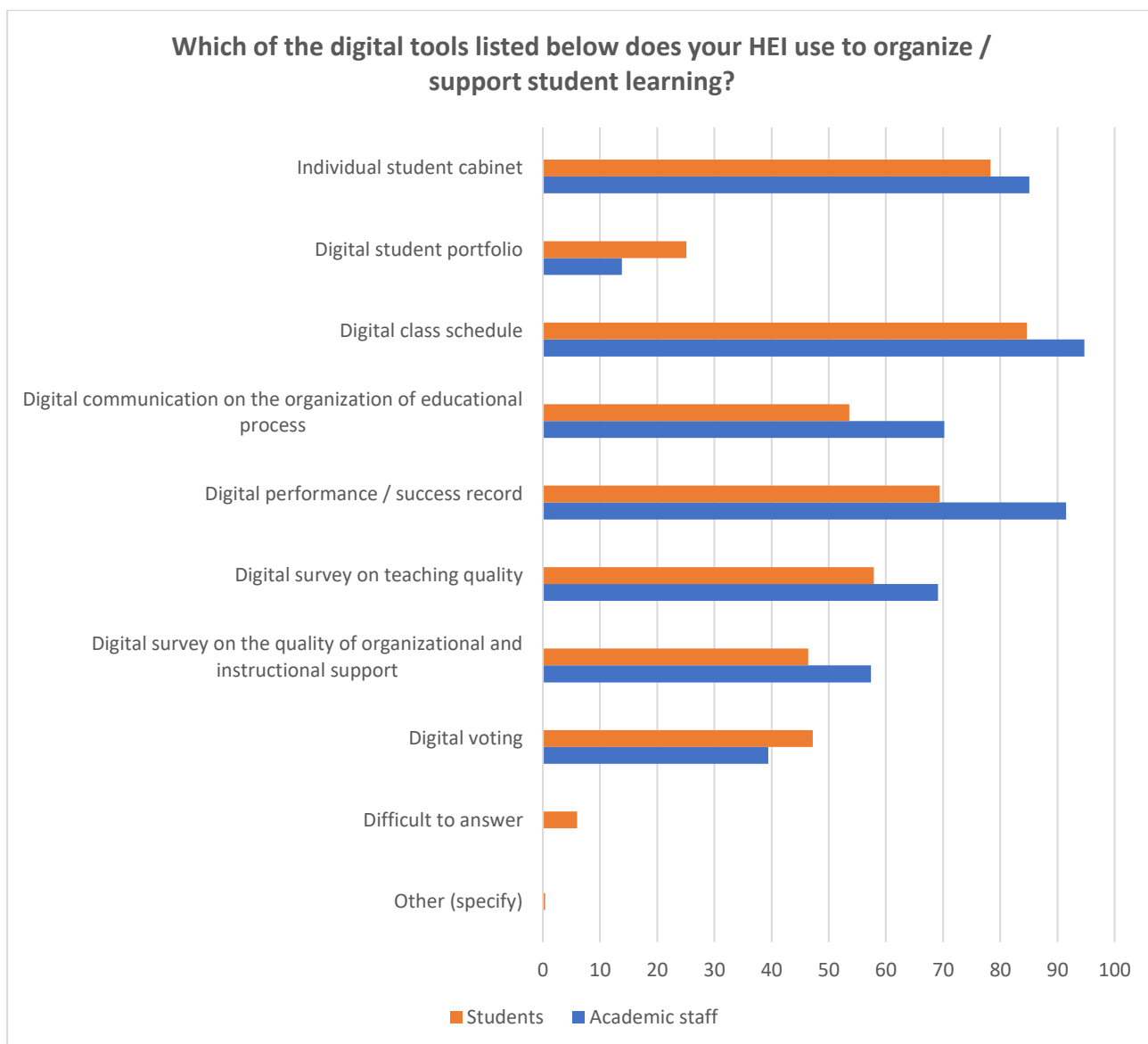
What types of support does your HEI provide to students to improve their learning outcomes, attainment?





8. Which of the digital tools listed below does your HEI use to organize / support student learning?

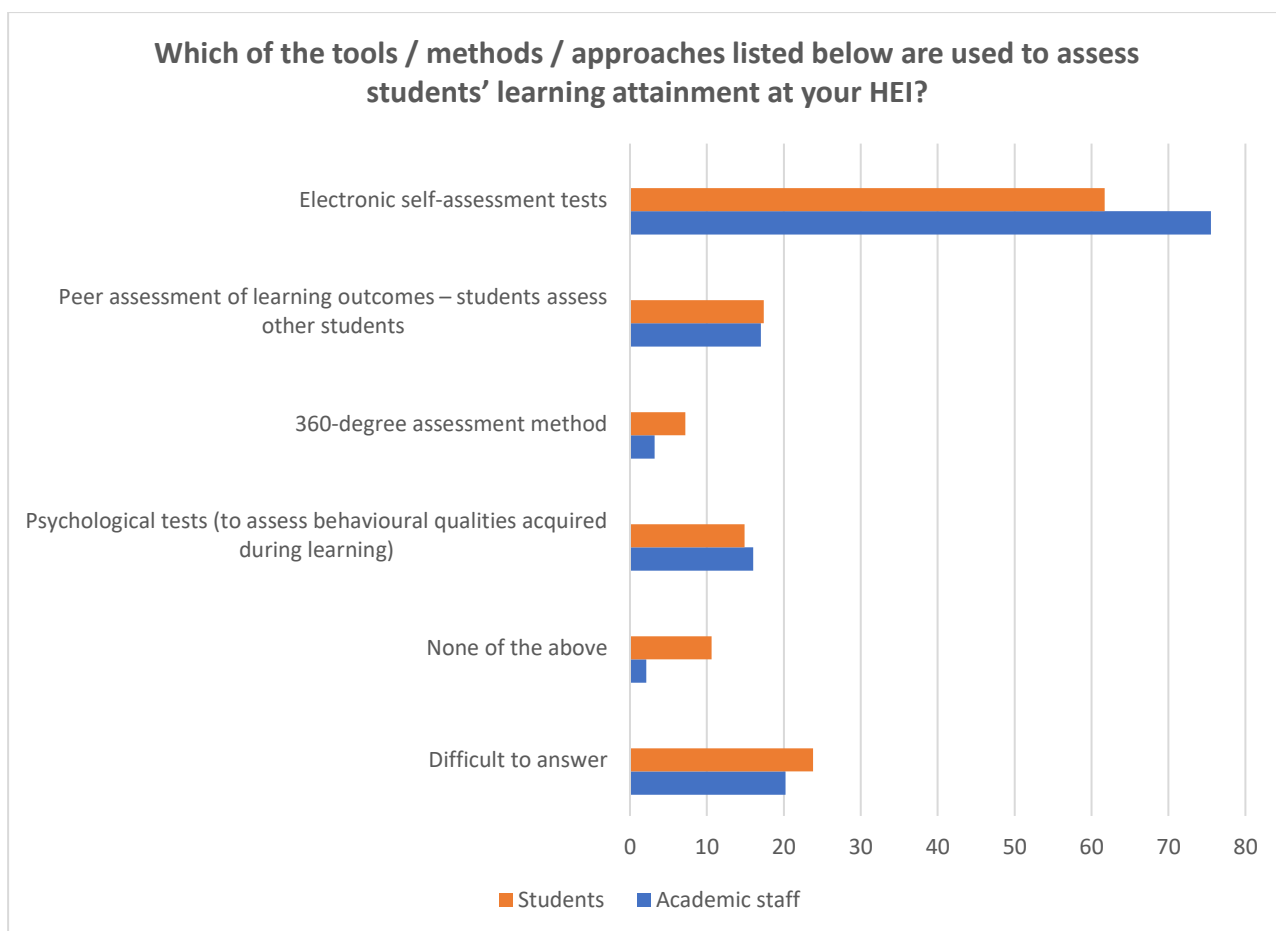
	Academic staff (94)		Students (235)	
	Persons	%	Persons	%
Individual student cabinet	80	85,1	184	78,3
Digital student portfolio	13	13,8	59	25,1
Digital class schedule	89	94,7	199	84,7
Digital communication on the organization of educational process	66	70,2	126	53,6
Digital performance / success record	86	91,5	163	69,4
Digital survey on teaching quality	65	69,1	136	57,9
Digital survey on the quality of organizational and instructional support	54	57,4	109	46,4
Digital voting	37	39,4	111	47,2
Difficult to answer	0	0	14	6
Other (specify)	0	0	1	0,4





9. Which of the tools / methods / approaches listed below are used to assess students' learning attainment at your HEI?

	Academic staff (94)		Students (235)	
	Persons	%	Persons	%
Electronic self-assessment tests	71	75,5	145	61,7
Peer assessment of learning outcomes – students assess other students	16	17	41	17,4
360-degree assessment method	3	3,2	17	7,2
Psychological tests (to assess behavioural qualities acquired during learning)	15	16	35	14,9
None of the above	2	2,1	25	10,6
Difficult to answer	19	20,2	56	23,8





6. V. N. Karazin Kharkiv National University

Part 1 – General information about implementation of PL in the university

1. Full name of a higher education institution: V. N. Karazin Kharkiv National University
2. HEI website address: <https://karazin.ua/>
3. Number of students: 14395
4. Number of academic staff: 1486
5. Number of students who took part in the survey: 118
6. Number of academic staff who took part in the survey: 120
7. **Which documents of your HEI reflect the implementation of a personalized approach to learning?**
 - The Regulation on organization of the educational process of V. N. Karazin Kharkiv National University
 - The Procedure for recognition of learning outcomes received in non-formal education at V. N. Karazin Kharkiv National University
 - Regulations on the organization of inclusive education at the V. N. Karazin Kharkiv National University
 - The Regulation on a dual form of higher education at the V. N. Karazin Kharkiv National University
 - The Regulation on the implementation procedure of the academic mobility right for participants of educational process at the V. N. Karazin Kharkiv National University
 - The Regulation on the implementation of the project "Student Ambassador of V. N. Karazin Kharkiv National University"
8. **What procedures, prerequisites and criteria are used to implement an individual learning pathway / trajectory (individual study schedule, academic mobility, non-formal learning, elective courses, accompaniment and support, etc.) at your HEI?**
 - Every student of V. N. Karazin Kharkiv National University has an Individual study plan, which takes into account student's right to academic mobility, working activity, possibility of credit awarding of non-formal education, etc.
 - Educational programmes at the university have at least 25% of elective courses.
 - The practical component of educational process is provided by a wide choice of practice bases / placements, individual practice possibility, writing individual research papers (coursework, projects, research papers) etc.
 - The Institute of Curators and Academic Supervisors of students operates at the university to support students in learning and social areas.
9. **What conditions to ensure an inclusion in higher education are implemented at your HEI?**
 - The students with special educational needs study together with other students (inclusive group).
 - To implement inclusive education at the university, university staff provide psychological and pedagogical support (Support Group).

The tasks of the Support Group include:

- Learning and organizational support – assistance to participants of the educational process in its organization, writing and monitoring of implementation of the Individual Study Plan for a student with special educational needs, organization of individual cancelling, etc.
- Psychological-pedagogical (psychological and anagogical) support – a systematic activity that includes a provision of psychological and pedagogical assistance to students with special educational needs during the educational process



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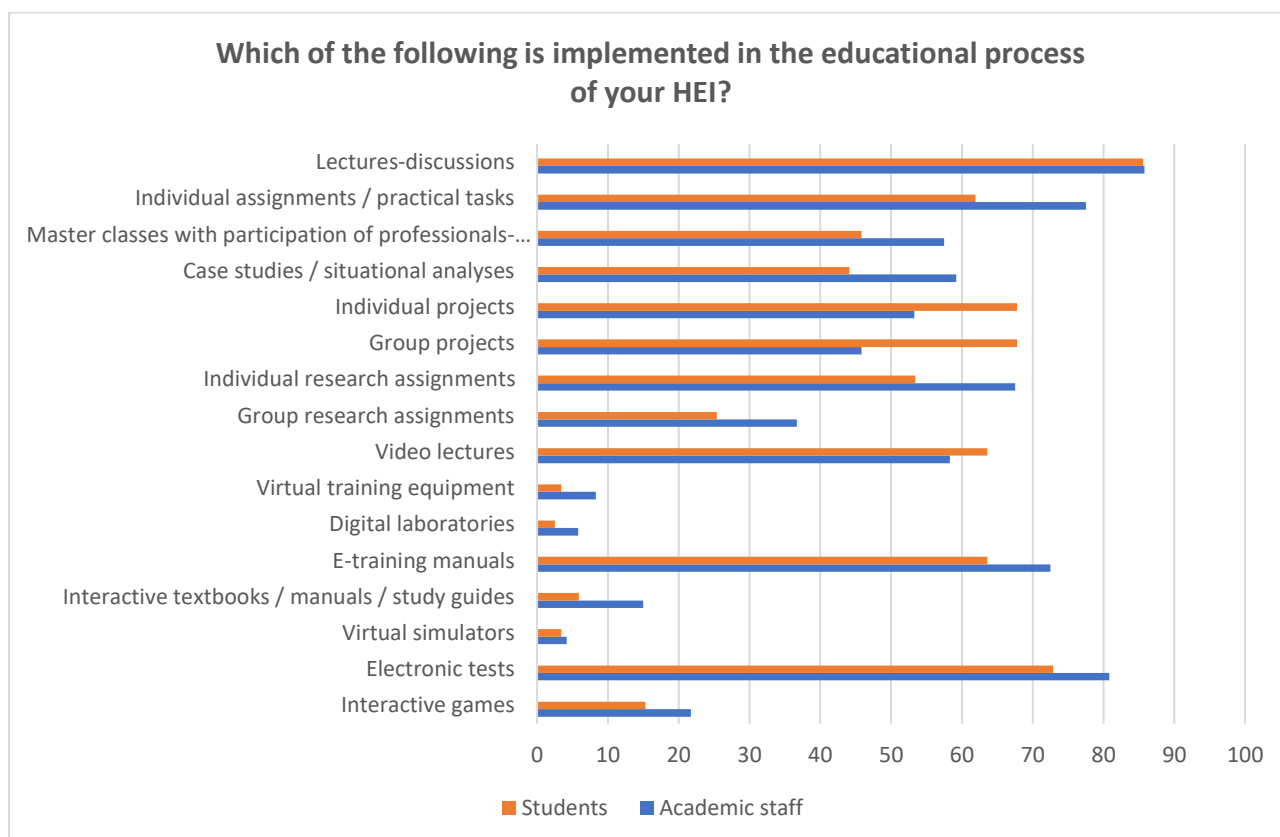
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- Social support – events to create conditions for social and household support of students with special educational needs, including providing with information and assistance in accommodation in a dormitory, obtaining technical means of rehabilitation, organization of volunteer assistance to support such students
 - Developing of Individual Study Plans of students with special educational needs, monitoring of its implementation, amendments to it
 - Counselling and provision of methodological assistance to academic staff of the university regarding organization of the educational process for students with special educational needs
 - Informational and educational activities for creating a tolerant attitude towards students with special educational needs
 - Cooperation with social welfare institutions, civic groups/organizations for conducting volunteer activities aimed at supporting students with special educational needs
 - Examination of the material and technical base of the university regarding accessibility and unhindered access for people with reduced mobility.



Part 2 – Questionnaire for surveying staff and students

1. Which of the following is implemented in the educational process of your HEI?

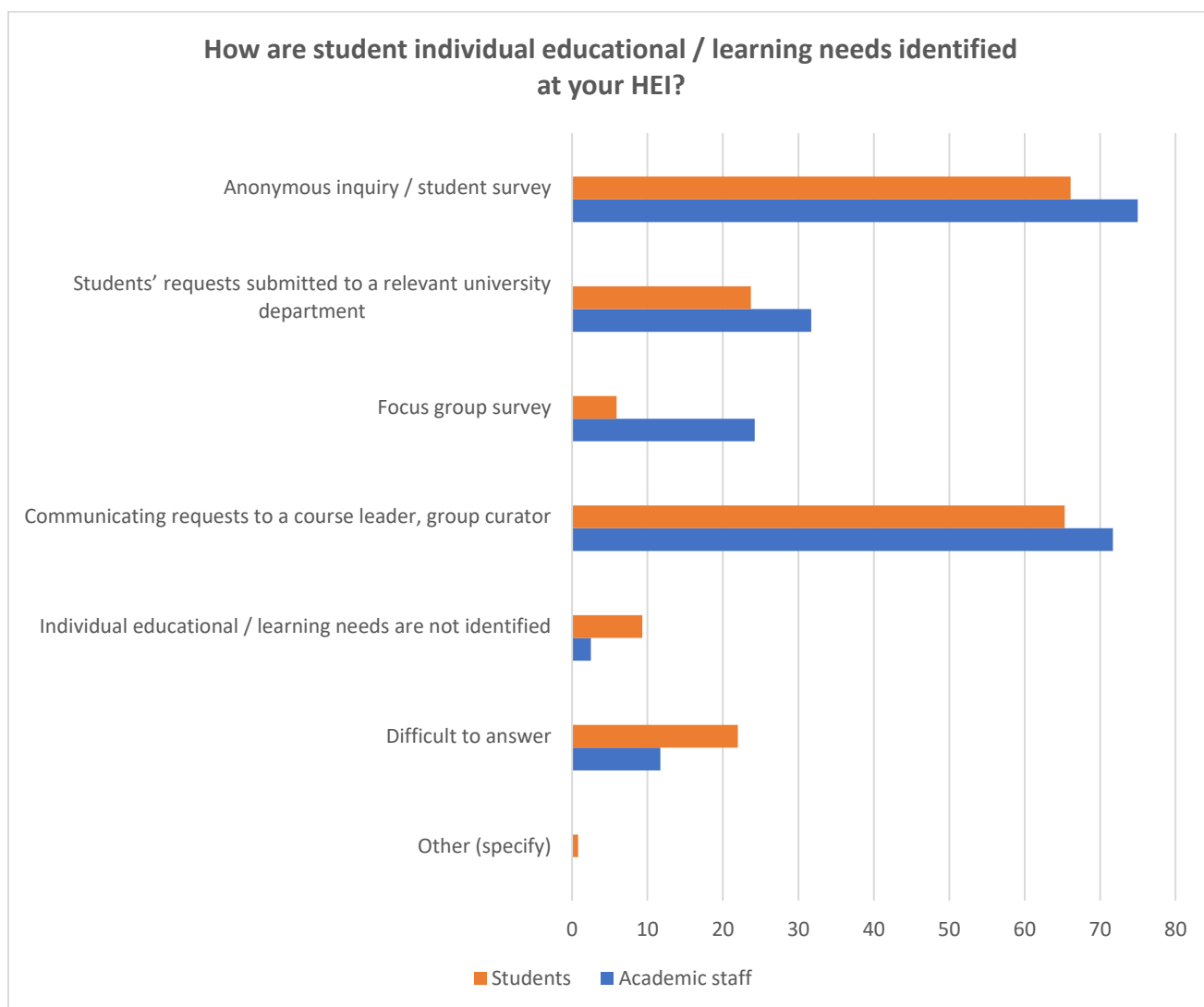
	Academic staff (120)		Students (118)	
	Persons	%	Persons	%
Lectures-discussions	103	85,8	101	85,6
Individual assignments / practical tasks	93	77,5	73	61,9
Master classes with participation of professionals-practitioners	69	57,5	54	45,8
Case studies / situational analyses	71	59,2	52	44,1
Individual projects	64	53,3	80	67,8
Group projects	55	45,8	80	67,8
Individual research assignments	81	67,5	63	53,4
Group research assignments	44	36,7	30	25,4
Video lectures	70	58,3	75	63,6
Virtual training equipment	10	8,3	4	3,4
Digital laboratories	7	5,8	3	2,5
E-training manuals	87	72,5	75	63,6
Interactive textbooks / manuals / study guides	18	15	7	5,9
Virtual simulators	5	4,2	4	3,4
Electronic tests	97	80,8	86	72,9
Interactive games	26	21,7	18	15,3





2. How are student individual educational / learning needs identified at your HEI?

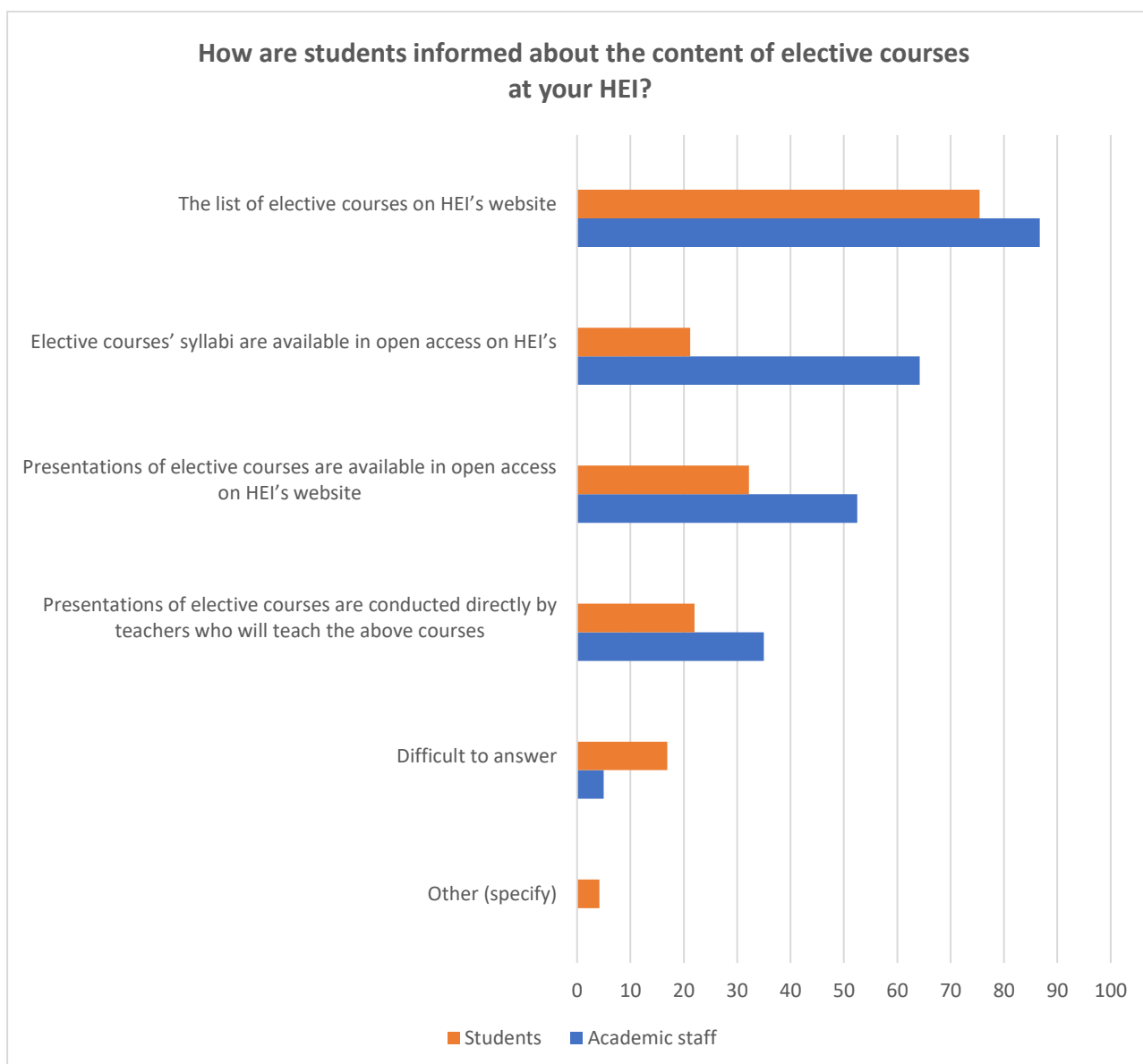
	Academic staff (120)		Students (118)	
	Persons	%	Persons	%
Anonymous inquiry / student survey	90	75	78	66,1
Students' requests submitted to a relevant university department	38	31,7	28	23,7
Focus group survey	29	24,2	7	5,9
Communicating requests to a course leader, group curator	86	71,7	77	65,3
Individual educational / learning needs are not identified	3	2,5	11	9,3
Difficult to answer	14	11,7	26	22
Other (specify)	0	0	1	0,8





3. How are students informed about the content of elective courses at your HEI?

	Academic staff (120)		Students (118)	
	Persons	%	Persons	%
The list of elective courses on HEI's website	104	86,7	89	75,4
Elective courses' syllabi are available in open access on HEI's	77	64,2	25	21,2
Presentations of elective courses are available in open access on HEI's website	63	52,5	38	32,2
Presentations of elective courses are conducted directly by teachers who will teach the above courses	42	35	26	22
Difficult to answer	6	5	20	16,9
Other (specify)	0	0	5	4,2

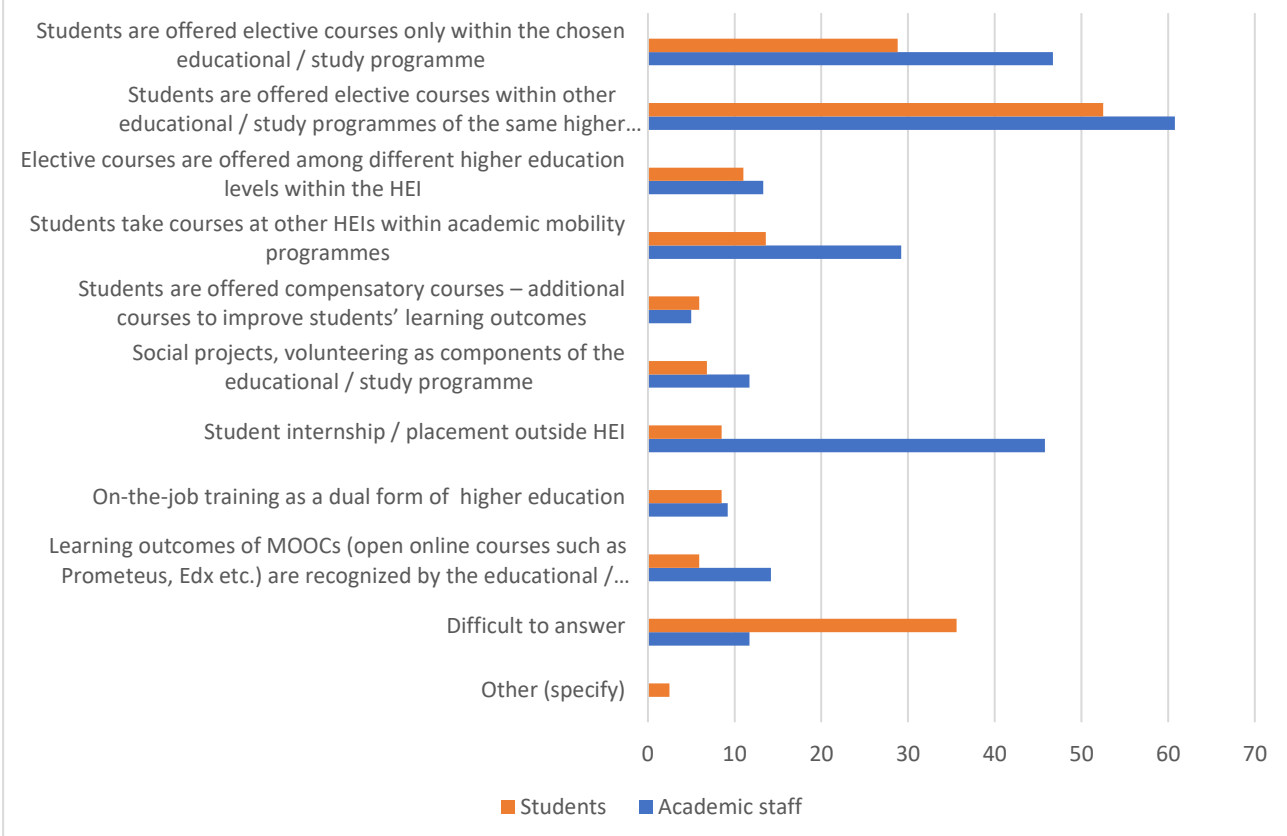




4. How are student individual learning pathways implemented at your HEI?

	Academic staff (120)		Students (118)	
	Persons	%	Persons	%
Students are offered elective courses only within the chosen educational / study programme	56	46,7	34	28,8
Students are offered elective courses within other educational / study programmes of the same higher education level	73	60,8	62	52,5
Elective courses are offered among different higher education levels within the HEI	16	13,3	13	11
Students take courses at other HEIs within academic mobility programmes	35	29,2	16	13,6
Students are offered compensatory courses – additional courses to improve students' learning outcomes	6	5	7	5,9
Social projects, volunteering as components of the educational / study programme	14	11,7	8	6,8
Student internship / placement outside HEI	55	45,8	10	8,5
On-the-job training as a dual form of higher education	11	9,2	10	8,5
Learning outcomes of MOOCs (open online courses such as Prometeus, Edx etc.) are recognized by the educational / study programme	17	14,2	7	5,9
Difficult to answer	14	11,7	42	35,6
Other (specify)	0	0	3	2,5

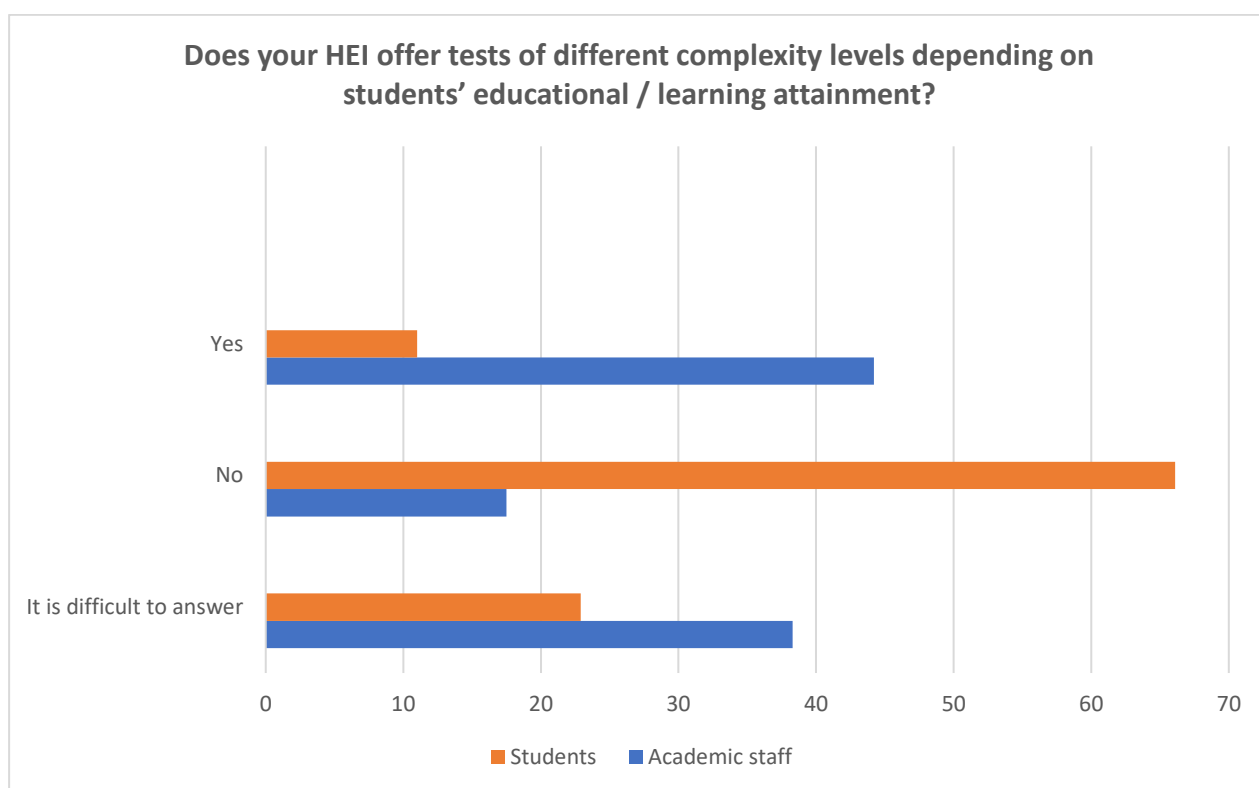
How are student individual learning pathways implemented at your HEI?





5. Does your HEI offer tests of different complexity levels depending on students' educational / learning attainment?

	Academic staff (120)		Students (118)	
	Persons	%	Persons	%
Yes	53	44,2	13	11
No	21	17,5	78	66,1
It is difficult to answer	46	38,3	27	22,9

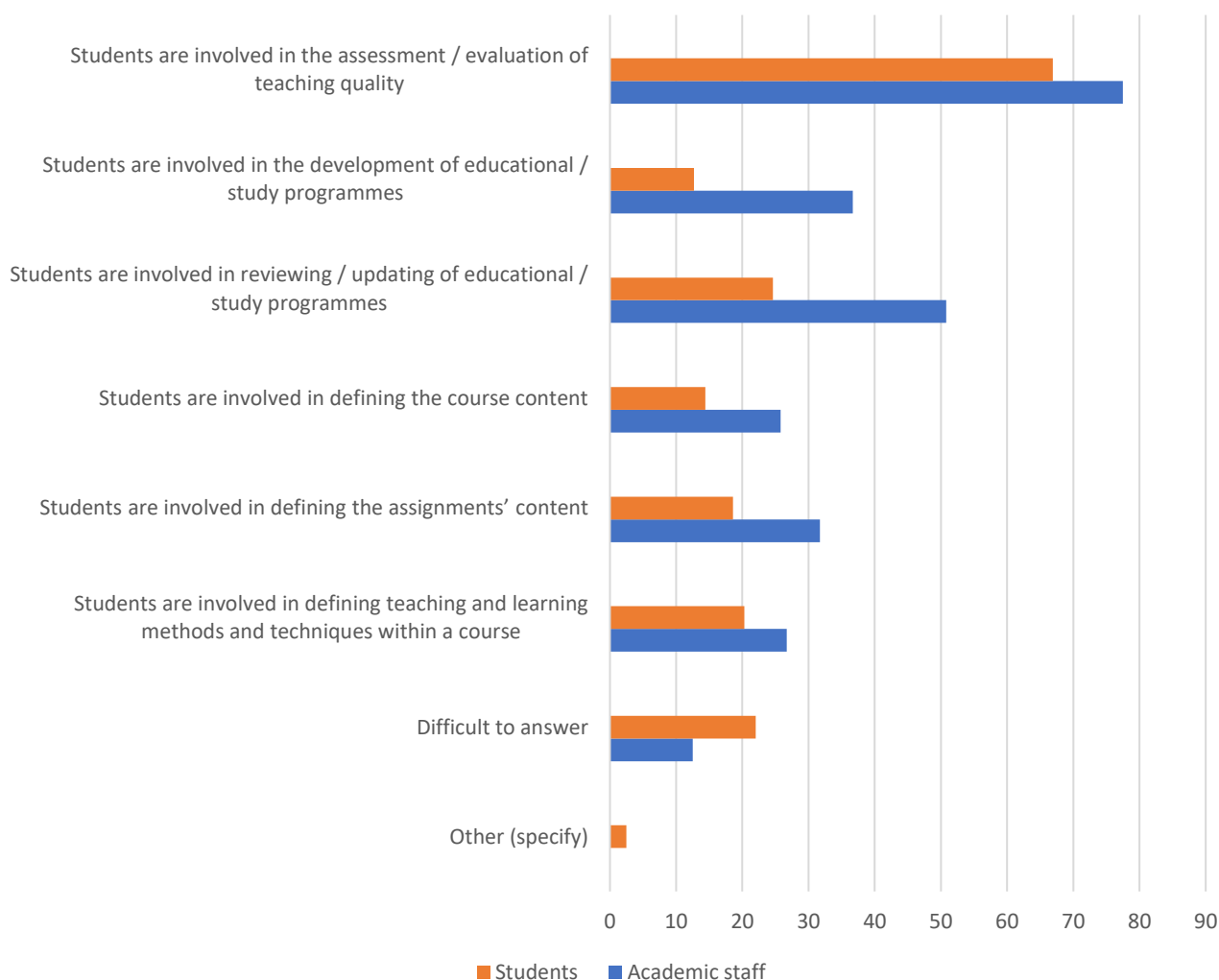




6. Which of the practices listed below are implemented in your HEI?

	Academic staff (120)		Students (118)	
	Persons	%	Persons	%
Students are involved in the assessment / evaluation of teaching quality	93	77,5	79	66,9
Students are involved in the development of educational / study programmes	44	36,7	15	12,7
Students are involved in reviewing / updating of educational / study programmes	61	50,8	29	24,6
Students are involved in defining the course content	31	25,8	17	14,4
Students are involved in defining the assignments' content	38	31,7	22	18,6
Students are involved in defining teaching and learning methods and techniques within a course	32	26,7	24	20,3
Difficult to answer	15	12,5	26	22
Other (specify)	0	0	3	2,5

Which of the practices listed below are implemented in your HEI?





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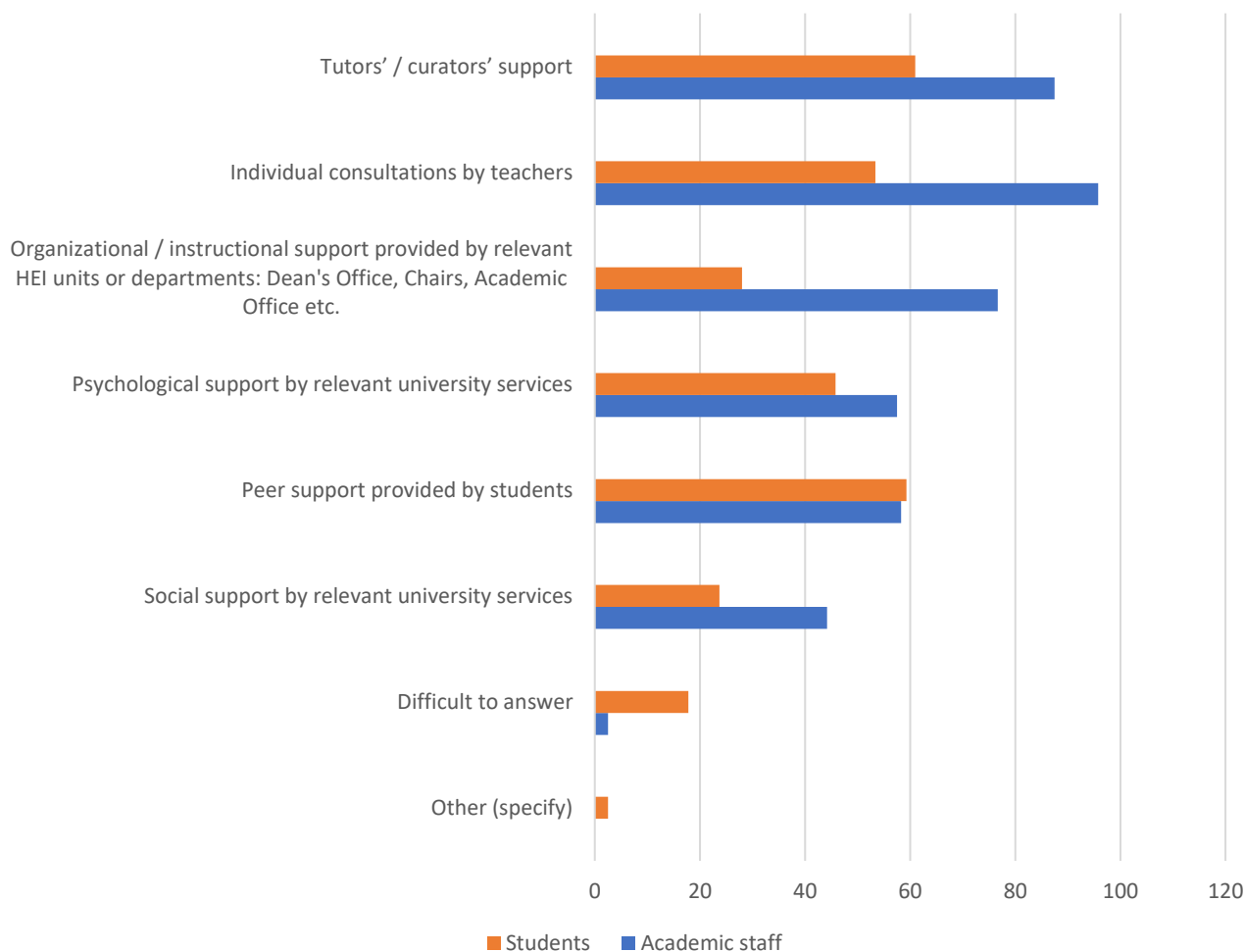


Project Name:
Students' Personalised Learning Model, Based on the Virtual Learning Environment of Intellectual Tutoring "Learning with No Limits"

7. What types of support does your HEI provide to students to improve their learning outcomes, attainment?

	Academic staff (120)		Students (118)	
	Persons	%	Persons	%
Tutors' / curators' support	105	87,5	72	61
Individual consultations by teachers	115	95,8	63	53,4
Organizational / instructional support provided by relevant HEI units or departments: Dean's Office, Chairs, Academic Office etc.	92	76,7	33	28
Psychological support by relevant university services	69	57,5	54	45,8
Peer support provided by students	70	58,3	70	59,3
Social support by relevant university services	53	44,2	28	23,7
Difficult to answer	3	2,5	21	17,8
Other (specify)	0	0	3	2,5

What types of support does your HEI provide to students to improve their learning outcomes, attainment?





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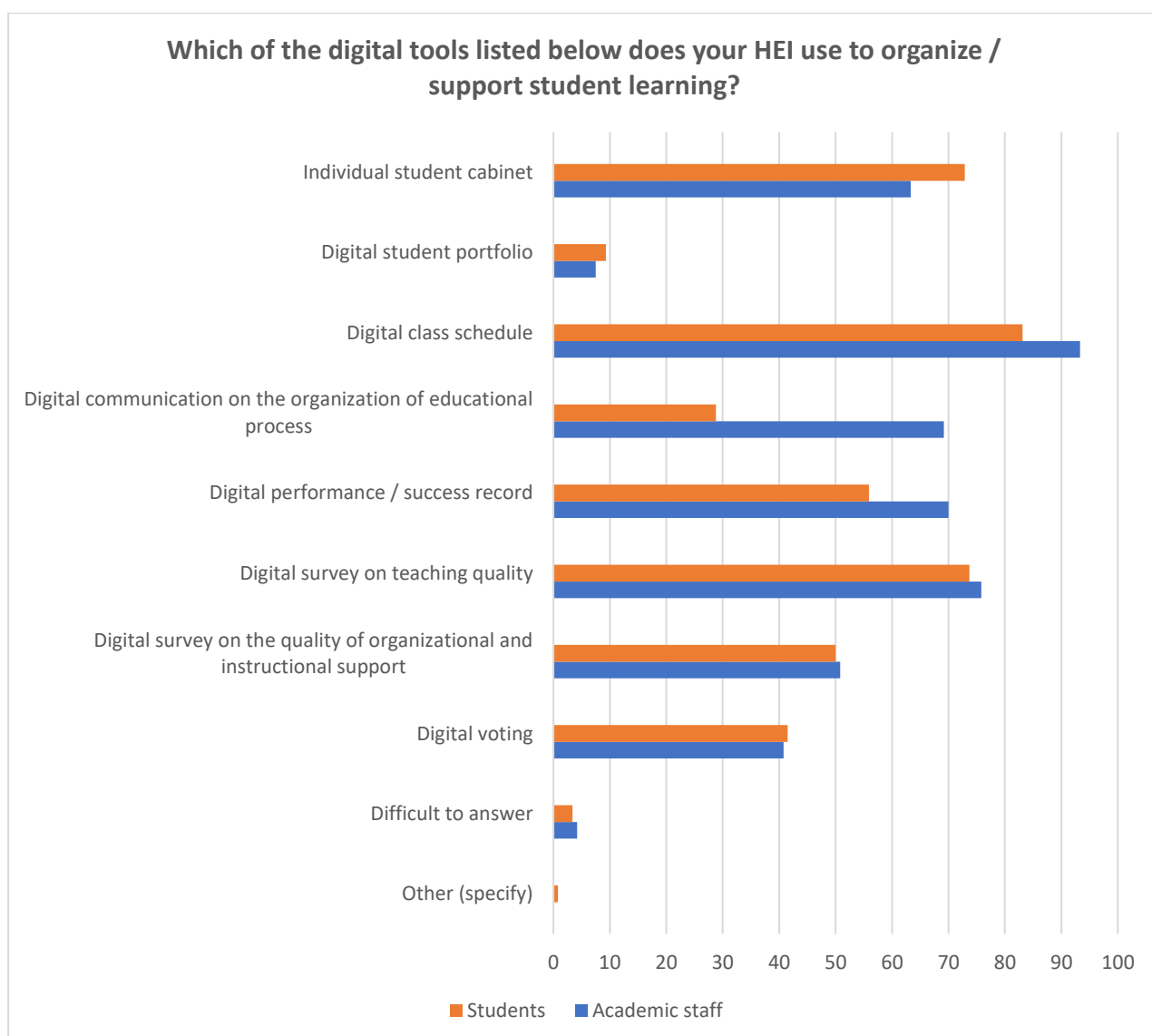
This Project has received funding from the European Commission ERASMUS+ Programme under grant agreement no. 101082928.



Project Name:
Students' Personalised Learning Model, Based on the Virtual Learning Environment of Intellectual Tutoring "Learning with No Limits"

8. Which of the digital tools listed below does your HEI use to organize / support student learning?

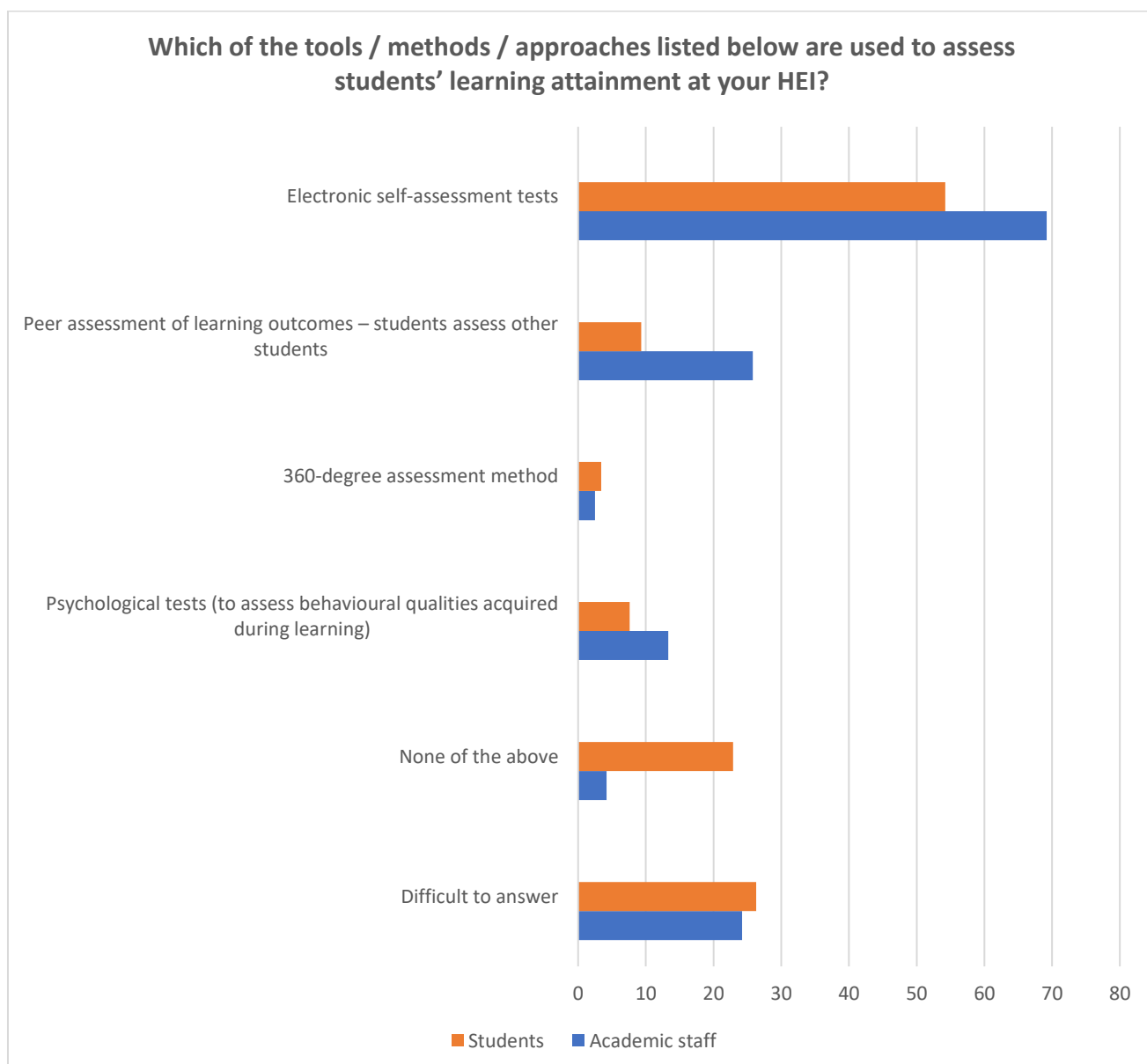
	Academic staff (120)		Students (118)	
	Persons	%	Persons	%
Individual student cabinet	76	63,3	86	72,9
Digital student portfolio	9	7,5	11	9,3
Digital class schedule	112	93,3	98	83,1
Digital communication on the organization of educational process	83	69,2	34	28,8
Digital performance / success record	84	70	66	55,9
Digital survey on teaching quality	91	75,8	87	73,7
Digital survey on the quality of organizational and instructional support	61	50,8	59	50
Digital voting	49	40,8	49	41,5
Difficult to answer	5	4,2	4	3,4
Other (specify)	0	0	1	0,8





9. Which of the tools / methods / approaches listed below are used to assess students' learning attainment at your HEI?

	Academic staff (120)		Students (118)	
	Persons	%	Persons	%
Electronic self-assessment tests	83	69,2	64	54,2
Peer assessment of learning outcomes – students assess other students	31	25,8	11	9,3
360-degree assessment method	3	2,5	4	3,4
Psychological tests (to assess behavioural qualities acquired during learning)	16	13,3	9	7,6
None of the above	5	4,2	27	22,9
Difficult to answer	29	24,2	31	26,3





7. Khmelnytsky National University

Part 1 – General information about implementation of PL in the university

1. Full name of a higher education institution: Khmelnytsky National University
 2. HEI website address: <https://khnmu.edu.ua/>
 3. Number of students: 8 000
 4. Number of academic staff: 530
 5. Number of students who took part in the survey: 264
 6. Number of academic staff who took part in the survey: 81
- 7. Which documents of your HEI reflect the implementation of a personalized approach to learning?**
- The Regulation on the organization of the educational process at KhNU ¹⁵⁰
 - The Regulation on the individual study plan of a student of the KhNU ¹⁵¹
 - The Regulation on the implementation procedure of student's right of free choice of elective courses ¹⁵²
 - The Regulation on certificate programs ¹⁵³
 - The Regulation on the implementation procedure of the academic mobility right for the higher education seekers of Khmelnytskyi National University ¹⁵⁴
 - The Regulation on the procedure for recognizing and enrolment of students' learning outcomes at KhNU ¹⁵⁵
 - The Regulation on research of students of KhNU ¹⁵⁶
 - The Regulation on Internal Quality Assurance System of educational activities and higher education at KhNU ¹⁵⁷
 - The Regulation on stakeholders' participation in the procedures of educational activities and higher education quality assurance at KhNU ¹⁵⁸
 - The Regulation on participants of the process of developing, launching and supporting of educational programmes ¹⁵⁹

¹⁵⁰ <https://khnmu.edu.ua/wp-content/uploads/normatyvni-dokumenty/polozhennya/pro-organizacziyu-osvitnogo-proczesu.pdf>

¹⁵¹ <https://khnmu.edu.ua/wp-content/uploads/normatyvni-dokumenty/polozhennya/pro-indyvidualnyj-navchalnyj-plan.pdf>

¹⁵² <https://khnmu.edu.ua/wp-content/uploads/normatyvni-dokumenty/polozhennya/pro-poryadok-realizacziyi-prava-na-vilnyj-vybir-navchalnyh-dyscyplinu-chynne-z-01.09.2020.pdf>

¹⁵³ <https://khnmu.edu.ua/wp-content/uploads/normatyvni-dokumenty/polozhennya/pro-sertyfikatni-programy.pdf>

¹⁵⁴ <https://khnmu.edu.ua/wp-content/uploads/normatyvni-dokumenty/polozhennya/pro-poryadok-realizacziyi-prava-na-akademichnu-mobilnist.pdf>

¹⁵⁵ <https://khnmu.edu.ua/wp-content/uploads/normatyvni-dokumenty/polozhennya/pro-poryadok-vyznannya-ta-perezarahuvannya-rezultativ-navchannya.pdf>

¹⁵⁶ <https://khnmu.edu.ua/wp-content/uploads/normatyvni-dokumenty/polozhennya/pro-naukovo-doslidnu-robotu-studentiv.pdf>

¹⁵⁷ <https://khnmu.edu.ua/wp-content/uploads/normatyvni-dokumenty/polozhennya/pro-systemu-vnutrishnogo-zabezpechennya-yakosti-osvitnoyi-diyalnosti.pdf>

¹⁵⁸ <https://khnmu.edu.ua/wp-content/uploads/normatyvni-dokumenty/polozhennya/pro-uchast-stejkhoderiv-u-procedurah-zabezpechennya-yakosti-osvitnoyi-diyalnosti-ta-yakosti-vyshhoyi-osvity.pdf>

¹⁵⁹ <https://khnmu.edu.ua/wp-content/uploads/normatyvni-dokumenty/polozhennya/pro-uchasnykiv-rozroblennya-zapochatkuvannya-suprovodzhennya-op.pdf>



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Project Name:
Students' Personalised Learning Model, Based on the Virtual Learning Environment of Intellectual Tutoring "Learning with No Limits"

-
8. *What procedures, prerequisites and criteria are used to implement an individual learning pathway / trajectory (individual study schedule, academic mobility, non-formal learning, elective courses, accompaniment and support, etc.) at your HEI?*
- "Electronic University" system ¹⁶⁰
 - Modular learning environment ¹⁶¹
 - Psychological service ¹⁶²
 - Resource Information and Advisory Centre for Psychological Support ¹⁶³
9. *What conditions to ensure an inclusion in higher education are implemented at your HEI?*
- Infrastructure for people with reduced mobility (ramps, elevators, toilets), drawing up a study schedule for people with disabilities, taking into account floors
 - The Procedure for accompanying (providing assistance) disabled persons and representatives of other people with reduced mobility during their staying on the territory of KhNU ¹⁶⁴
 - The Regulation on full-time learning of students at KhNU ¹⁶⁵
 - Research and educational laboratory "Physical therapy, ergotherapy" ¹⁶⁶

¹⁶⁰ <https://isu1.khmnu.edu.ua>

¹⁶¹ <https://msn.khmnu.edu.ua>

¹⁶² <https://khmnu.edu.ua/wp-content/uploads/normatyvni-dokumenty/polozhennya/pro-psyhologichnu-sluzhbu.pdf>,
<https://ps-sluzhba.khmnu.edu.ua/>

¹⁶³ <https://psy.khmnu.edu.ua/>

¹⁶⁴ <https://khmnu.edu.ua/wp-content/uploads/normatyvni-dokumenty/polozhennya/poryadok-suprovodu-nadannya-dopomogy-osib-z-invalidnistyu-ta-predstavnykiv-inshyh-malomobilnyh-grup-naselennya.pdf>

¹⁶⁵ <https://khmnu.edu.ua/wp-content/uploads/normatyvni-dokumenty/polozhennya/pro-navchannya-bez-vidryvu-vid-vyrobnycztva.pdf>

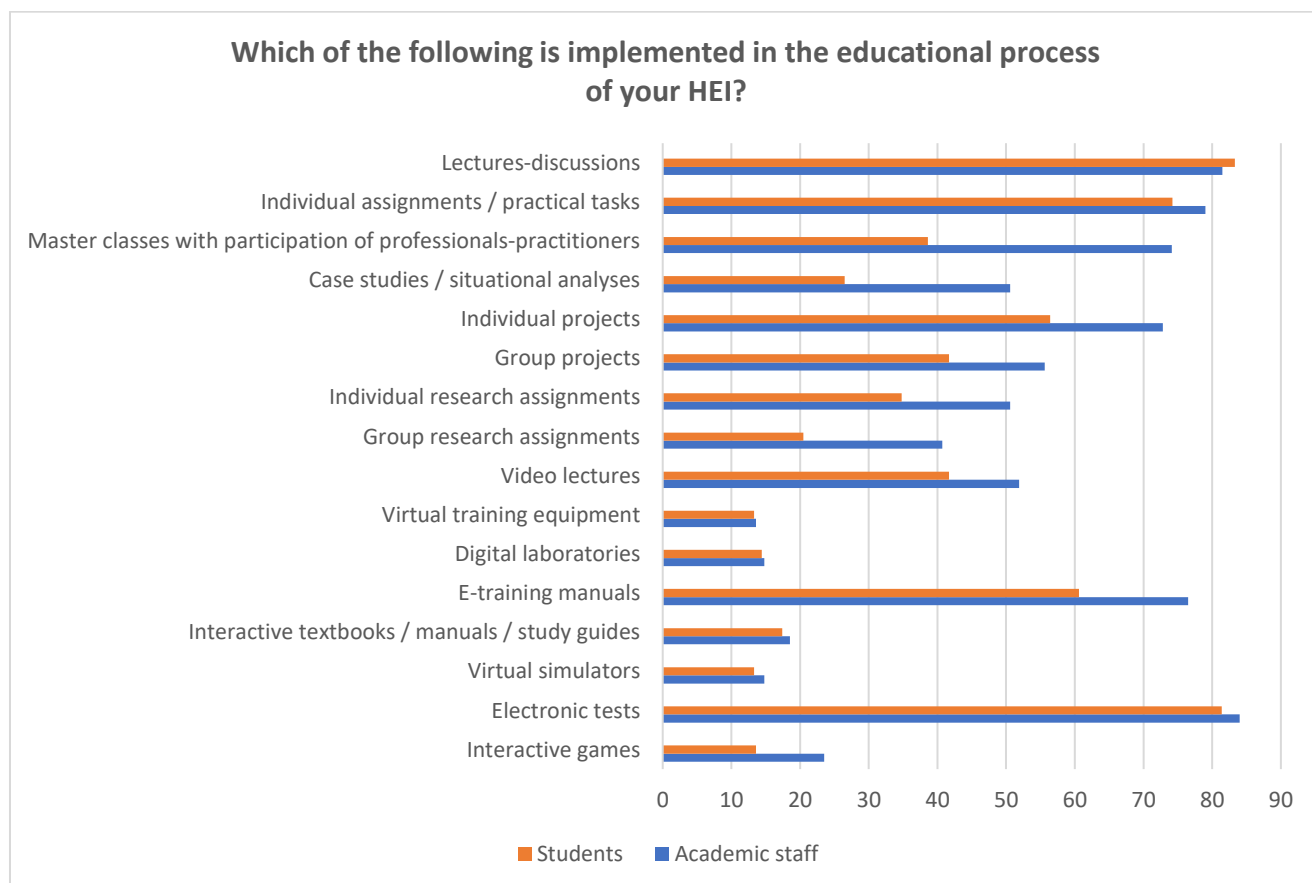
¹⁶⁶ <https://fte.khmnu.edu.ua/laboratoriya-z-egroterapiyi/>



Part 2 – Questionnaire for surveying staff and students

1. Which of the following is implemented in the educational process of your HEI?

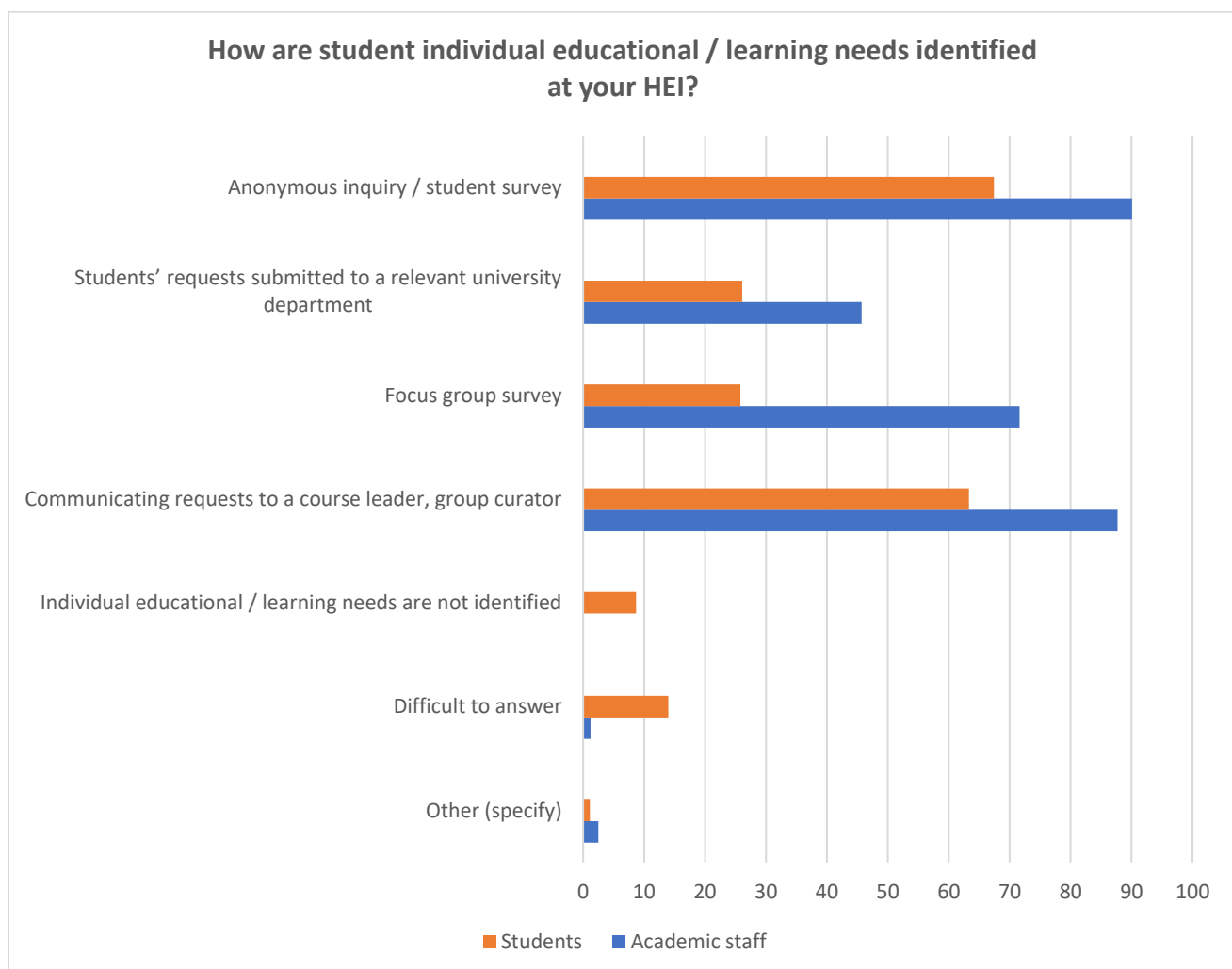
	Academic staff (81)		Students (264)	
	Persons	%	Persons	%
Lectures-discussions	66	81,5	220	83,3
Individual assignments / practical tasks	64	79	196	74,2
Master classes with participation of professionals-practitioners	60	74,1	102	38,6
Case studies / situational analyses	41	50,6	70	26,5
Individual projects	59	72,8	149	56,4
Group projects	45	55,6	110	41,7
Individual research assignments	41	50,6	92	34,8
Group research assignments	33	40,7	54	20,5
Video lectures	42	51,9	110	41,7
Virtual training equipment	11	13,6	35	13,3
Digital laboratories	12	14,8	38	14,4
E-training manuals	62	76,5	160	60,6
Interactive textbooks / manuals / study guides	15	18,5	46	17,4
Virtual simulators	12	14,8	35	13,3
Electronic tests	68	84	215	81,4
Interactive games	19	23,5	36	13,6





2. How are student individual educational / learning needs identified at your HEI?

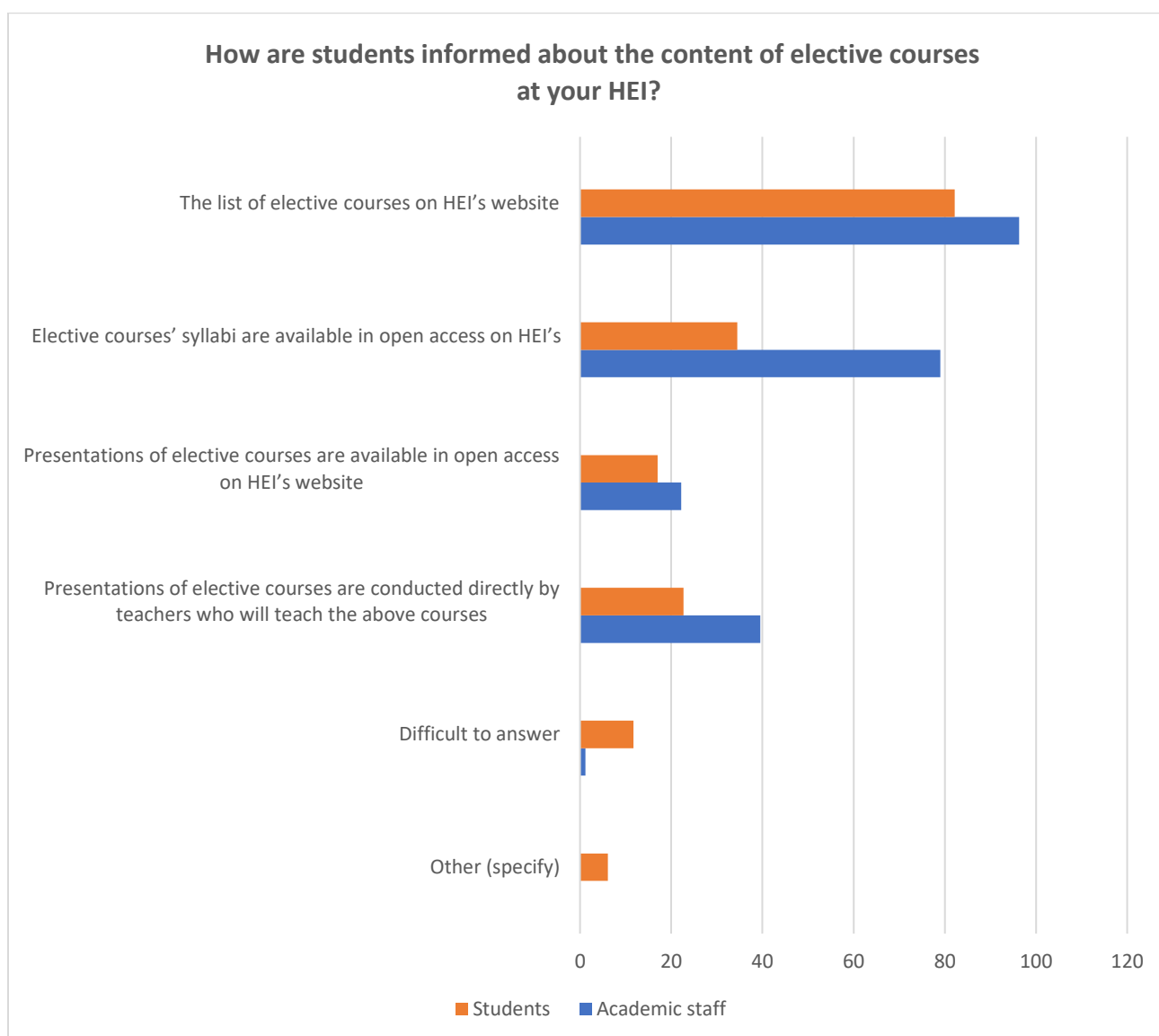
	Academic staff (81)		Students (264)	
	Persons	%	Persons	%
Anonymous inquiry / student survey	73	90,1	178	67,4
Students' requests submitted to a relevant university department	37	45,7	69	26,1
Focus group survey	58	71,6	68	25,8
Communicating requests to a course leader, group curator	71	87,7	167	63,3
Individual educational / learning needs are not identified	0	0	23	8,7
Difficult to answer	1	1,2	37	14
Other (specify)	2	2,5	3	1,1





3. How are students informed about the content of elective courses at your HEI?

	Academic staff (81)		Students (264)	
	Persons	%	Persons	%
The list of elective courses on HEI's website	78	96,3	217	82,2
Elective courses' syllabi are available in open access on HEI's	64	79	91	34,5
Presentations of elective courses are available in open access on HEI's website	18	22,2	45	17
Presentations of elective courses are conducted directly by teachers who will teach the above courses	32	39,5	60	22,7
Difficult to answer	1	1,2	31	11,7
Other (specify)	0	0	16	6,1

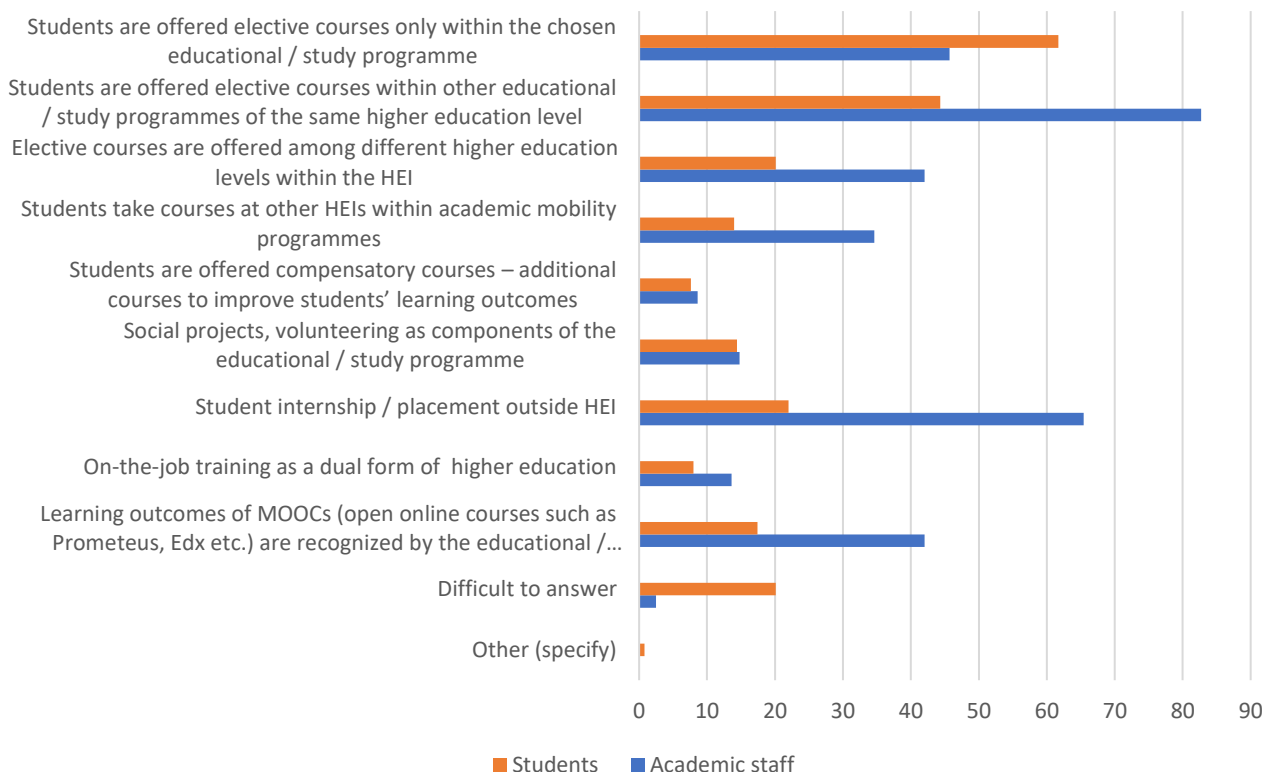




4. How are student individual learning pathways implemented at your HEI?

	Academic staff (81)		Students (264)	
	Persons	%	Persons	%
Students are offered elective courses only within the chosen educational / study programme	37	45,7	163	61,7
Students are offered elective courses within other educational / study programmes of the same higher education level	67	82,7	117	44,3
Elective courses are offered among different higher education levels within the HEI	34	42	53	20,1
Students take courses at other HEIs within academic mobility programmes	28	34,6	37	14
Students are offered compensatory courses – additional courses to improve students' learning outcomes	7	8,6	20	7,6
Social projects, volunteering as components of the educational / study programme	12	14,8	38	14,4
Student internship / placement outside HEI	53	65,4	58	22
On-the-job training as a dual form of higher education	11	13,6	21	8
Learning outcomes of MOOCs (open online courses such as Prometheus, Edx etc.) are recognized by the educational / study programme	34	42	46	17,4
Difficult to answer	2	2,5	53	20,1
Other (specify)	0	0	2	0,8

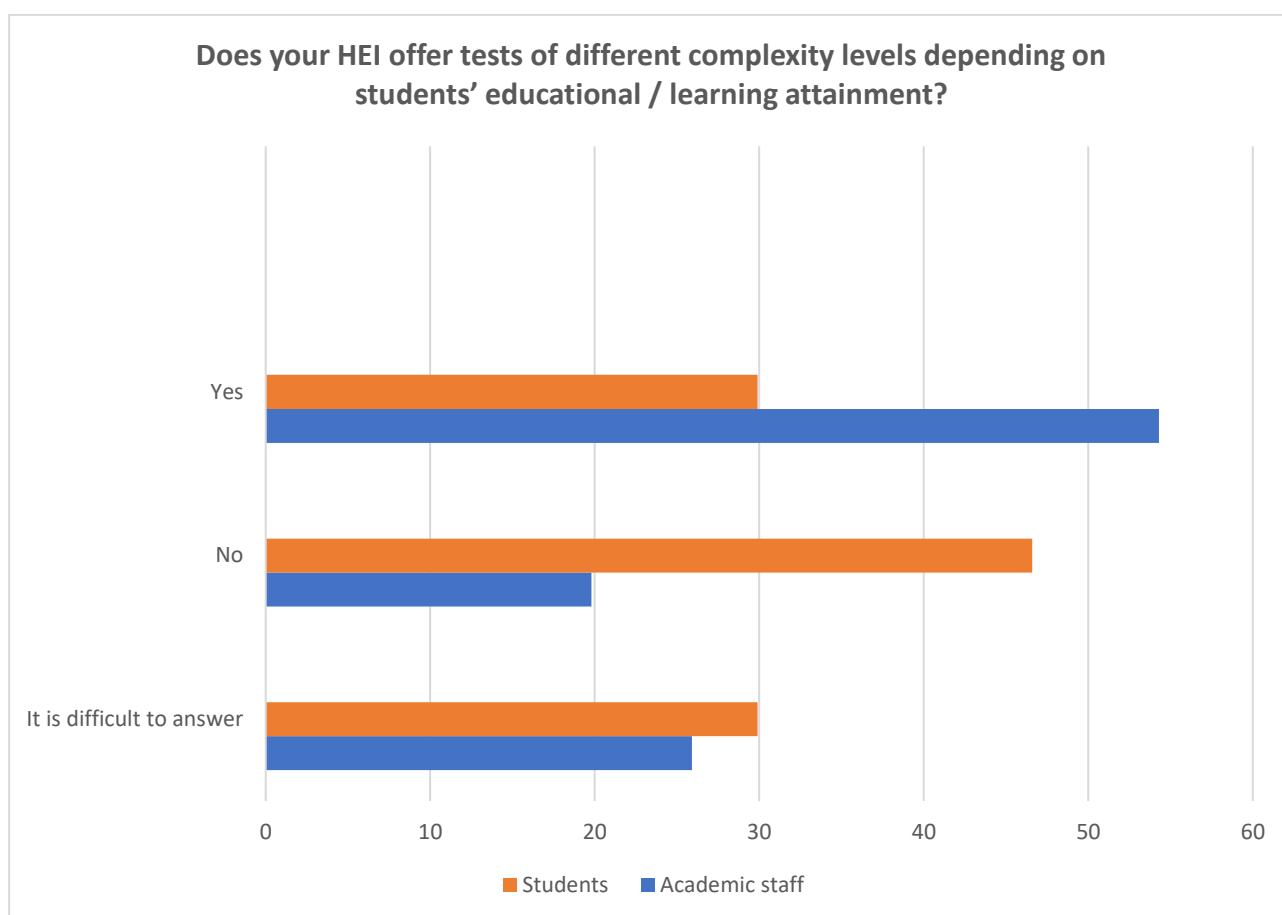
How are student individual learning pathways implemented at your HEI?





5. Does your HEI offer tests of different complexity levels depending on students' educational / learning attainment?

	Academic staff (81)		Students (264)	
	Persons	%	Persons	%
Yes	44	54,3	79	29,9
No	16	19,8	123	46,6
It is difficult to answer	21	25,9	62	23,5

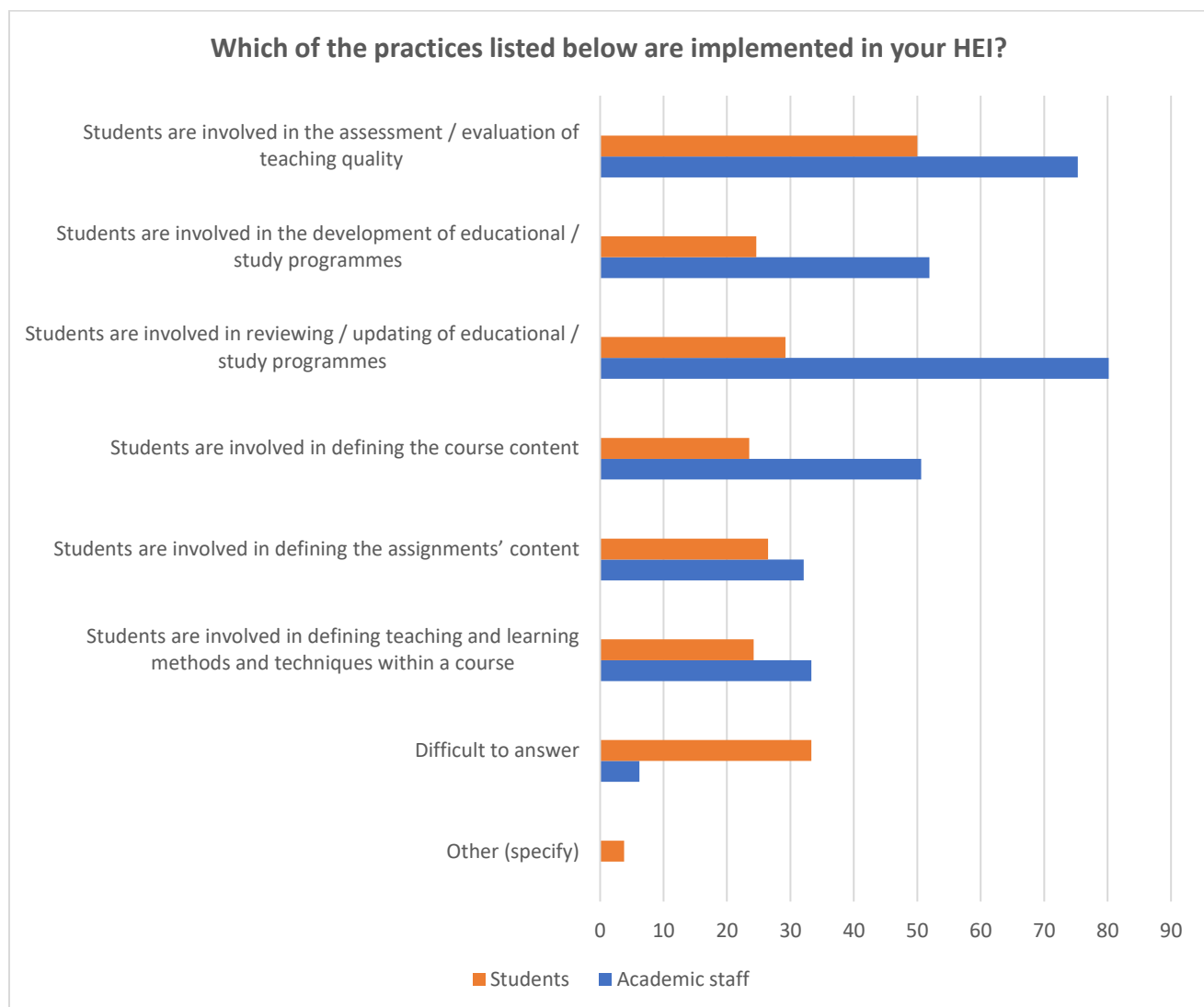




6. Which of the practices listed below are implemented in your HEI?

	Academic staff (81)		Students (264)	
	Persons	%	Persons	%
Students are involved in the assessment / evaluation of teaching quality	61	75,3	132	50
Students are involved in the development of educational / study programmes	42	51,9	65	24,6
Students are involved in reviewing / updating of educational / study programmes	65	80,2	77	29,2
Students are involved in defining the course content	41	50,6	62	23,5
Students are involved in defining the assignments' content	26	32,1	70	26,5
Students are involved in defining teaching and learning methods and techniques within a course	27	33,3	64	24,2
Difficult to answer	5	6,2	88	33,3
Other (specify)	0	0	10	3,8

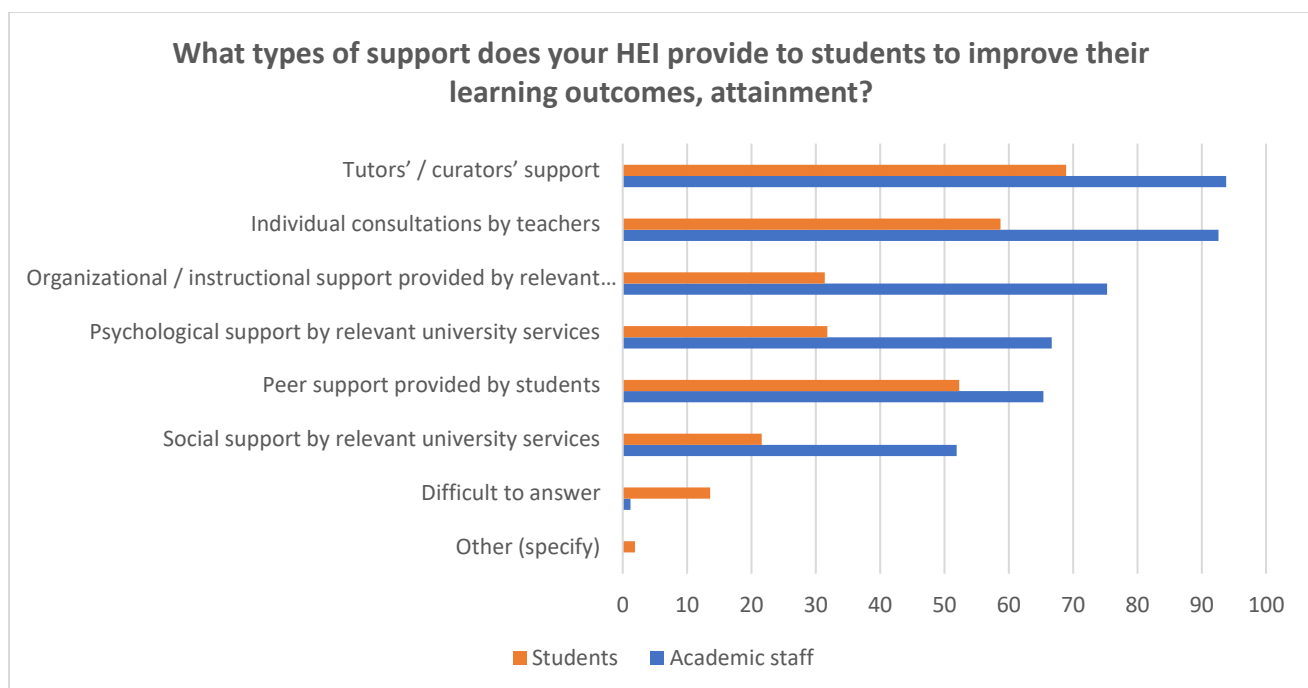
Which of the practices listed below are implemented in your HEI?





7. What types of support does your HEI provide to students to improve their learning outcomes, attainment?

	Academic staff (81)		Students (264)	
	Persons	%	Persons	%
Tutors' / curators' support	76	93,8	182	68,9
Individual consultations by teachers	75	92,6	155	58,7
Organizational / instructional support provided by relevant HEI units or departments: Dean's Office, Chairs, Academic Office etc.	61	75,3	83	31,4
Psychological support by relevant university services	54	66,7	84	31,8
Peer support provided by students	53	65,4	138	52,3
Social support by relevant university services	42	51,9	57	21,6
Difficult to answer	1	1,2	36	13,6
Other (specify)	0	0	5	1,9





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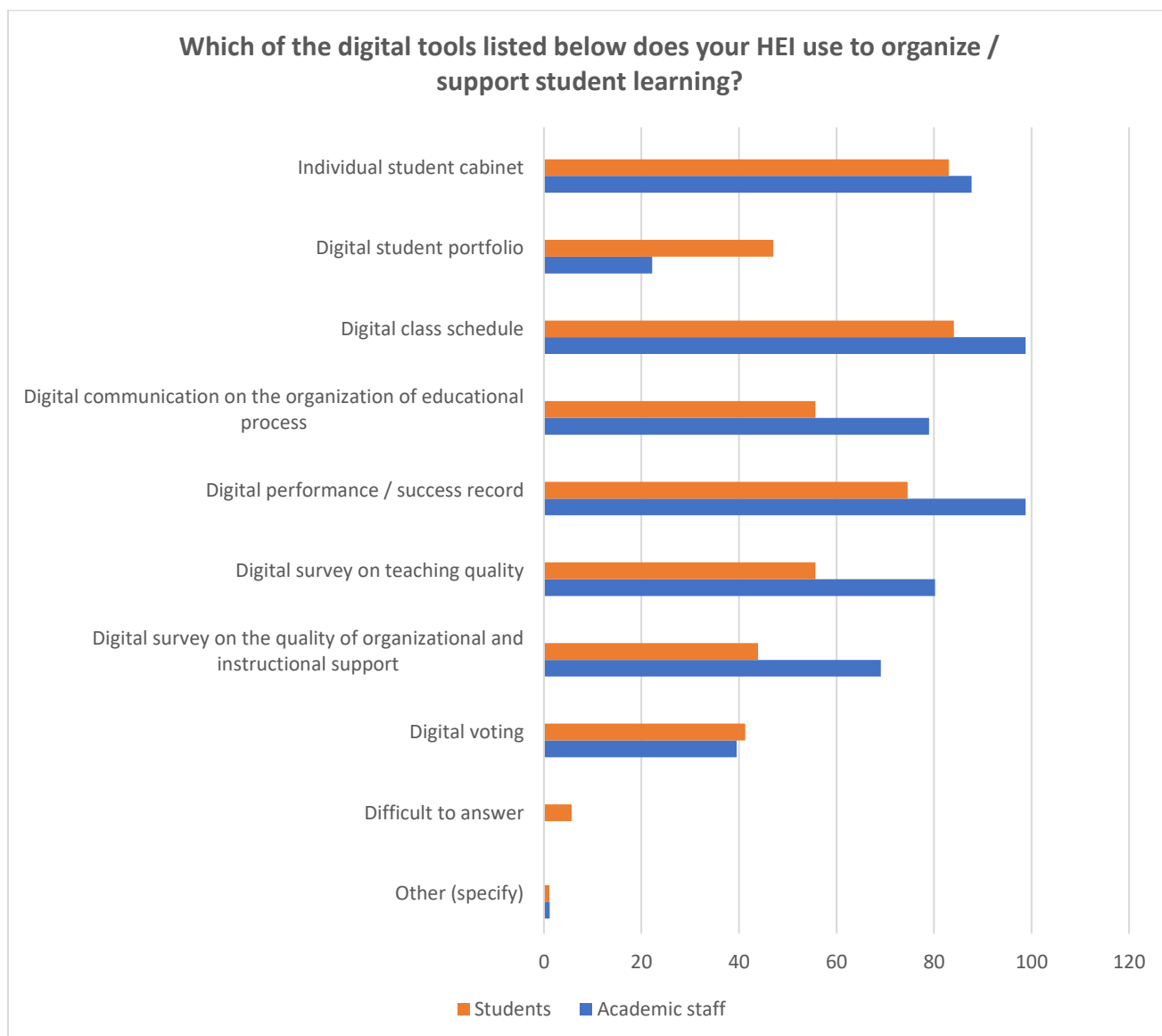
This Project has received funding from the European Commission ERASMUS+ Programme under grant agreement no. 101082928.



Project Name:
Students' Personalised Learning Model, Based on the Virtual Learning Environment of Intellectual Tutoring "Learning with No Limits"

8. Which of the digital tools listed below does your HEI use to organize / support student learning?

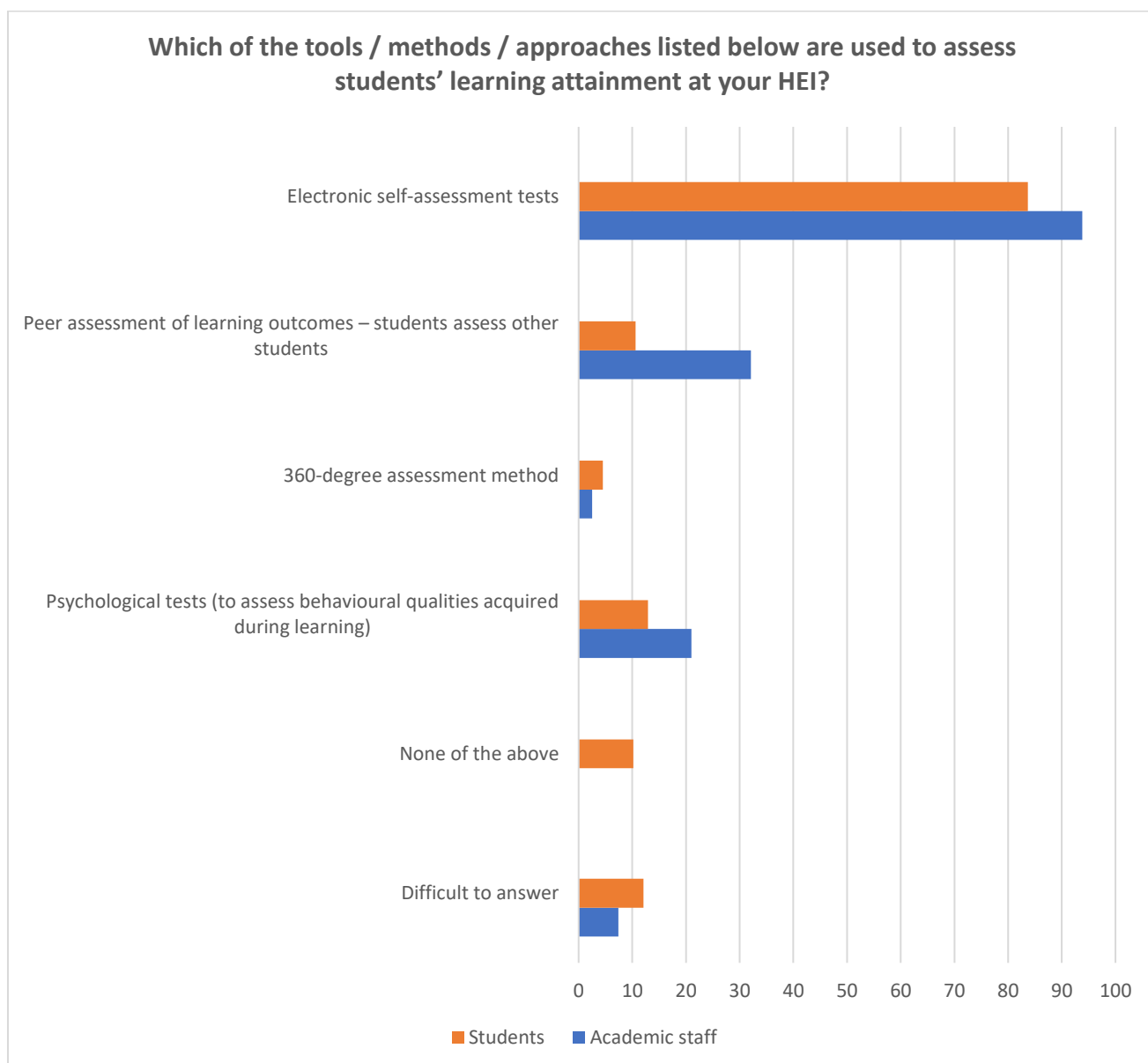
	Academic staff (81)		Students (264)	
	Persons	%	Persons	%
Individual student cabinet	71	87,7	219	83
Digital student portfolio	18	22,2	124	47
Digital class schedule	80	98,8	222	84,1
Digital communication on the organization of educational process	64	79	147	55,7
Digital performance / success record	80	98,8	197	74,6
Digital survey on teaching quality	65	80,2	147	55,7
Digital survey on the quality of organizational and instructional support	56	69,1	116	43,9
Digital voting	32	39,5	109	41,3
Difficult to answer	0	0	15	5,7
Other (specify)	1	1,2	3	1,1





9. Which of the tools / methods / approaches listed below are used to assess students' learning attainment at your HEI?

	Academic staff (81)		Students (264)	
	Persons	%	Persons	%
Electronic self-assessment tests	76	93,8	221	83,7
Peer assessment of learning outcomes – students assess other students	26	32,1	28	10,6
360-degree assessment method	2	2,5	12	4,5
Psychological tests (to assess behavioural qualities acquired during learning)	17	21	34	12,9
None of the above	0	0	27	10,2
Difficult to answer	6	7,4	32	12,1





8. Odesa National Polytechnic University

Part 1 – General information about implementation of PL in the university

1. Full name of a higher education institution: Odesa National Polytechnic University
2. HEI website address: <https://op.edu.ua>
3. Number of students: 6619
4. Number of academic staff: 982
5. Number of students who took part in the survey: 119
6. Number of academic staff who took part in the survey: 112
7. ***Which documents of your HEI reflect the implementation of a personalized approach to learning?***
 - Order on the approval and enforcement of the Procedure for the implementation of the right to academic mobility (Order dated 11.07. 2022 № 17)
 - The Regulation on the implementation of the right to academic mobility ¹⁶⁷
 - Order on the enforcement of the Regulation on the procedure for organizing of learning of elective educational components / courses for educational activities realisation from the year of admission in 2020 (Order dated 06.03. 2020 № 24)
 - The Regulations on the procedure for organizing of learning of elective educational components / courses ¹⁶⁸
 - Order on the implementation of the decision of the Academic Council of the Odessa Polytechnic dated 24.06.2022 (protocol № 13) on the approval of the Procedure for recognition of learning outcomes obtained by students in non-formal and/or informal education (Order dated 28.09.2022 № 40)
 - The Regulation on the recognition of learning outcomes obtained by students in non-formal and/or informal education ¹⁶⁹
 - Order on the approval of the Regulation on the Department of Postgraduate and Doctoral Studies of the Odesa National Polytechnic University (Order dated 01.06.2016 № 22)
 - Regulation on the Department of Postgraduate and Doctoral Studies of Odesa National Polytechnic University ¹⁷⁰
8. ***What procedures, prerequisites and criteria are used to implement an individual learning pathway / trajectory (individual study schedule, academic mobility, non-formal learning, elective courses, accompaniment and support, etc.) at your HEI?***
 - Academic mobility is implemented in accordance with the Order on the approval and enforcement of the Procedure for the implementation of the right to academic mobility (Order dated 11.07. 2022 № 17) and the relevant Regulation. Informal education is recognized in accordance with the Order on the implementation of the decision of the Academic Council of the Odessa Polytechnic dated 24.06.2022 (protocol № 13) on the approval of the Procedure for recognition of learning outcomes obtained by students in non-formal and/or informal education (Order dated 28.09.2022 № 40) and the relevant Regulation.

¹⁶⁷ <https://op.edu.ua/ru/document/13482>

¹⁶⁸ <https://op.edu.ua/ru/document/3354>

¹⁶⁹ <https://op.edu.ua/document/13766>

¹⁷⁰ <https://op.edu.ua/document/3409>



- The choice of courses is possible in accordance with the Order on the enforcement of the Regulation on the procedure for organizing of learning of elective educational components / courses for educational activities realisation from the year of admission in 2020 (Order dated 06.03. 2020 № 24) and the corresponding Regulation.
- Social and psychological support of students conducts in accordance with the Order on the creation of a social and psychological support group for students (Order dated 30.10.2019. № 508-B) ¹⁷¹
- Social support is provided in accordance with the implementation of the Procedure for Social support of students and staff (Order dated 11.10.2019. № 39) and the Procedure "Social support of students and staff" ¹⁷²

9. *What conditions to ensure an inclusion in higher education are implemented at your HEI?*

- Accessibility to learning facilities for people with reduced mobility is ensured, sufficient conditions for the realization of their right to education at the university have been created. Studying at education-and-research program can take place in specially equipped laboratories and centres. The porches of the buildings are equipped with a ramp, the entrance doors are of increased width, without doorsteps. Building № 3 is equipped with an elevator; people with reduced mobility have free access to classrooms and laboratories on nine floors. Building № 4 has a space for classes on the first floor. Special parking spaces are allocated on the territory of the university. Dormitory № 4 has a separate entrance equipped with a ramp.
- On the territory of the university, all roads to buildings have a hard crust road surface. The width of footpaths or pavements with oncoming traffic is at least 1.8 meters. The university ensures provision of parking spaces near buildings entrance, no further than 50 meters away, for personal motor transport of disabled persons or vehicles transporting them. The university provide disabled persons with opportunity to reach any place on the university territory, including, if necessary, transfer of persons with disabilities by stairs in buildings where there are no elevators or lifts.
- A group of psychological and pedagogical support for inclusive education has been created at the university: Order on the creation of a group of psychological and pedagogical support for inclusive education, (Order dated 30.10. № 509-B) ¹⁷³
- Learning of persons with special educational needs is carried out in accordance with the following documents: Order on enforcement of the Regulations on the organization of inclusive education of persons with special educational needs at Odesa National Polytechnic University (Order dated 24.09.2019. № 32) and the Regulation on organization of inclusive education of persons with special educational needs at Odesa National Polytechnic University ¹⁷⁴

¹⁷¹ <https://op.edu.ua/document/2541>

¹⁷² <https://op.edu.ua/document/2539>

¹⁷³ <https://op.edu.ua/document/2542>

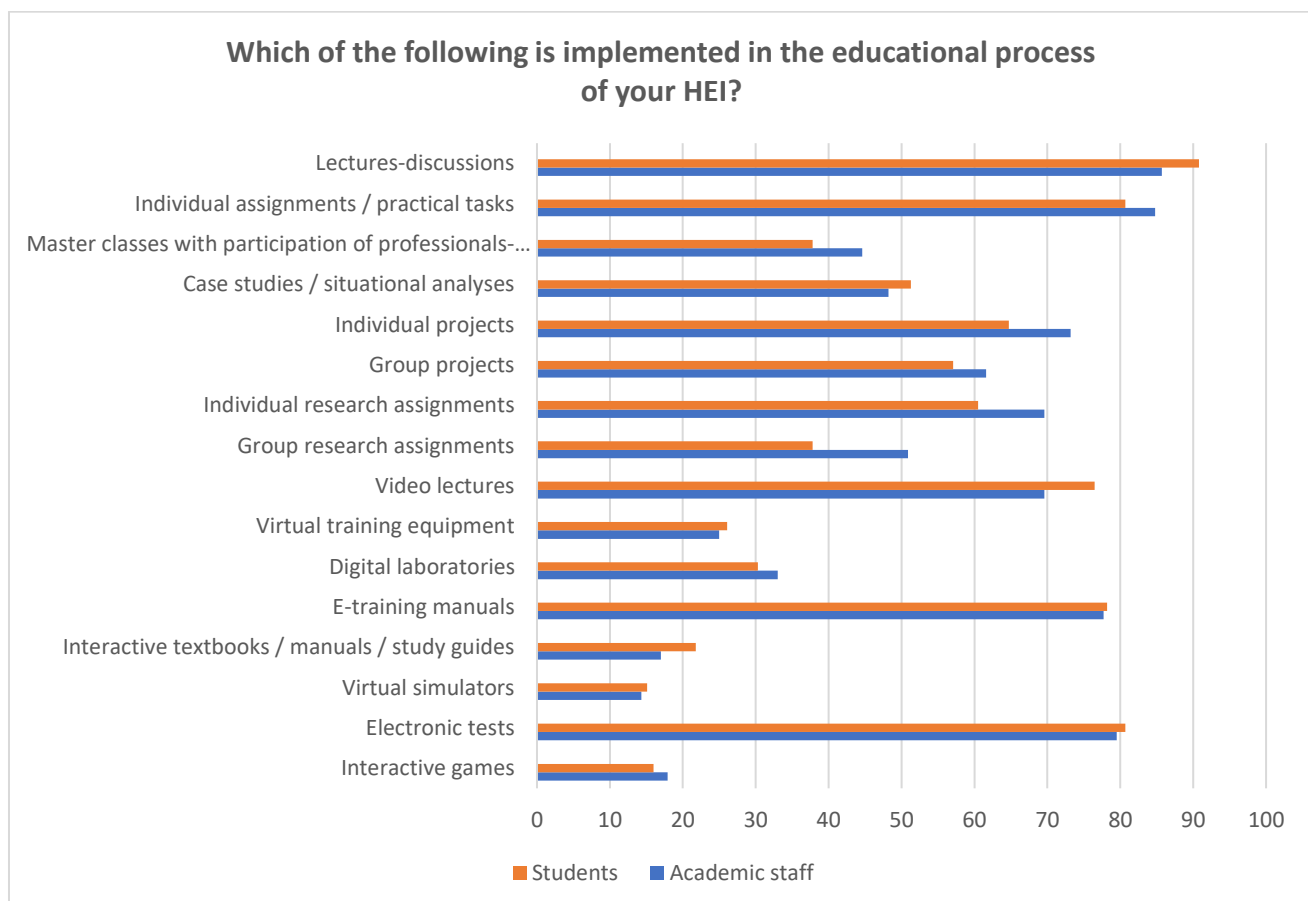
¹⁷⁴ <https://op.edu.ua/document/2486>



Part 2 – Questionnaire for surveying staff and students

1. Which of the following is implemented in the educational process of your HEI?

	Academic staff (112)		Students (119)	
	Persons	%	Persons	%
Lectures-discussions	96	85,7	108	90,8
Individual assignments / practical tasks	95	84,8	96	80,7
Master classes with participation of professionals-practitioners	50	44,6	45	37,8
Case studies / situational analyses	54	48,2	61	51,3
Individual projects	82	73,2	77	64,7
Group projects	69	61,6	68	57,1
Individual research assignments	78	69,6	72	60,5
Group research assignments	57	50,9	45	37,8
Video lectures	78	69,6	91	76,5
Virtual training equipment	28	25	31	26,1
Digital laboratories	37	33	36	30,3
E-training manuals	87	77,7	93	78,2
Interactive textbooks / manuals / study guides	19	17	26	21,8
Virtual simulators	16	14,3	18	15,1
Electronic tests	89	79,5	96	80,7
Interactive games	20	17,9	19	16

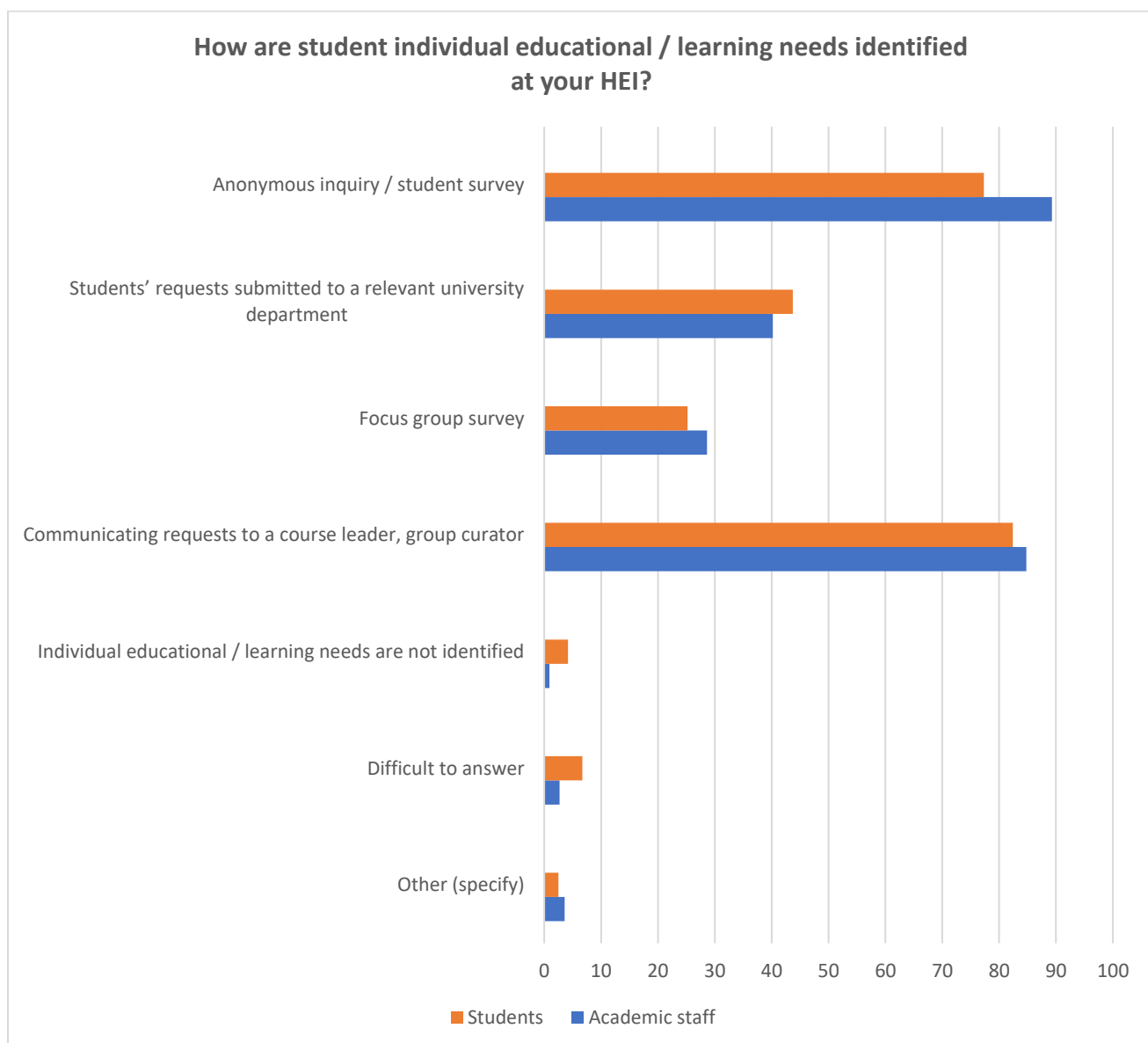




2. How are student individual educational / learning needs identified at your HEI?

	Academic staff (112)		Students (119)	
	Persons	%	Persons	%
Anonymous inquiry / student survey	100	89,3	92	77,3
Students' requests submitted to a relevant university department	45	40,2	52	43,7
Focus group survey	32	28,6	30	25,2
Communicating requests to a course leader, group curator	95	84,8	98	82,4
Individual educational / learning needs are not identified	1	0,9	5	4,2
Difficult to answer	3	2,7	8	6,7
Other (specify)	4	3,6	3	2,5

How are student individual educational / learning needs identified at your HEI?

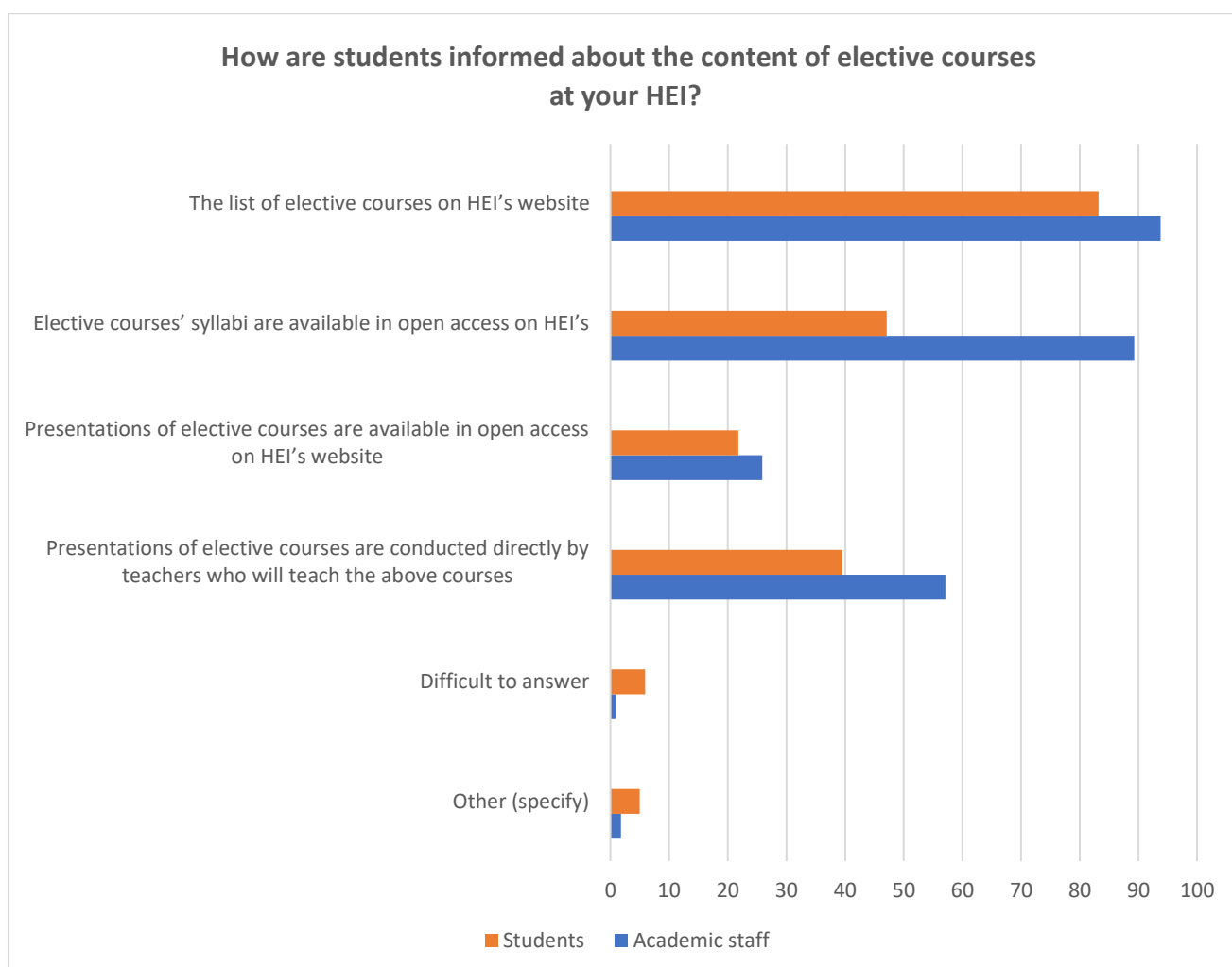




3. How are students informed about the content of elective courses at your HEI?

	Academic staff (112)		Students (119)	
	Persons	%	Persons	%
The list of elective courses on HEI's website	105	93,8	99	83,2
Elective courses' syllabi are available in open access on HEI's	100	89,3	56	47,1
Presentations of elective courses are available in open access on HEI's website	29	25,9	26	21,8
Presentations of elective courses are conducted directly by teachers who will teach the above courses	64	57,1	47	39,5
Difficult to answer	1	0,9	7	5,9
Other (specify)	2	1,8	6	5

How are students informed about the content of elective courses at your HEI?

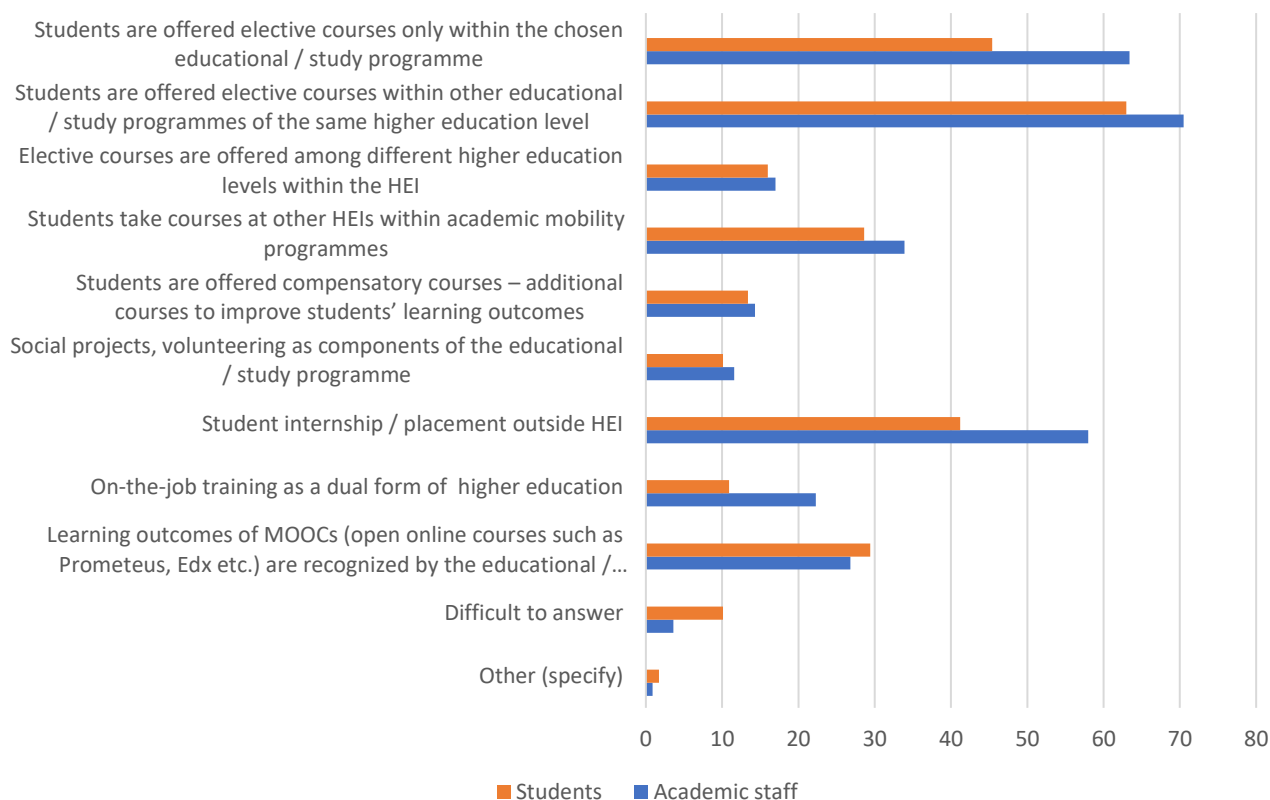




4. How are student individual learning pathways implemented at your HEI?

	Academic staff (112)		Students (119)	
	Persons	%	Persons	%
Students are offered elective courses only within the chosen educational / study programme	71	63,4	54	45,4
Students are offered elective courses within other educational / study programmes of the same higher education level	79	70,5	75	63
Elective courses are offered among different higher education levels within the HEI	19	17	19	16
Students take courses at other HEIs within academic mobility programmes	38	33,9	34	28,6
Students are offered compensatory courses – additional courses to improve students' learning outcomes	16	14,3	16	13,4
Social projects, volunteering as components of the educational / study programme	13	11,6	12	10,1
Student internship / placement outside HEI	65	58	49	41,2
On-the-job training as a dual form of higher education	25	22,3	13	10,9
Learning outcomes of MOOCs (open online courses such as Prometheus, Edx etc.) are recognized by the educational / study programme	30	26,8	35	29,4
Difficult to answer	4	3,6	12	10,1
Other (specify)	1	0,9	2	1,7

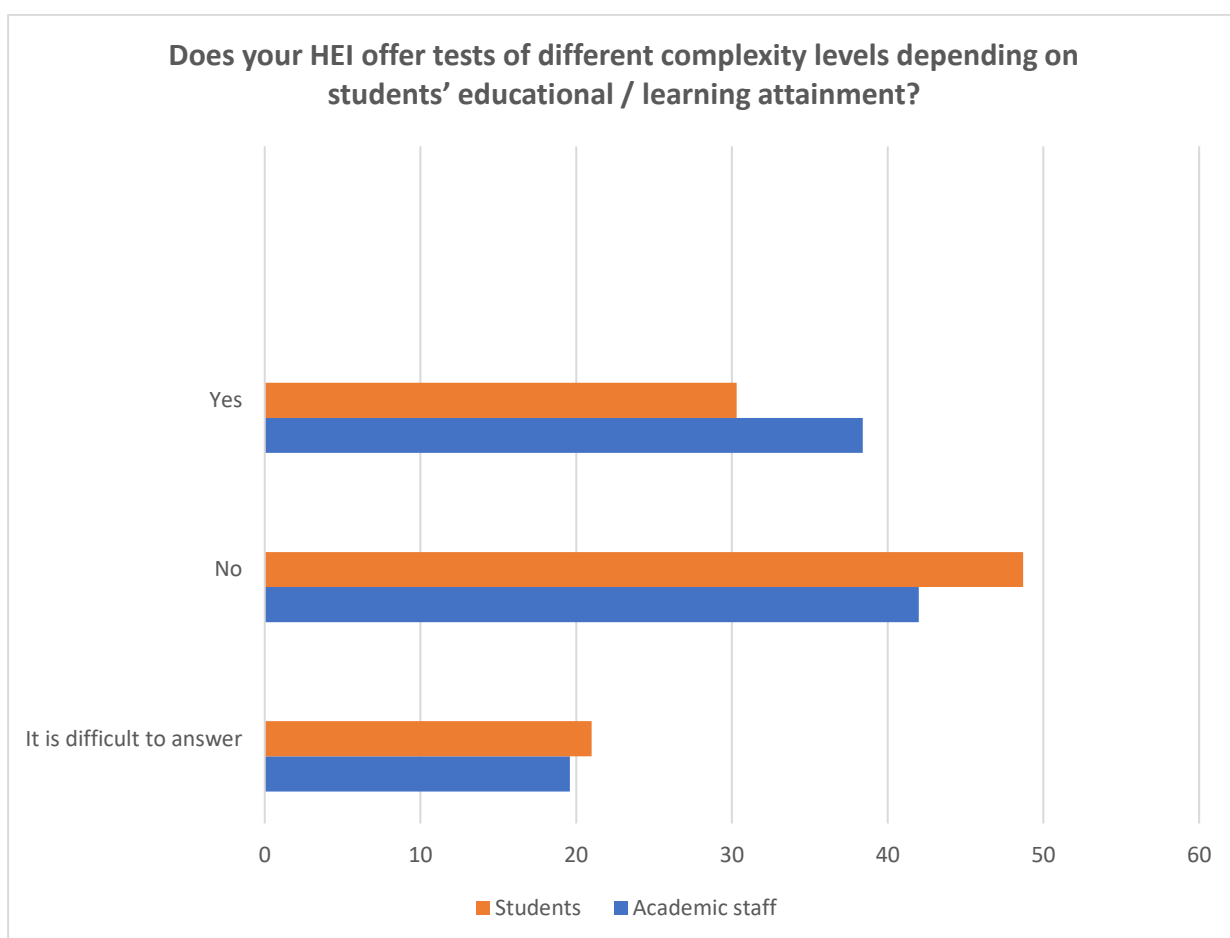
How are student individual learning pathways implemented at your HEI?





5. Does your HEI offer tests of different complexity levels depending on students' educational / learning attainment?

	Academic staff (112)		Students (119)	
	Persons	%	Persons	%
Yes	43	38,4	36	30,3
No	47	42	58	48,7
It is difficult to answer	22	19,6	25	21

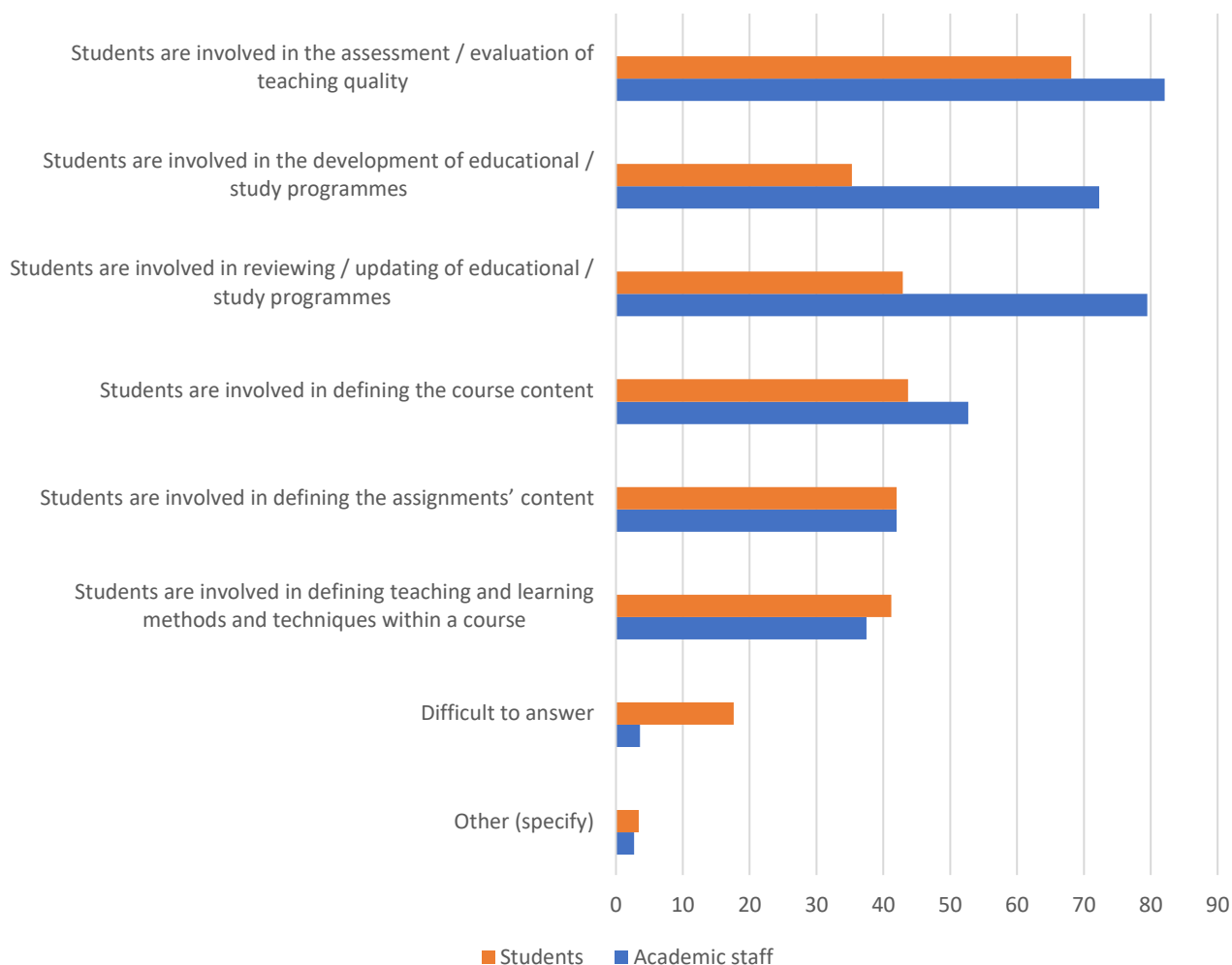




6. Which of the practices listed below are implemented in your HEI?

	Academic staff (112)		Students (119)	
	Persons	%	Persons	%
Students are involved in the assessment / evaluation of teaching quality	92	82,1	81	68,1
Students are involved in the development of educational / study programmes	81	72,3	42	35,3
Students are involved in reviewing / updating of educational / study programmes	89	79,5	51	42,9
Students are involved in defining the course content	59	52,7	52	43,7
Students are involved in defining the assignments' content	47	42	50	42
Students are involved in defining teaching and learning methods and techniques within a course	42	37,5	49	41,2
Difficult to answer	4	3,6	21	17,6
Other (specify)	3	2,7	4	3,4

Which of the practices listed below are implemented in your HEI?

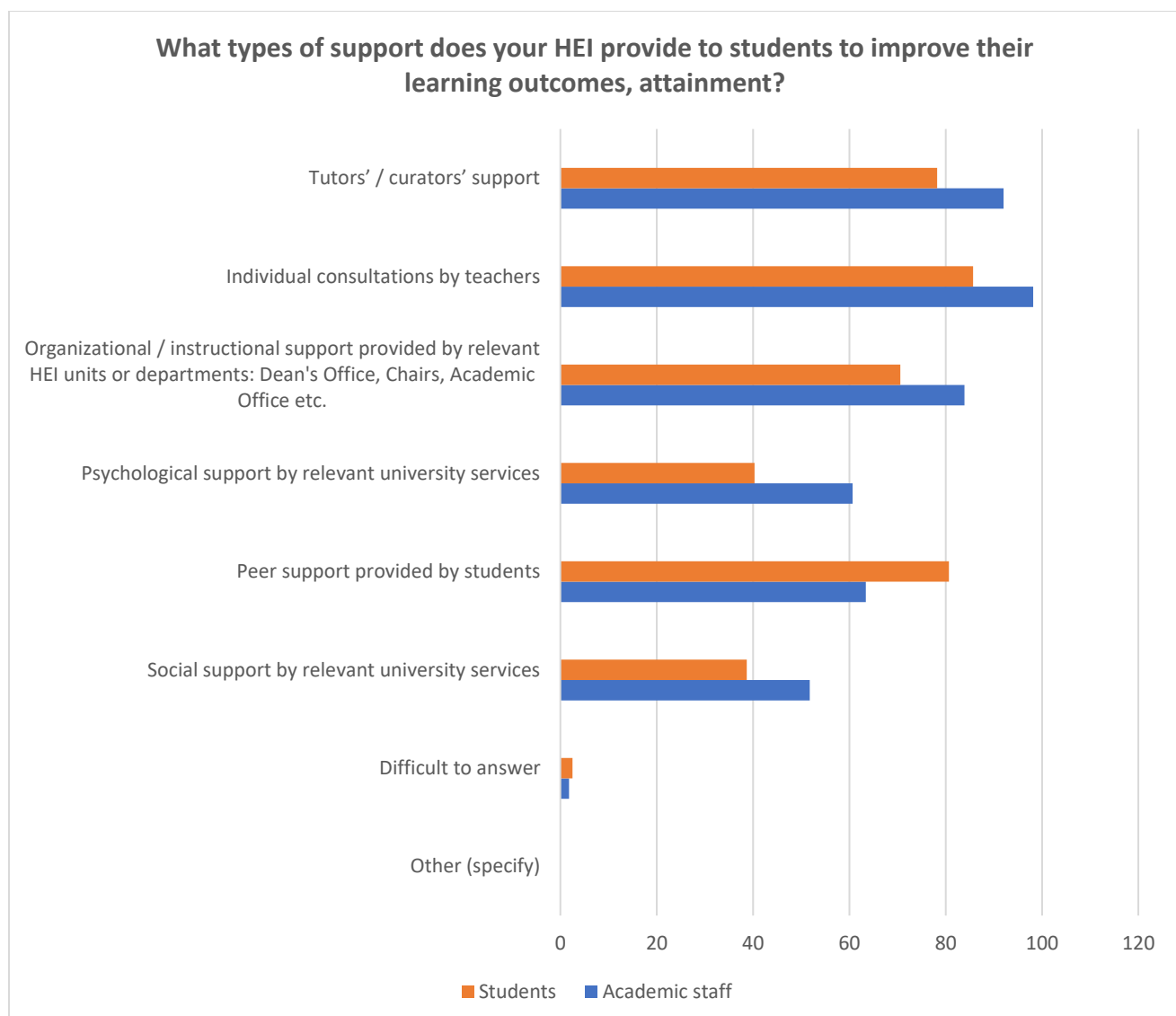




7. What types of support does your HEI provide to students to improve their learning outcomes, attainment?

	Academic staff (112)		Students (119)	
	Persons	%	Persons	%
Tutors' / curators' support	103	92	93	78,2
Individual consultations by teachers	110	98,2	102	85,7
Organizational / instructional support provided by relevant HEI units or departments: Dean's Office, Chairs, Academic Office etc.	94	83,9	84	70,6
Psychological support by relevant university services	68	60,7	48	40,3
Peer support provided by students	71	63,4	96	80,7
Social support by relevant university services	58	51,8	46	38,7
Difficult to answer	2	1,8	3	2,5
Other (specify)	0	0	0	0

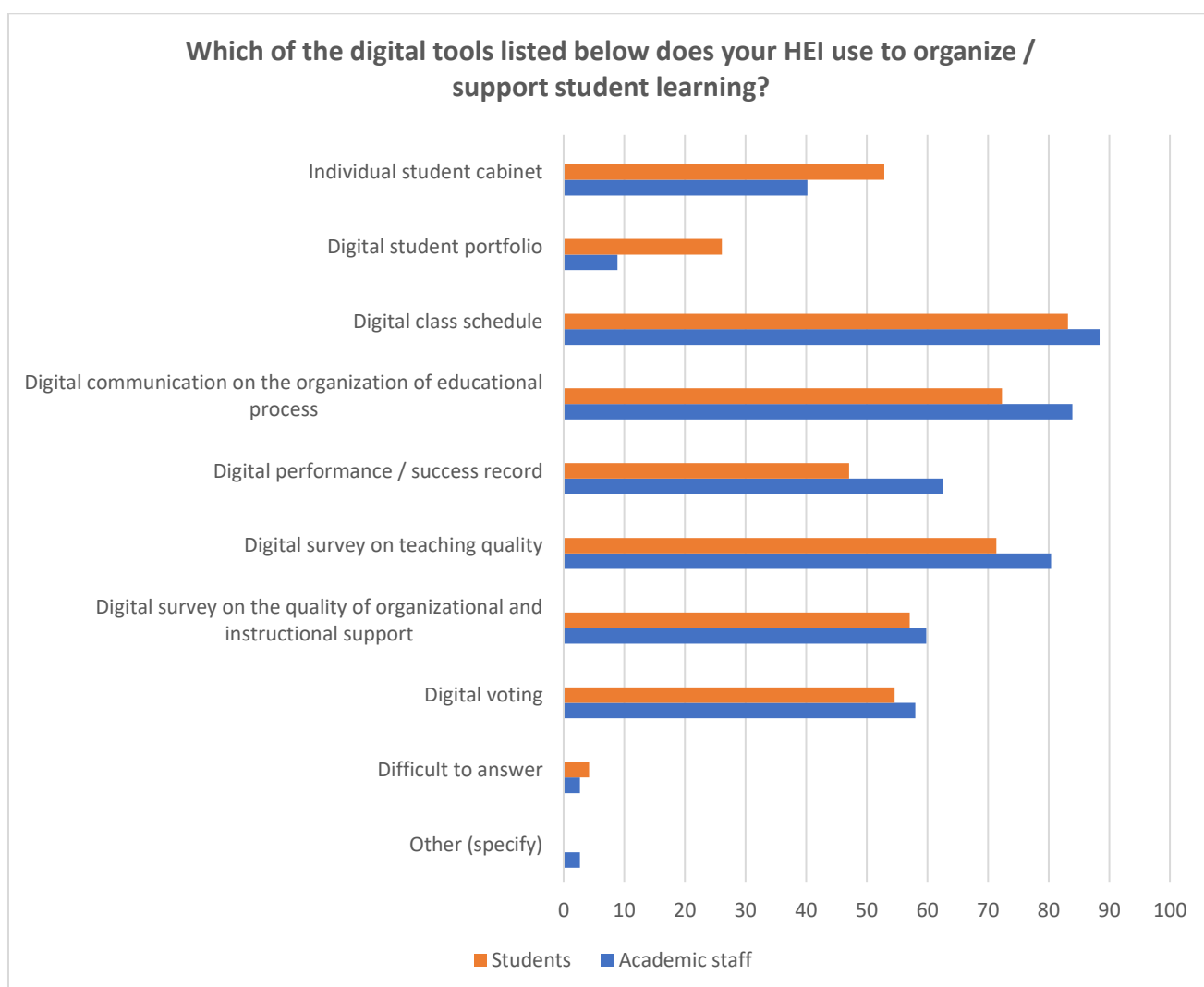
What types of support does your HEI provide to students to improve their learning outcomes, attainment?





8. Which of the digital tools listed below does your HEI use to organize / support student learning?

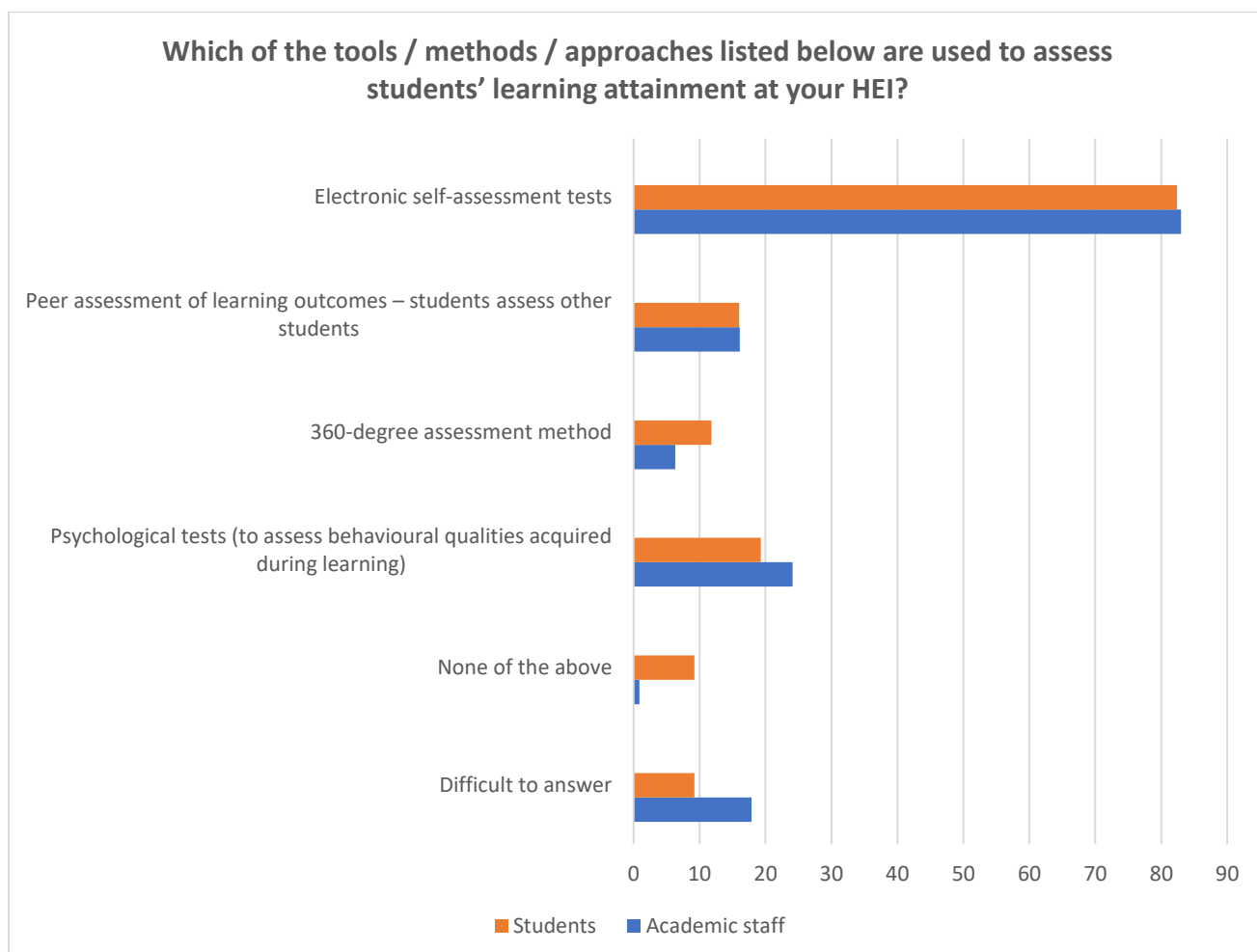
	Academic staff (112)		Students (119)	
	Persons	%	Persons	%
Individual student cabinet	45	40,2	63	52,9
Digital student portfolio	10	8,9	31	26,1
Digital class schedule	99	88,4	99	83,2
Digital communication on the organization of educational process	94	83,9	86	72,3
Digital performance / success record	70	62,5	56	47,1
Digital survey on teaching quality	90	80,4	85	71,4
Digital survey on the quality of organizational and instructional support	67	59,8	68	57,1
Digital voting	65	58	65	54,6
Difficult to answer	3	2,7	5	4,2
Other (specify)	3	2,7	0	0





9. Which of the tools / methods / approaches listed below are used to assess students' learning attainment at your HEI?

	Academic staff (112)		Students (119)	
	Persons	%	Persons	%
Electronic self-assessment tests	93	83	98	82,4
Peer assessment of learning outcomes – students assess other students	18	16,1	19	16
360-degree assessment method	7	6,3	14	11,8
Psychological tests (to assess behavioural qualities acquired during learning)	27	24,1	23	19,3
None of the above	1	0,9	11	9,2
Difficult to answer	20	17,9	11	9,2





9. Kherson State University

Part 1 – General information about implementation of PL in the university

1. Full name of a higher education institution: Kherson State University
2. HEI website address: <https://www.kspu.edu/>
3. Number of students: 3 045
4. Number of academic staff: 279
5. Number of students who took part in the survey: 348
6. Number of academic staff who took part in the survey: 88
7. ***Which documents of your HEI reflect the implementation of a personalized approach to learning?***
 - The Regulation on the procedure and terms of choosing elective educational components / elective courses by students of Kherson State University (Order dated 04.06.2020 № 511-D)
 - The Amendments to the Regulation on the procedure and terms of choosing elective educational components / elective courses by students of Kherson State University (Order dated 04.29.2021 № 528-D)
 - The Regulation on a practical training of students of Kherson State University (Order dated 02.06.2017 № 337-D)
 - The Procedure for recognition of learning outcomes obtained in non-formal and informal education (Order dated 04.03.2020 № 247-D)
 - The Regulation on academic mobility of students (Order dated 06.26.2020 № 592-D)
 - The Procedure for providing an individual study schedule, an individual term of practice and completing an exam session at Kherson State University (04.12.2019 № 1023-D)¹⁷⁵
8. ***What procedures, prerequisites and criteria are used to implement an individual learning pathway / trajectory (individual study schedule, academic mobility, non-formal learning, elective courses, accompaniment and support, etc.) at your HEI?***
 - Developing and expert evaluation of Regulation and Procedures (mentioned above), their public review and approval by the Academic Council of the university and implementation by Order of the Rector.
9. ***What conditions to ensure an inclusion in higher education are implemented at your HEI?***
 - Kherson State University (KSU) creates conditions for persons with special educational needs to realise their right on education, which is specified in the Rules for the Admission of students of KSU.
 - The university campuses are equipped with special ramps; the main 8-story building campus has a special lift. An external elevator has been built in building № 5. The educational process is implemented taking into account a health condition, features of psychophysical development, talents, abilities and individual needs.
 - The university encourages forming in student and teaching staff of a tolerant attitude towards persons with special educational needs, understanding of their problems, adaptation of teachers and persons without disabilities to educational process in integrated groups.
 - In addition, the Social and Psychological Service of KSU has a separate sector of social inclusion (Order dated 04.12.2019 № 1020-D) which helps students with special educational needs.

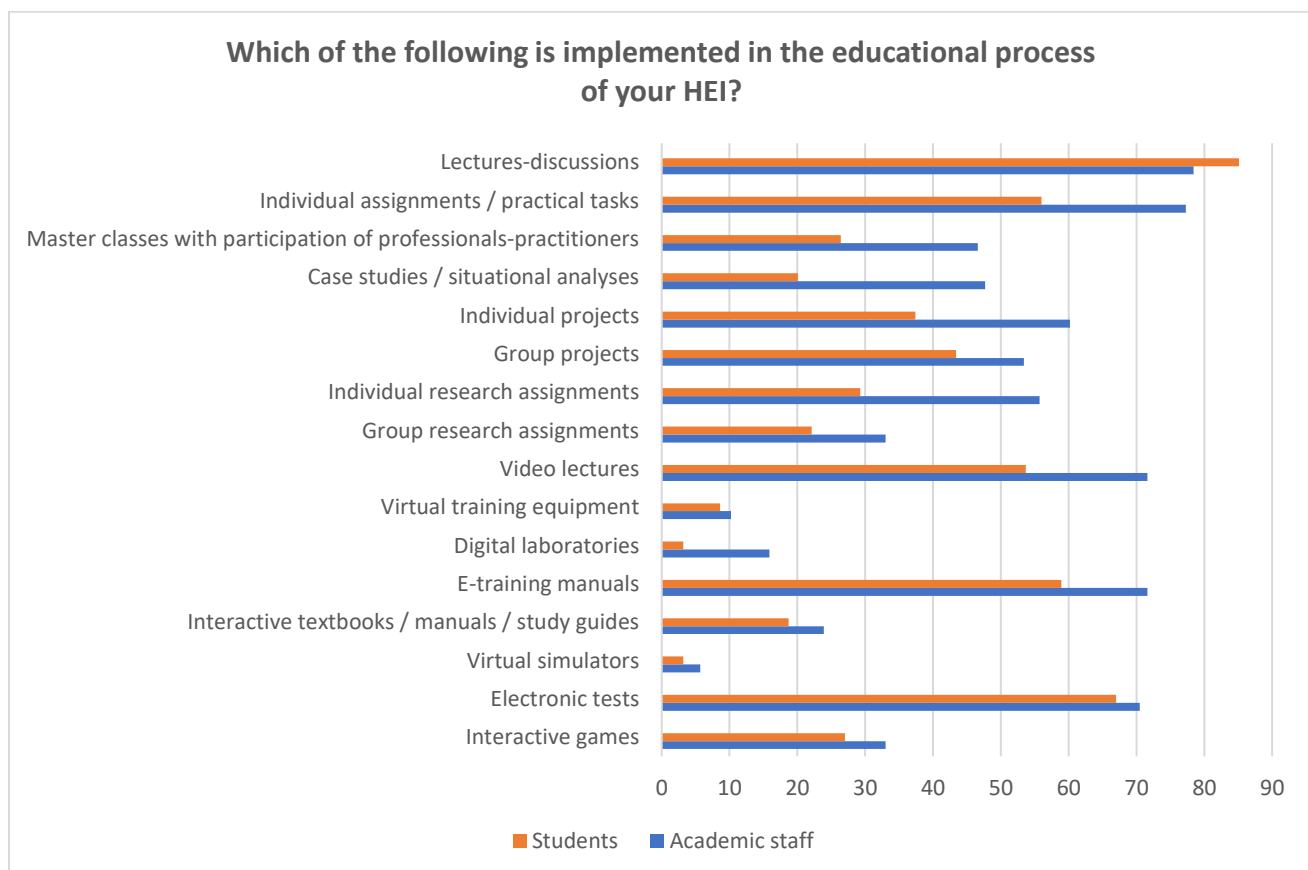
¹⁷⁵ <https://www.kspu.edu/Legislation/educationalprocessdocs.aspx>



Part 2 – Questionnaire for surveying staff and students

1. Which of the following is implemented in the educational process of your HEI?

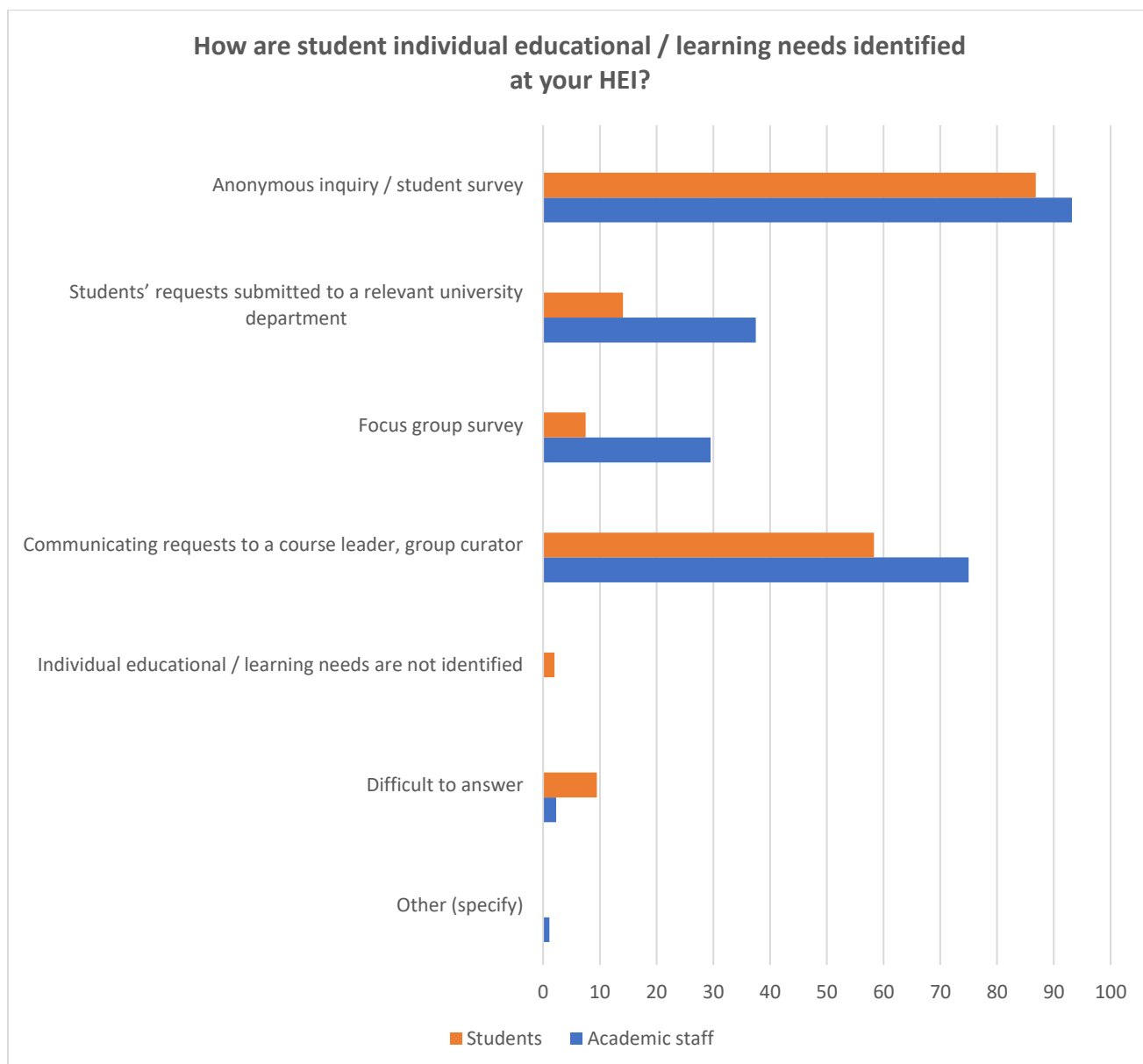
	Academic staff (88)		Students (348)	
	Persons	%	Persons	%
Lectures-discussions	69	78,4	296	85,1
Individual assignments / practical tasks	68	77,3	195	56
Master classes with participation of professionals-practitioners	41	46,6	92	26,4
Case studies / situational analyses	42	47,7	70	20,1
Individual projects	53	60,2	130	37,4
Group projects	47	53,4	151	43,4
Individual research assignments	49	55,7	102	29,3
Group research assignments	29	33	77	22,1
Video lectures	63	71,6	187	53,7
Virtual training equipment	9	10,2	30	8,6
Digital laboratories	14	15,9	11	3,2
E-training manuals	63	71,6	205	58,9
Interactive textbooks / manuals / study guides	21	23,9	65	18,7
Virtual simulators	5	5,7	11	3,2
Electronic tests	62	70,5	233	67
Interactive games	29	33	94	27





2. How are student individual educational / learning needs identified at your HEI?

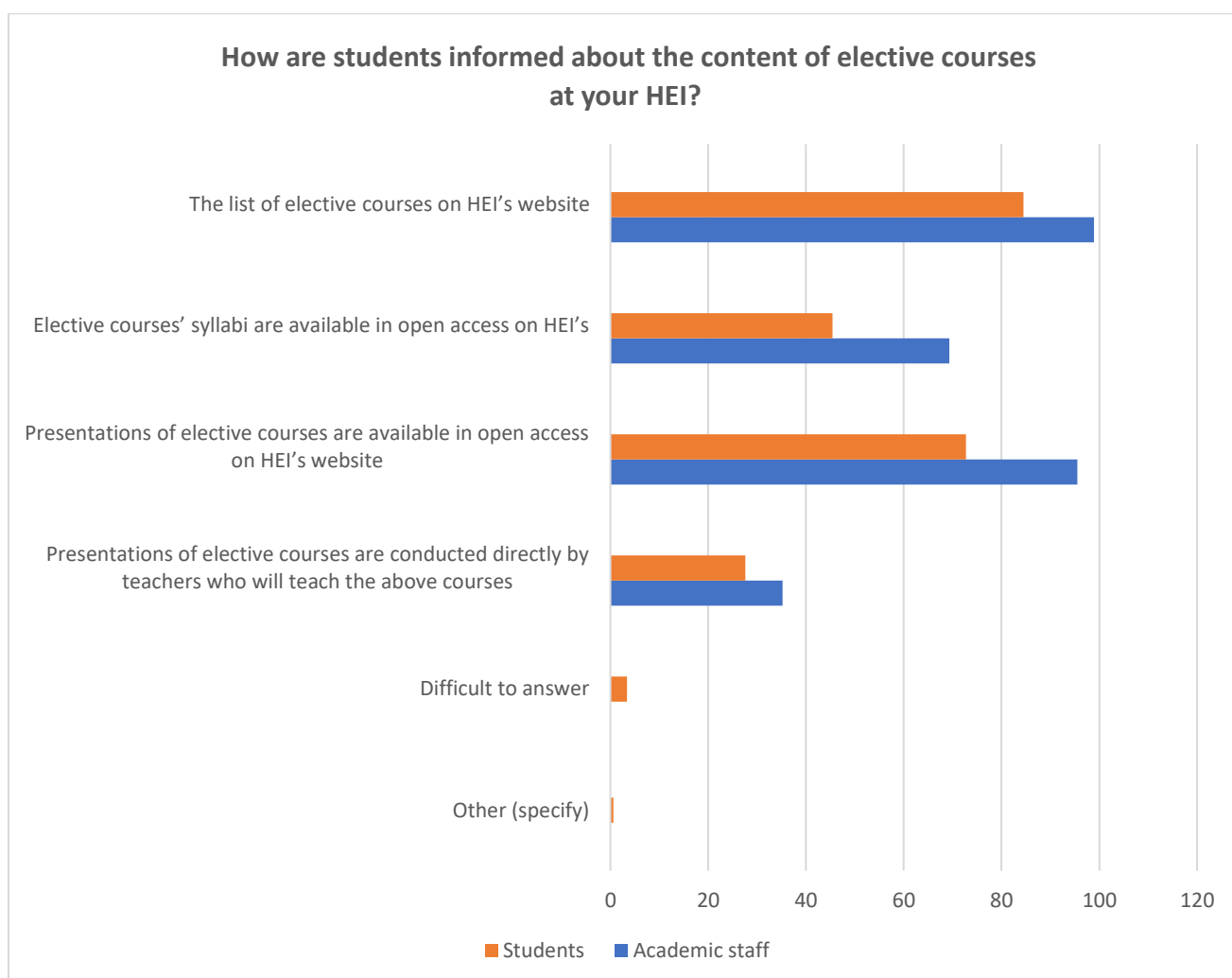
	Academic staff (88)		Students (348)	
	Persons	%	Persons	%
Anonymous inquiry / student survey	82	93,2	302	86,8
Students' requests submitted to a relevant university department	33	37,5	49	14,1
Focus group survey	26	29,5	26	7,5
Communicating requests to a course leader, group curator	66	75	203	58,3
Individual educational / learning needs are not identified	0	0	7	2
Difficult to answer	2	2,3	33	9,5
Other (specify)	1	1,1	0	0





3. How are students informed about the content of elective courses at your HEI?

	Academic staff (88)		Students (348)	
	Persons	%	Persons	%
The list of elective courses on HEI's website	87	98,9	294	84,5
Elective courses' syllabi are available in open access on HEI's	61	69,3	158	45,4
Presentations of elective courses are available in open access on HEI's website	84	95,5	253	72,7
Presentations of elective courses are conducted directly by teachers who will teach the above courses	31	35,2	96	27,6
Difficult to answer	0	0	12	3,4
Other (specify)	0	0	2	0,6

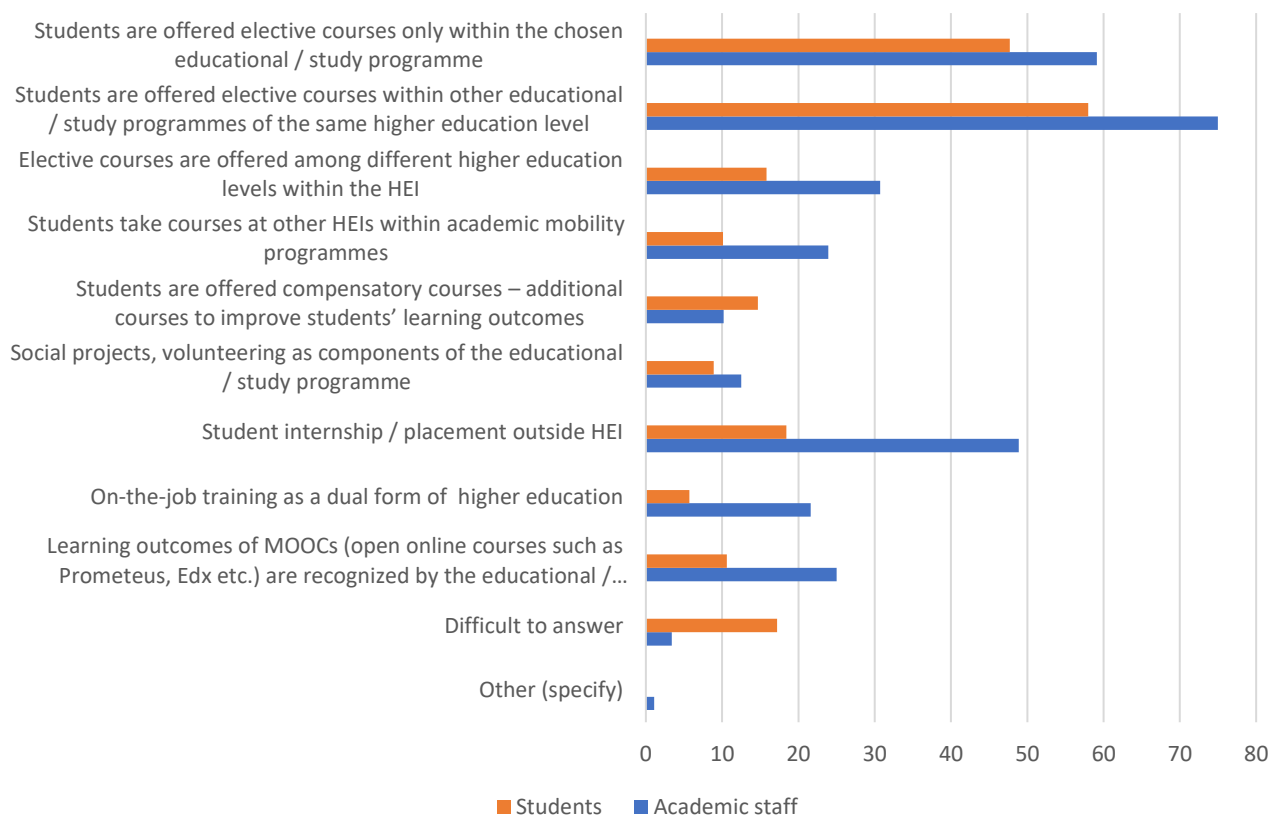




4. How are student individual learning pathways implemented at your HEI?

	Academic staff (88)		Students (348)	
	Persons	%	Persons	%
Students are offered elective courses only within the chosen educational / study programme	52	59,1	166	47,7
Students are offered elective courses within other educational / study programmes of the same higher education level	66	75	202	58
Elective courses are offered among different higher education levels within the HEI	27	30,7	55	15,8
Students take courses at other HEIs within academic mobility programmes	21	23,9	35	10,1
Students are offered compensatory courses – additional courses to improve students' learning outcomes	9	10,2	51	14,7
Social projects, volunteering as components of the educational / study programme	11	12,5	31	8,9
Student internship / placement outside HEI	43	48,9	64	18,4
On-the-job training as a dual form of higher education	19	21,6	20	5,7
Learning outcomes of MOOCs (open online courses such as Prometheus, Edx etc.) are recognized by the educational / study programme	22	25	37	10,6
Difficult to answer	3	3,4	60	17,2
Other (specify)	1	1,1	0	0

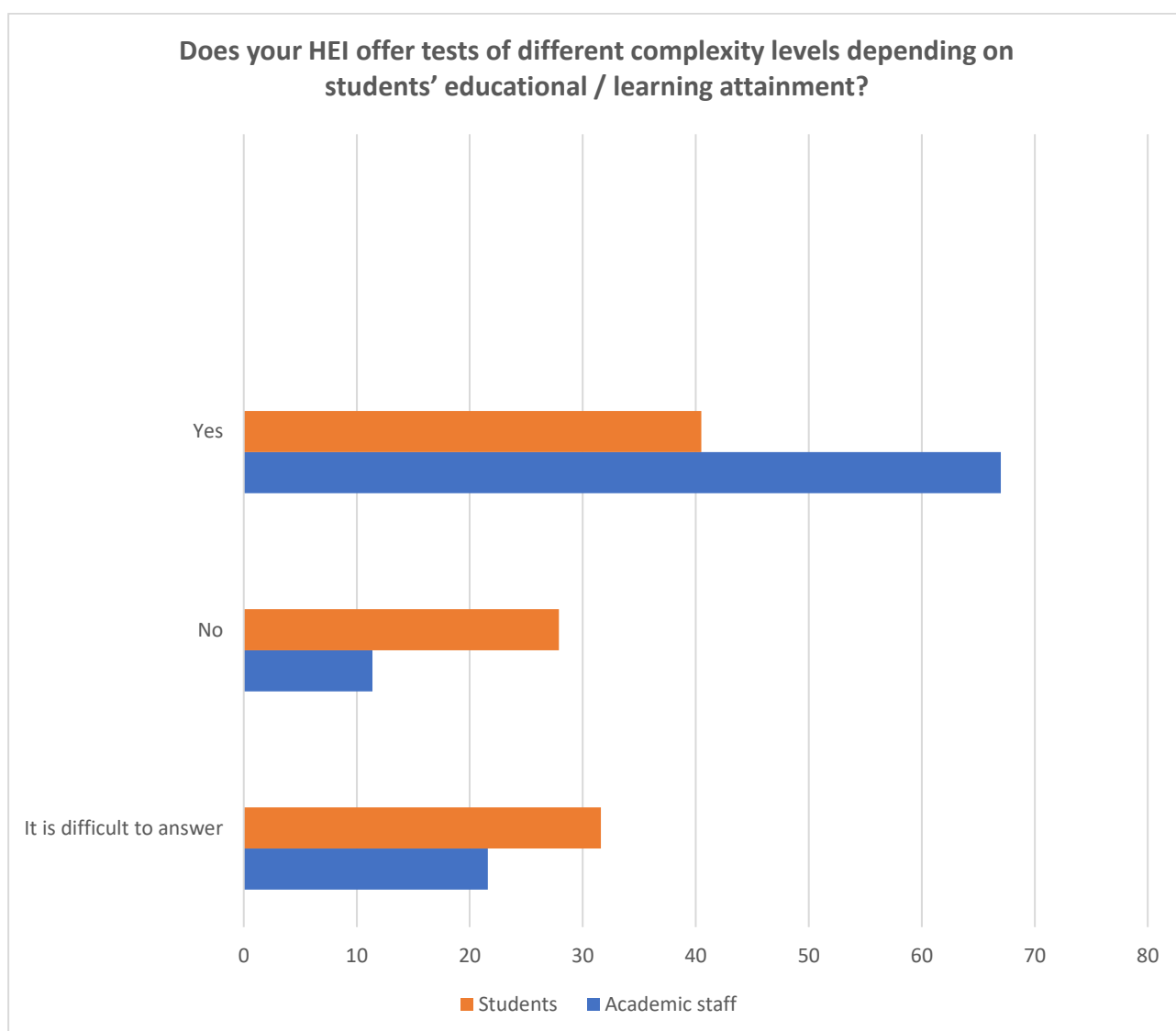
How are student individual learning pathways implemented at your HEI?





5. Does your HEI offer tests of different complexity levels depending on students' educational / learning attainment?

	Academic staff (88)		Students (348)	
	Persons	%	Persons	%
Yes	59	67	141	40,5
No	10	11,4	97	27,9
It is difficult to answer	19	21,6	110	31,6

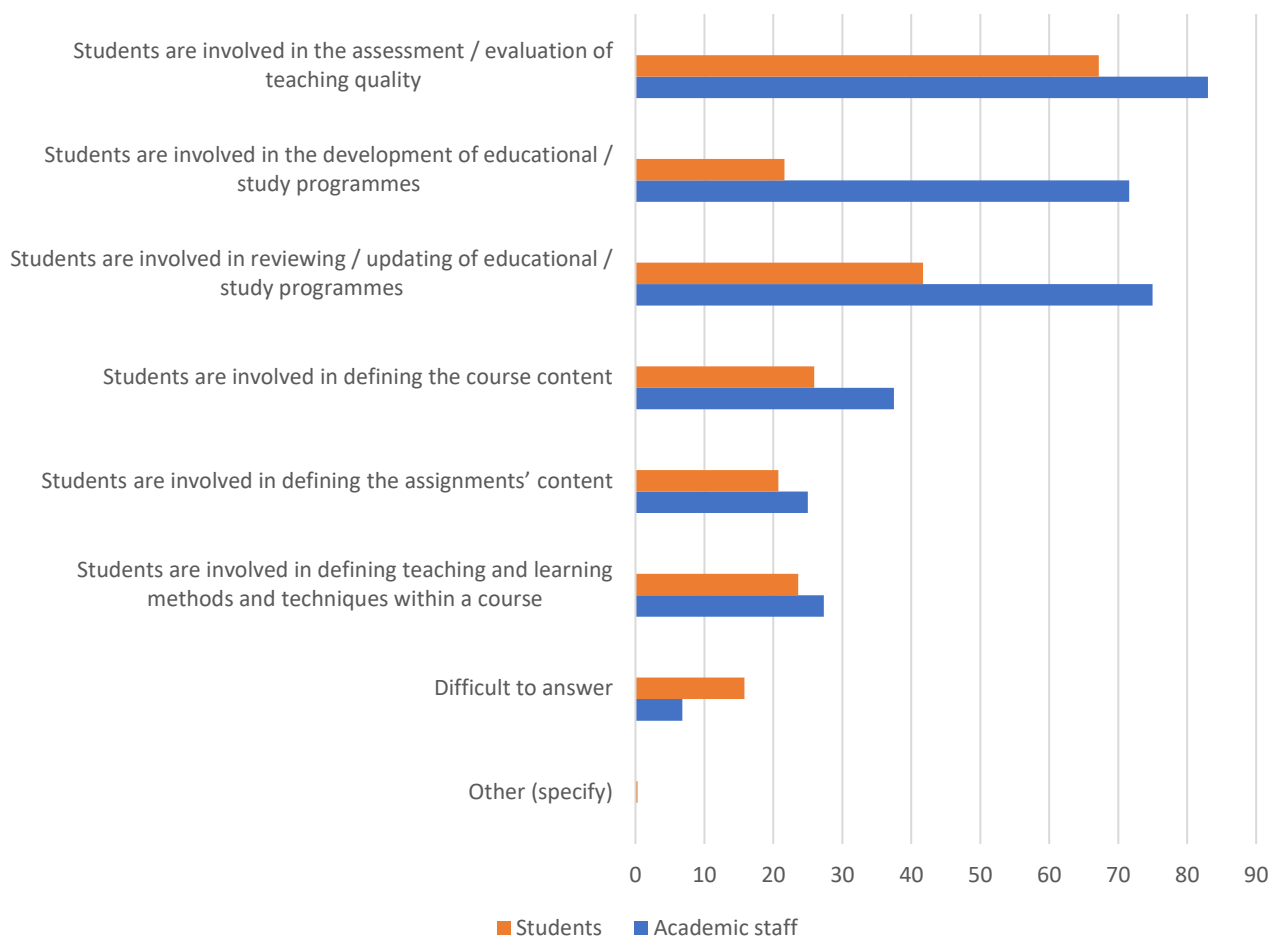




6. Which of the practices listed below are implemented in your HEI?

	Academic staff (88)		Students (348)	
	Persons	%	Persons	%
Students are involved in the assessment / evaluation of teaching quality	73	83	234	67,2
Students are involved in the development of educational / study programmes	63	71,6	75	21,6
Students are involved in reviewing / updating of educational / study programmes	66	75	145	41,7
Students are involved in defining the course content	33	37,5	90	25,9
Students are involved in defining the assignments' content	22	25	72	20,7
Students are involved in defining teaching and learning methods and techniques within a course	24	27,3	82	23,6
Difficult to answer	6	6,8	55	15,8
Other (specify)	0	0	1	0,3

Which of the practices listed below are implemented in your HEI?

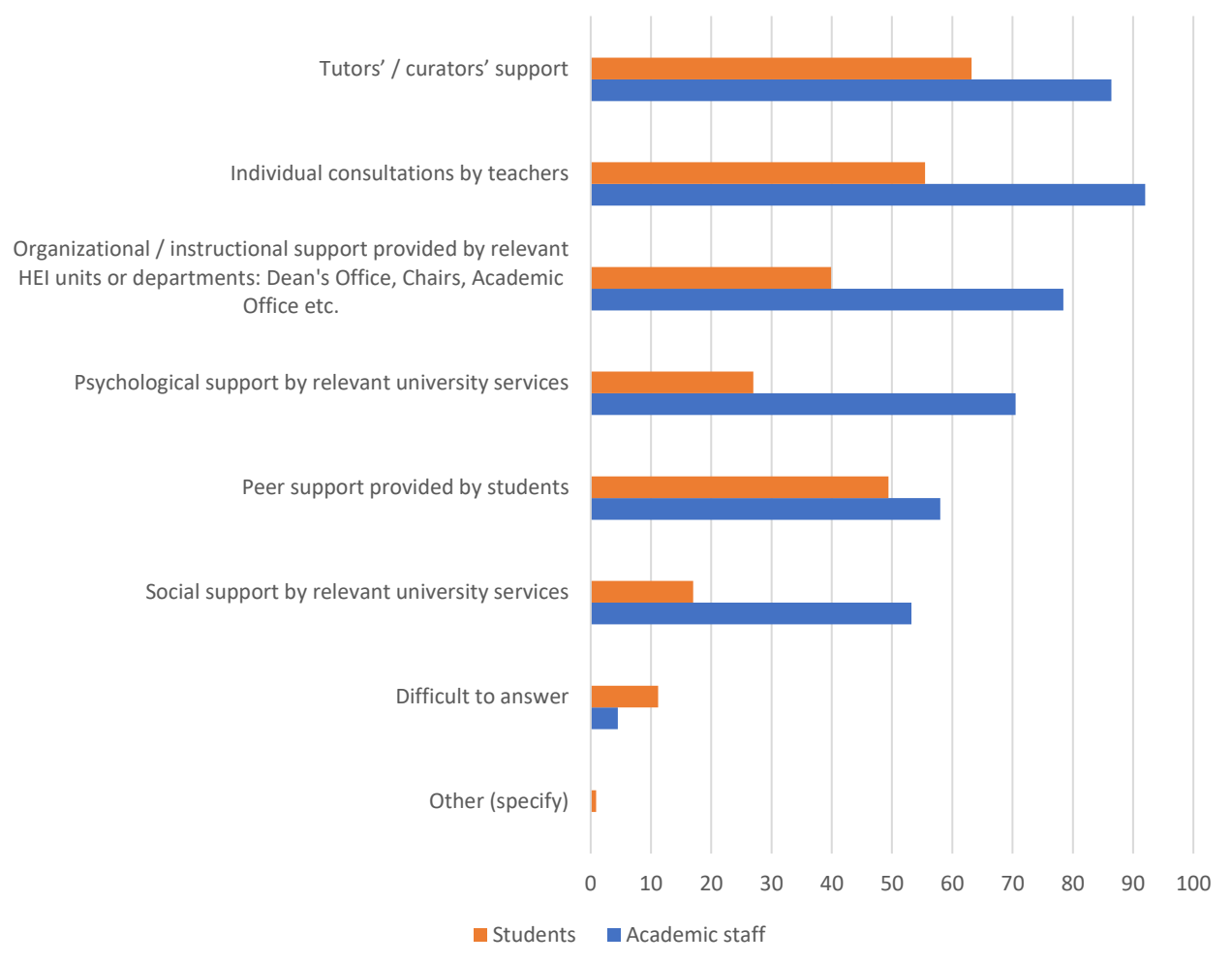




7. What types of support does your HEI provide to students to improve their learning outcomes, attainment?

	Academic staff (88)		Students (348)	
	Persons	%	Persons	%
Tutors' / curators' support	76	86,4	220	63,2
Individual consultations by teachers	81	92	193	55,5
Organizational / instructional support provided by relevant HEI units or departments: Dean's Office, Chairs, Academic Office etc.	69	78,4	139	39,9
Psychological support by relevant university services	62	70,5	94	27
Peer support provided by students	51	58	172	49,4
Social support by relevant university services	46	52,3	59	17
Difficult to answer	4	4,5	39	11,2
Other (specify)	0	0	3	0,9

What types of support does your HEI provide to students to improve their learning outcomes, attainment?





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This Project has received funding from the European Commission ERASMUS+ Programme under grant agreement no. 101082928.

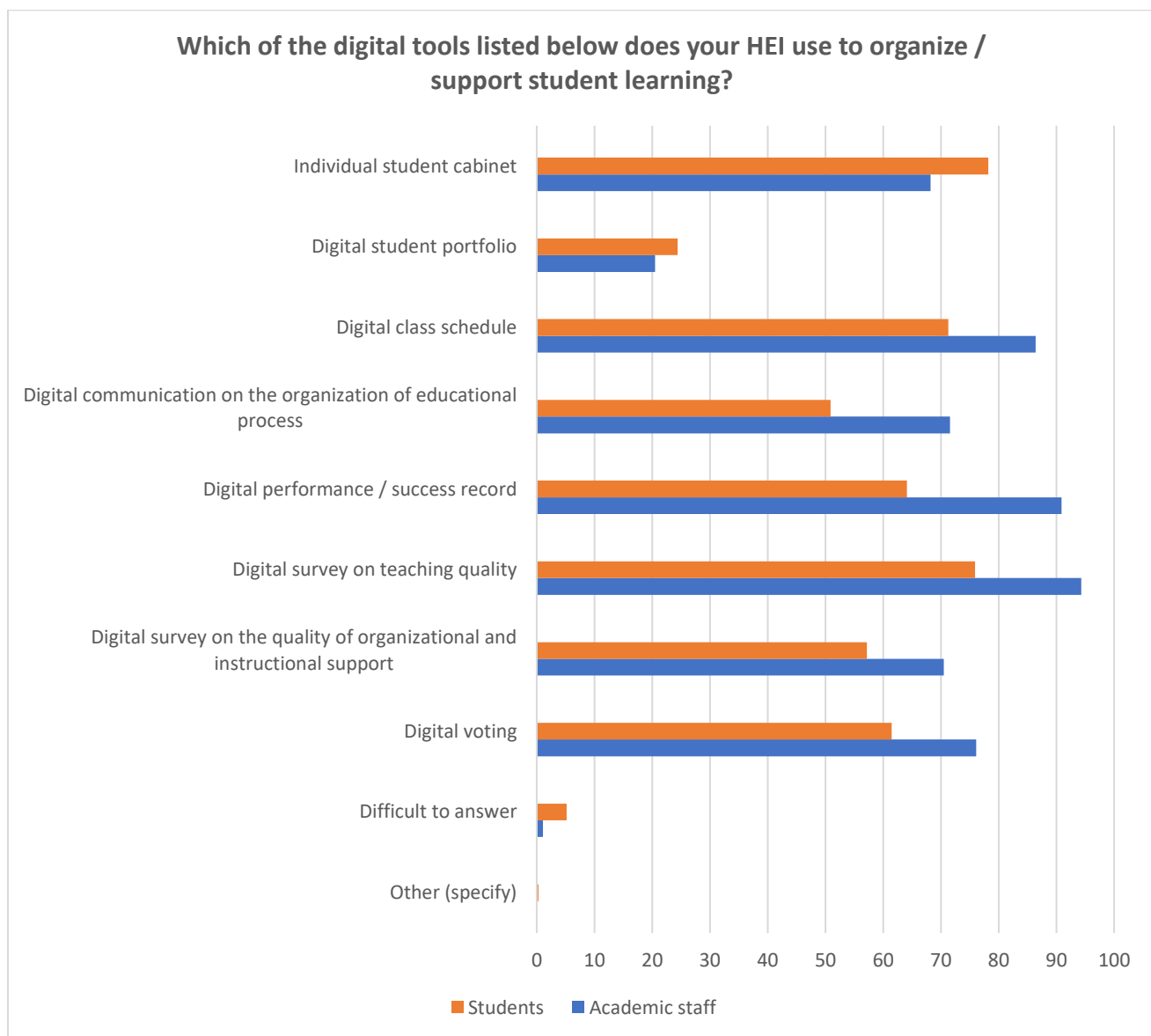


Project Name:
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8. Which of the digital tools listed below does your HEI use to organize / support student learning?

	Academic staff (88)		Students (348)	
	Persons	%	Persons	%
Individual student cabinet	60	68,2	272	78,2
Digital student portfolio	18	20,5	85	24,4
Digital class schedule	76	86,4	248	71,3
Digital communication on the organization of educational process	63	71,6	177	50,9
Digital performance / success record	80	90,9	223	64,1
Digital survey on teaching quality	83	94,3	264	75,9
Digital survey on the quality of organizational and instructional support	62	70,5	199	57,2
Digital voting	67	76,1	214	61,5
Difficult to answer	1	1,1	18	5,2
Other (specify)	0	0	1	0,3

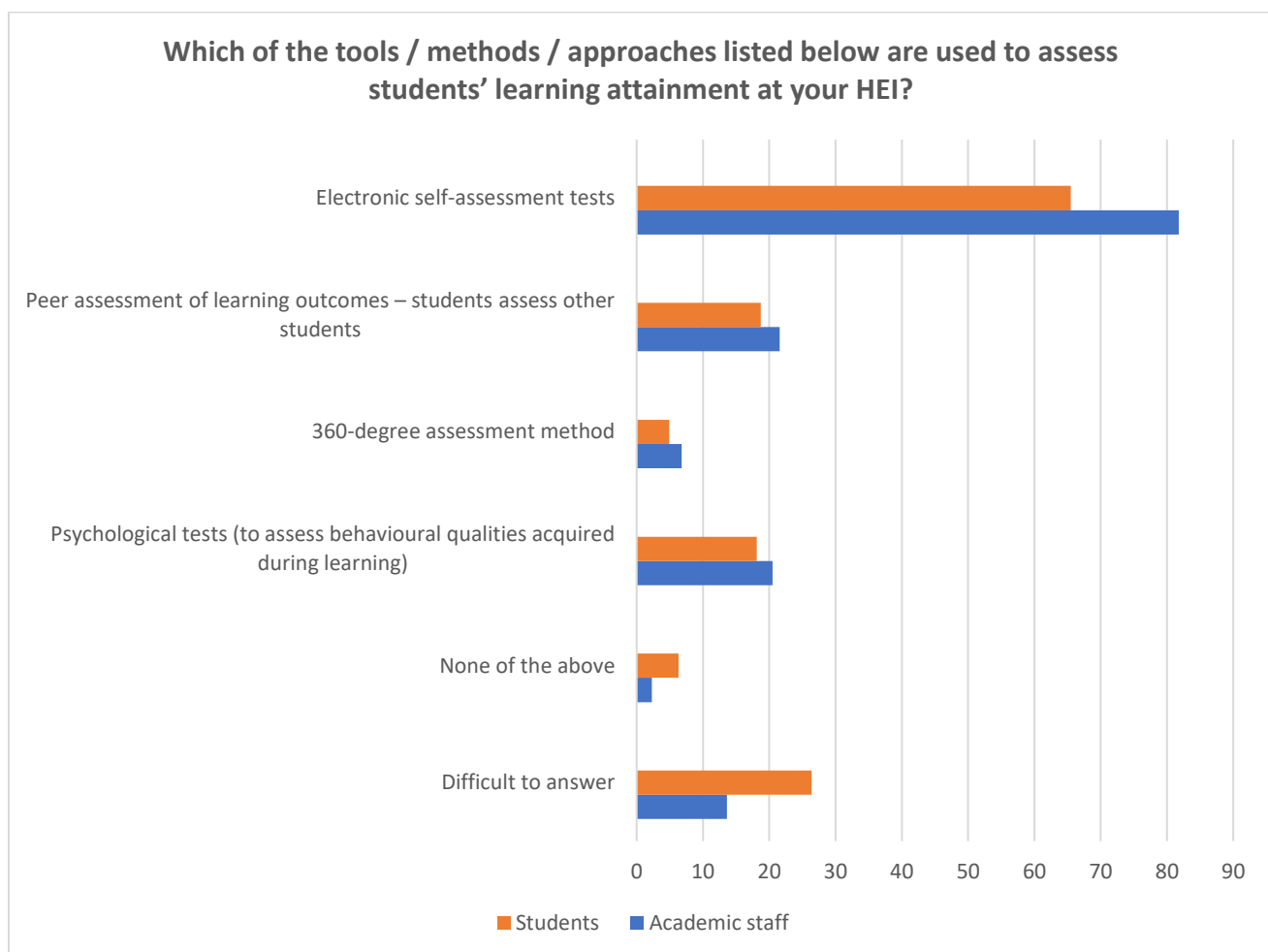
Which of the digital tools listed below does your HEI use to organize / support student learning?





9. Which of the tools / methods / approaches listed below are used to assess students' learning attainment at your HEI?

	Academic staff (88)		Students (48)	
	Persons	%	Persons	%
Electronic self-assessment tests	72	81,8	228	65,5
Peer assessment of learning outcomes – students assess other students	19	21,6	65	18,7
360-degree assessment method	6	6,8	17	4,9
Psychological tests (to assess behavioural qualities acquired during learning)	18	20,5	63	18,1
None of the above	2	2,3	22	6,3
Difficult to answer	12	13,6	92	26,4





10. Implementation of PL in the universities of Ukraine: Questionnaire for surveying staff and students

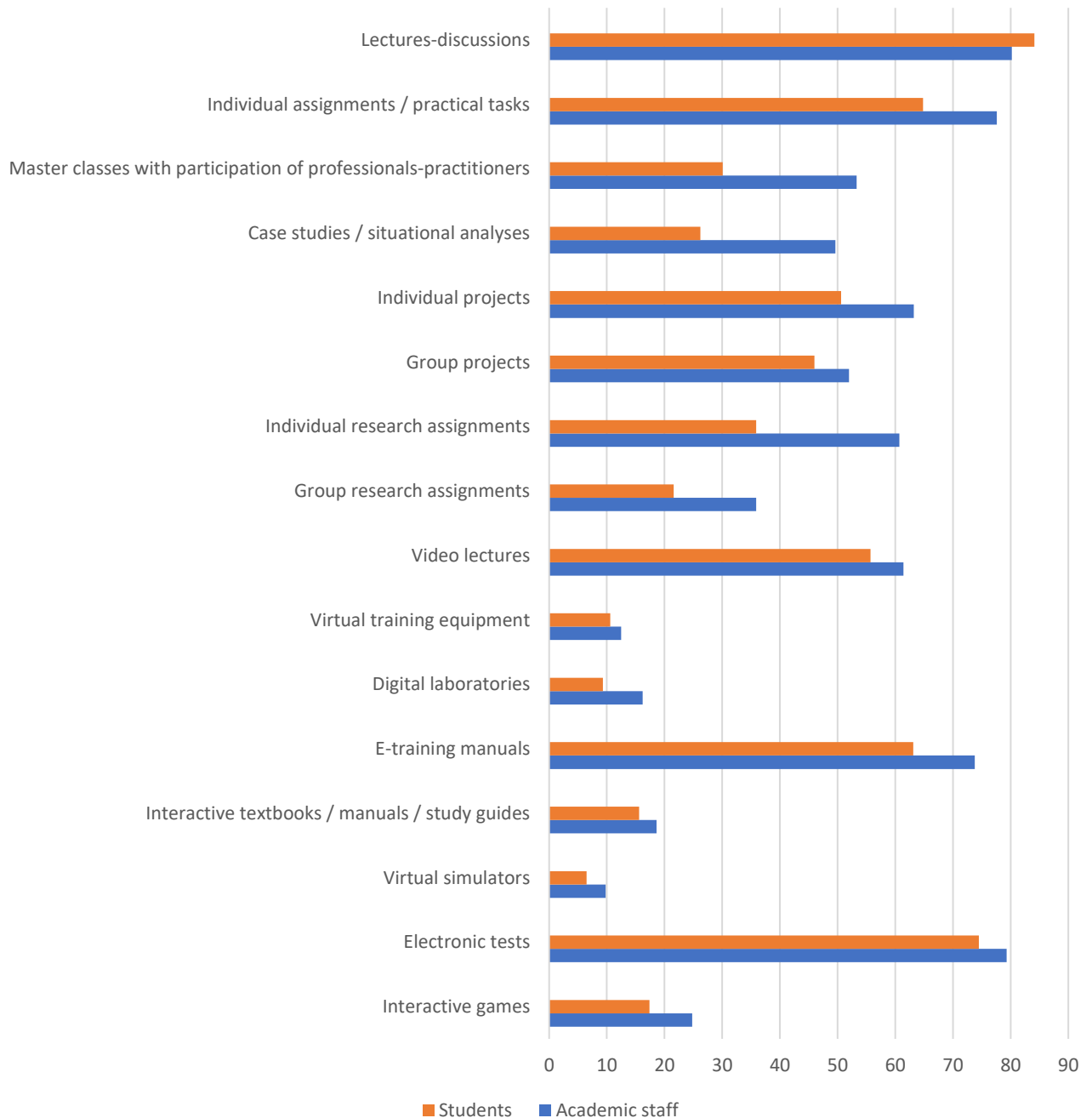
- Number of universities that took a part in the survey – 6 HEIs
- Number of involved academic staff – 596
- Number of involved students – 1 189

1. Which of the following is implemented in the educational process of your HEI?

	Academic staff (596)		Students (1189)	
	Persons	%	Persons	%
Lectures-discussions	478	80,2	1001	84,1
Individual assignments / practical tasks	463	77,6	771	64,8
Master classes with participation of professionals-practitioners	318	53,3	358	30,1
Case studies / situational analyses	296	49,6	312	26,2
Individual projects	377	63,2	602	50,6
Group projects	310	52	547	46
Individual research assignments	362	60,7	428	35,9
Group research assignments	214	35,9	258	21,6
Video lectures	366	61,4	663	55,7
Virtual training equipment	75	12,5	127	10,6
Digital laboratories	97	16,2	111	9,3
E-training manuals	440	73,8	751	63,1
Interactive textbooks / manuals / study guides	111	18,6	186	15,6
Virtual simulators	59	9,8	78	6,5
Electronic tests	473	79,3	886	74,5
Interactive games	148	24,8	208	17,4



Which of the following is implemented in the educational process of your HEI?

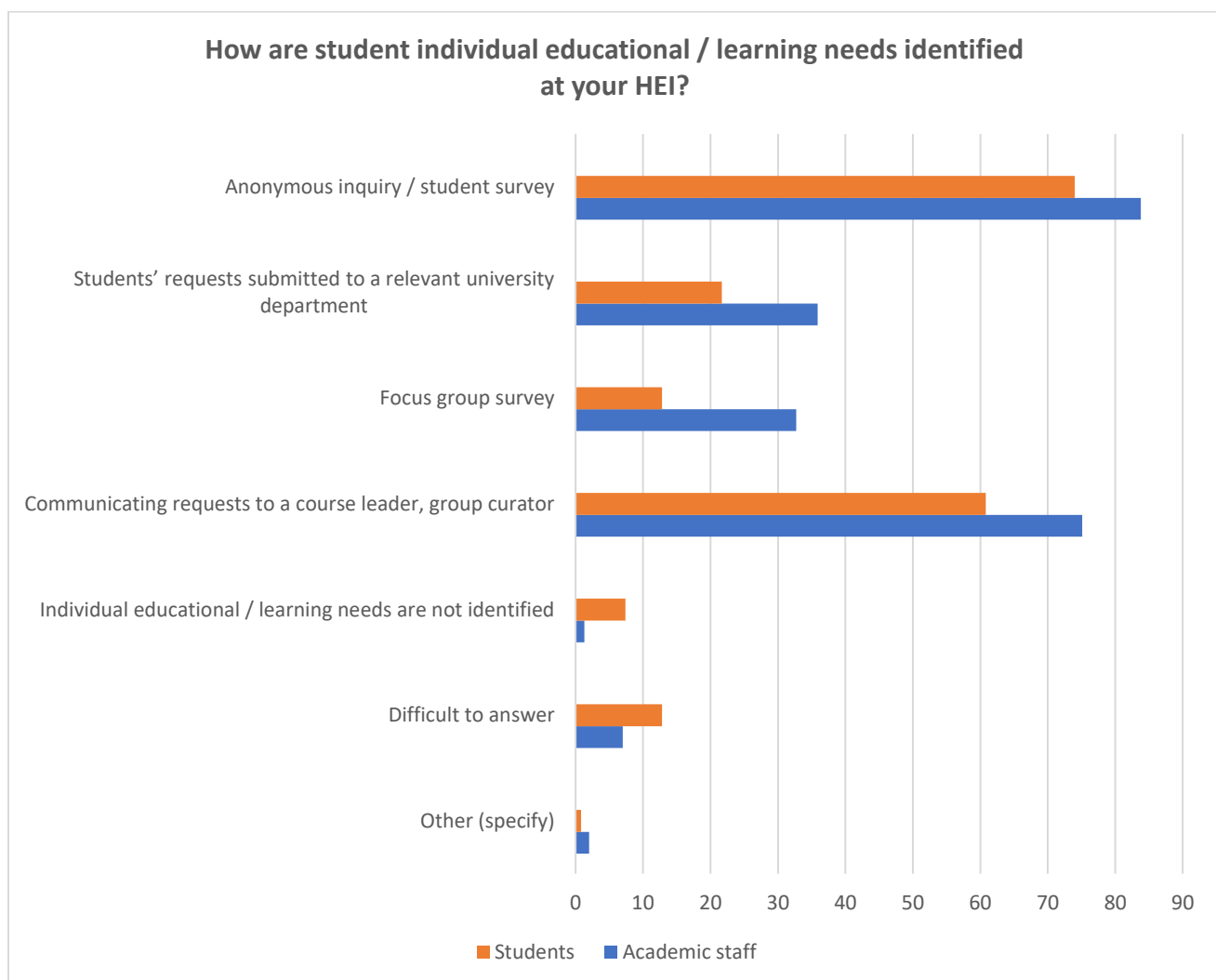




2. How are student individual educational / learning needs identified at your HEI?

	Academic staff (596)		Students (1189)	
	Persons	%	Persons	%
Anonymous inquiry / student survey	500	83,8	880	74
Students' requests submitted to a relevant university department	214	35,9	259	21,7
Focus group survey	195	32,7	153	12,8
Communicating requests to a course leader, group curator	448	75,1	723	60,8
Individual educational / learning needs are not identified	8	1,3	88	7,4
Difficult to answer	42	7	153	12,8
Other (specify)	12	2	10	0,8

How are student individual educational / learning needs identified at your HEI?

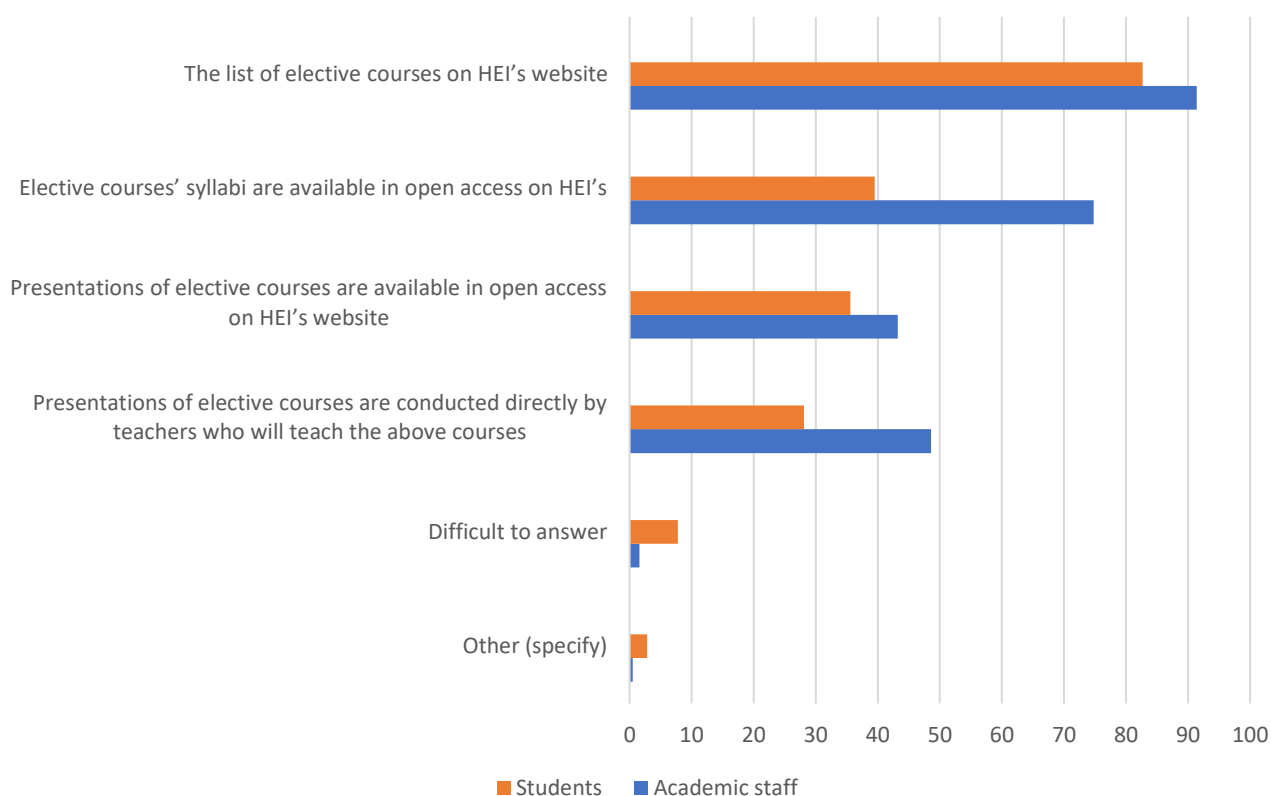




3. How are students informed about the content of elective courses at your HEI?

	Academic staff (596)		Students (1189)	
	Persons	%	Persons	%
The list of elective courses on HEI's website	545	91,4	984	82,7
Elective courses' syllabi are available in open access on HEI's	466	74,8	470	39,5
Presentations of elective courses are available in open access on HEI's website	258	43,2	424	35,6
Presentations of elective courses are conducted directly by teachers who will teach the above courses	290	48,6	335	28,1
Difficult to answer	10	1,6	93	7,8
Other (specify)	3	0,5	34	2,8

How are students informed about the content of elective courses at your HEI?

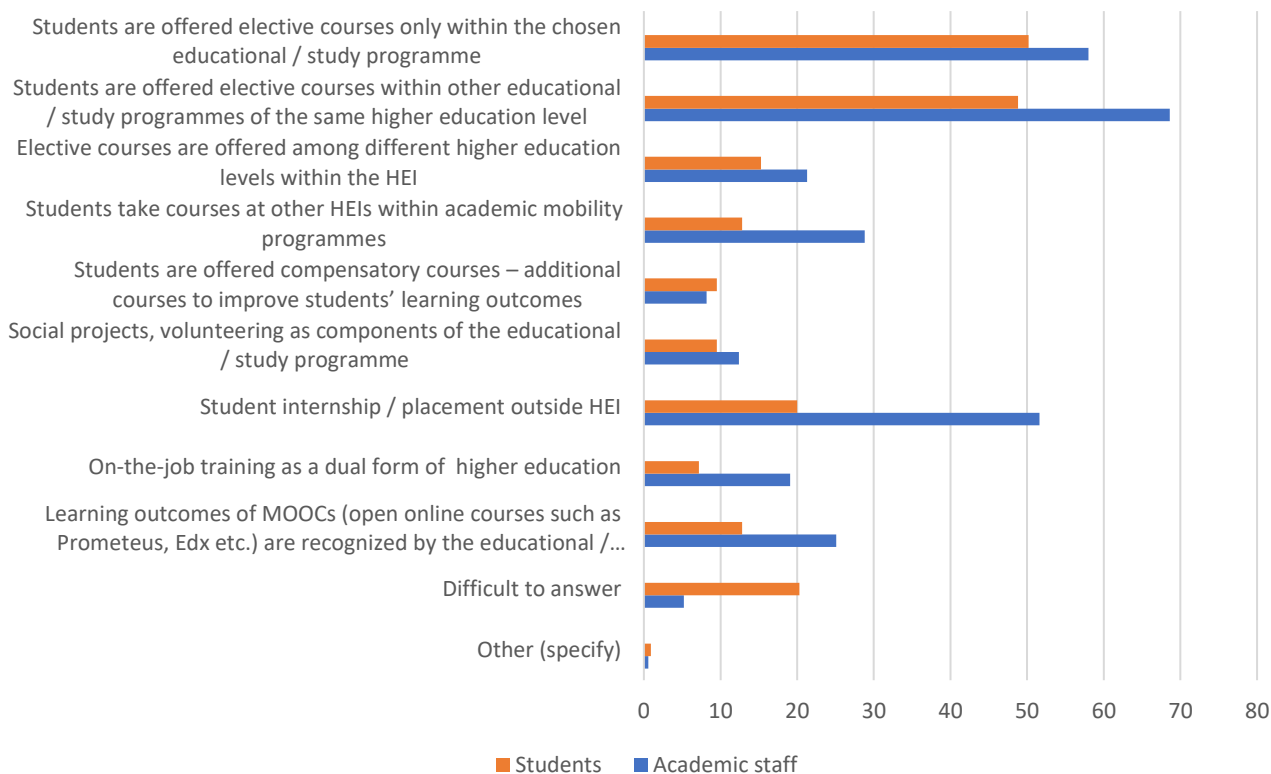




4. How are student individual learning pathways implemented at your HEI?

	Academic staff (596)		Students (1189)	
	Persons	%	Persons	%
Students are offered elective courses only within the chosen educational / study programme	346	58	598	50,2
Students are offered elective courses within other educational / study programmes of the same higher education level	409	68,6	581	48,8
Elective courses are offered among different higher education levels within the HEI	127	21,3	182	15,3
Students take courses at other HEIs within academic mobility programmes	172	28,8	153	12,8
Students are offered compensatory courses – additional courses to improve students' learning outcomes	49	8,2	114	9,5
Social projects, volunteering as components of the educational / study programme	74	12,4	113	9,5
Student internship / placement outside HEI	308	51,6	238	20
On-the-job training as a dual form of higher education	114	19,1	86	7,2
Learning outcomes of MOOCs (open online courses such as Prometheus, Edx etc.) are recognized by the educational / study programme	150	25,1	153	12,8
Difficult to answer	31	5,2	242	20,3
Other (specify)	4	0,6	11	0,9

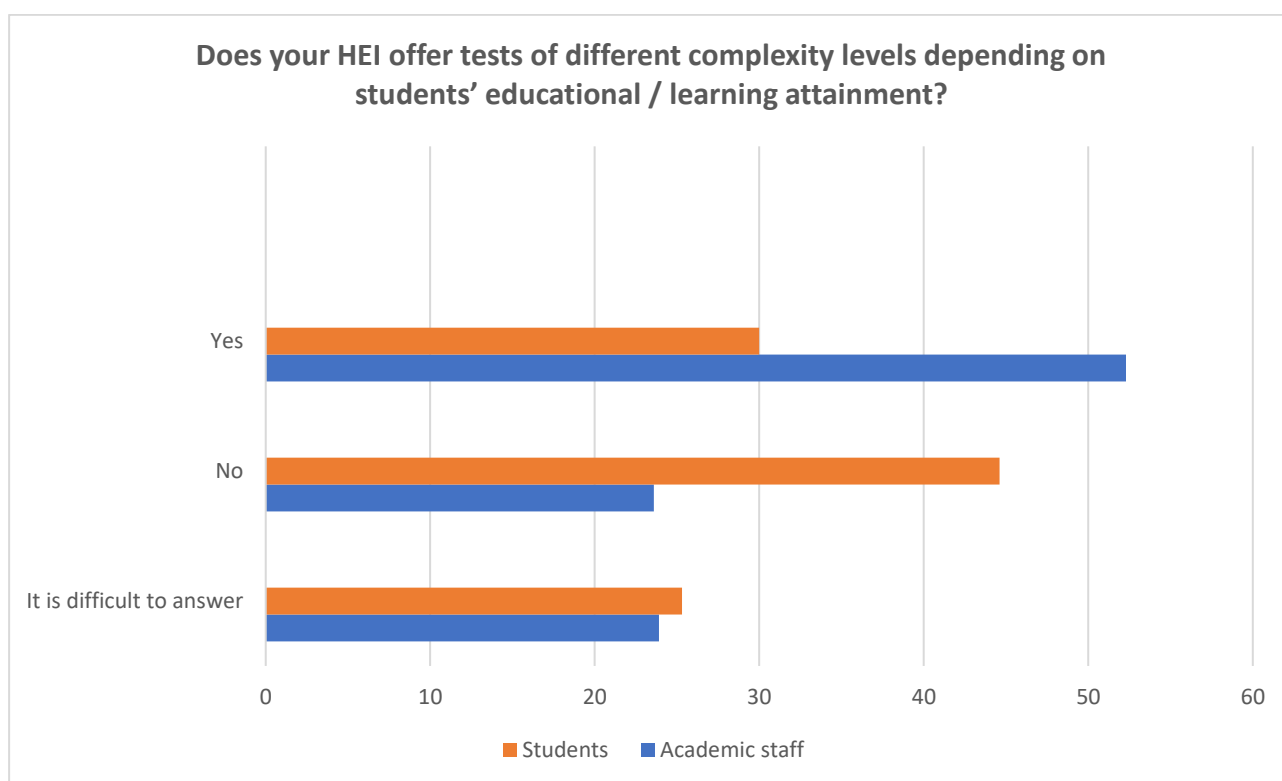
How are student individual learning pathways implemented at your HEI?





5. Does your HEI offer tests of different complexity levels depending on students' educational / learning attainment?

	Academic staff (596)		Students (1189)	
	Persons	%	Persons	%
Yes	312	52,3	357	30
No	141	23,6	531	44,6
It is difficult to answer	143	23,9	301	25,3

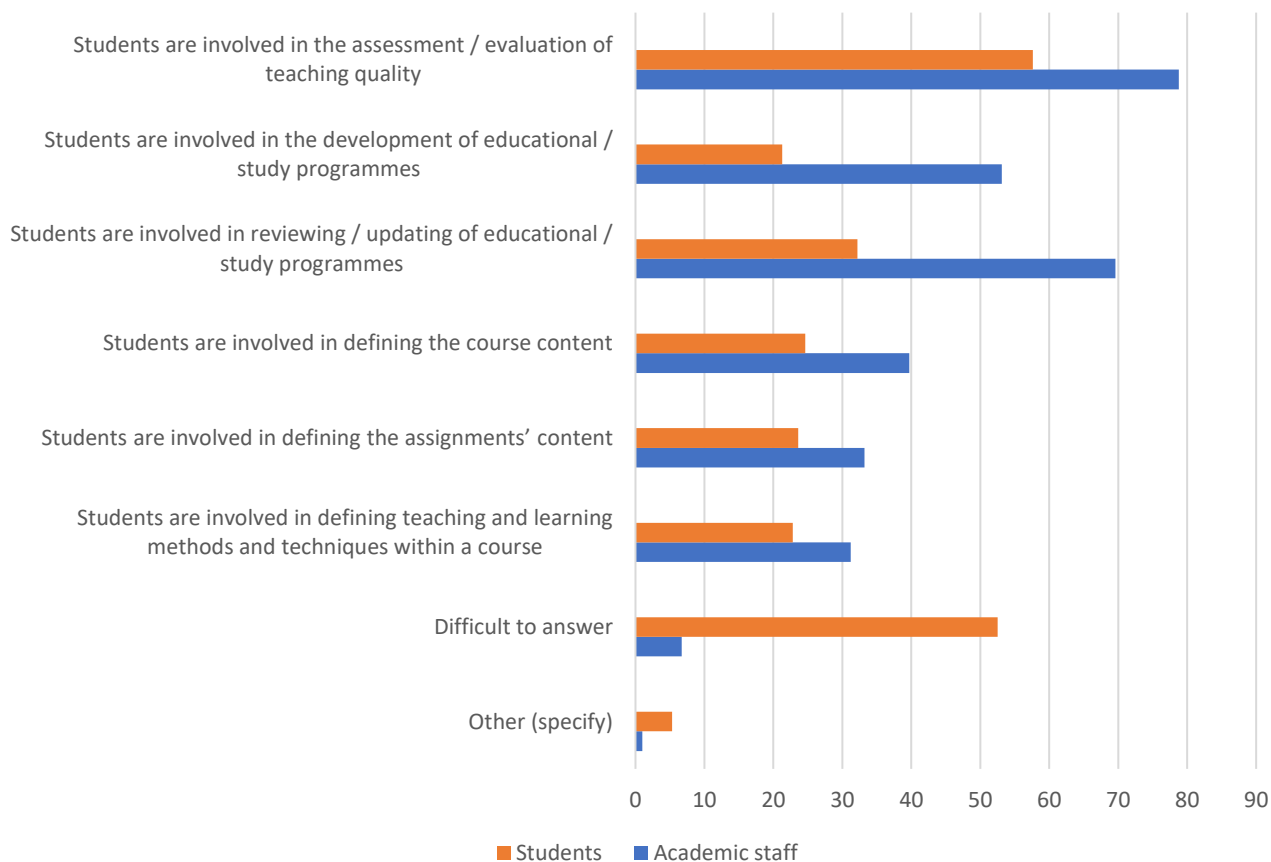




6. Which of the practices listed below are implemented in your HEI?

	Academic staff (596)		Students (1189)	
	Persons	%	Persons	%
Students are involved in the assessment / evaluation of teaching quality	470	78,8	685	57,6
Students are involved in the development of educational / study programmes	317	53,1	254	21,3
Students are involved in reviewing / updating of educational / study programmes	415	69,6	384	32,2
Students are involved in defining the course content	237	39,7	293	24,6
Students are involved in defining the assignments' content	198	33,2	281	23,6
Students are involved in defining teaching and learning methods and techniques within a course	186	31,2	277	22,8
Difficult to answer	40	6,7	313	52,5
Other (specify)	6	1	32	5,3

Which of the practices listed below are implemented in your HEI?

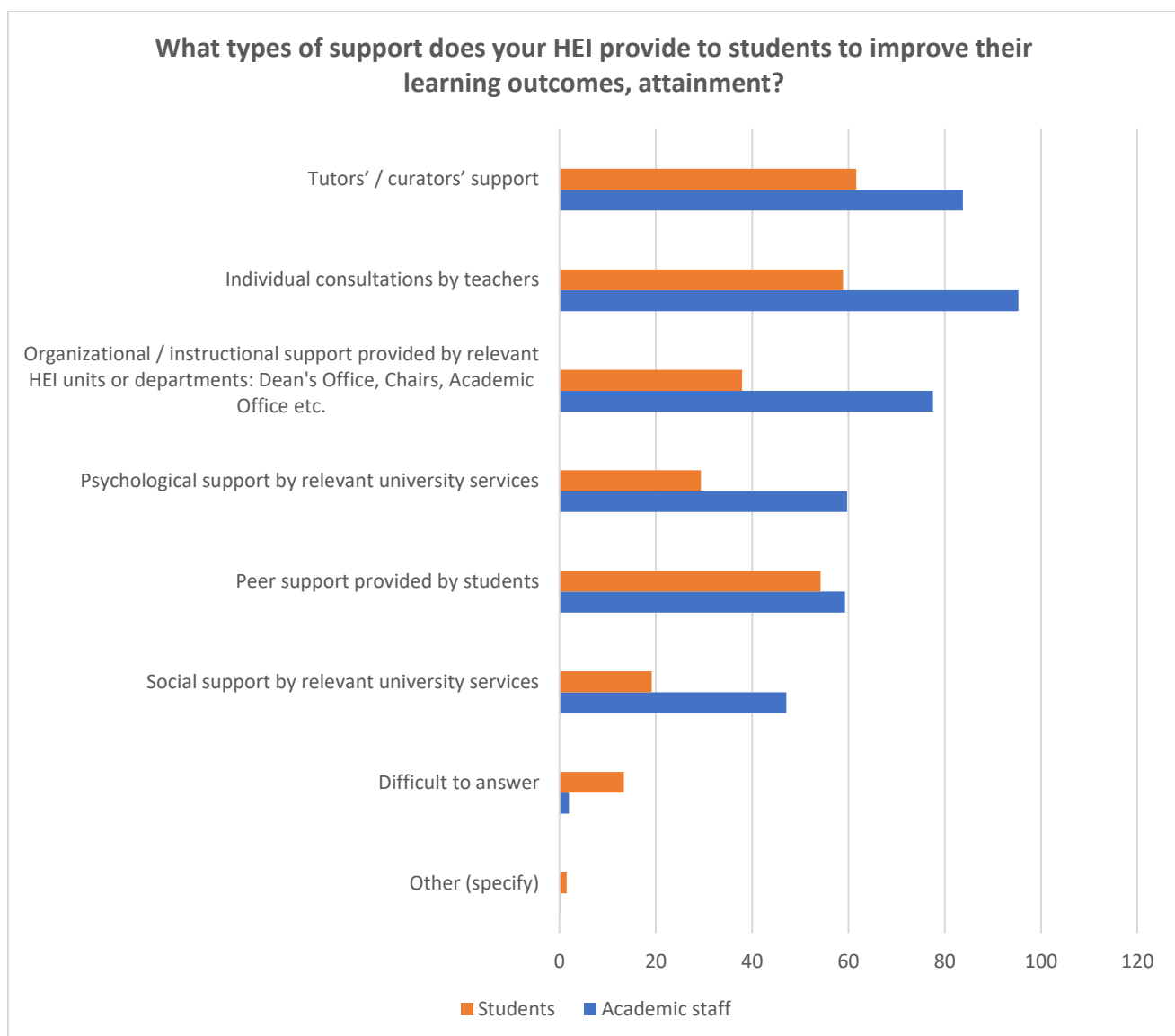




7. What types of support does your HEI provide to students to improve their learning outcomes, attainment?

	Academic staff (596)		Students (1189)	
	Persons	%	Persons	%
Tutors' / curators' support	500	83,8	733	61,6
Individual consultations by teachers	568	95,3	701	58,9
Organizational / instructional support provided by relevant HEI units or departments: Dean's Office, Chairs, Academic Office etc.	463	77,6	451	37,9
Psychological support by relevant university services	356	59,7	350	29,4
Peer support provided by students	354	59,3	645	54,2
Social support by relevant university services	281	47,1	229	19,2
Difficult to answer	12	2	160	13,4
Other (specify)	1	0,1	19	1,5

What types of support does your HEI provide to students to improve their learning outcomes, attainment?





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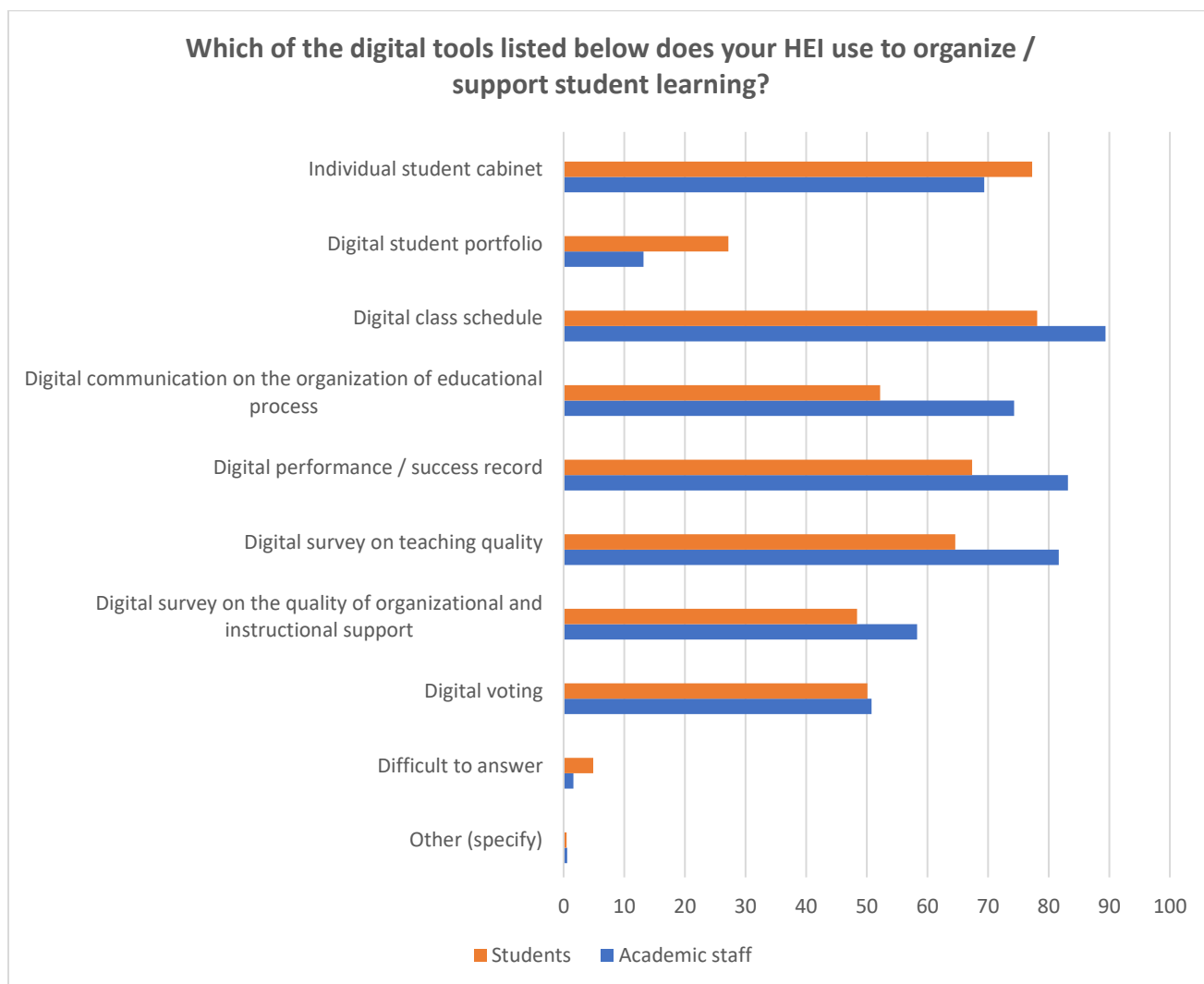
This Project has received funding from the European Commission ERASMUS+ Programme under grant agreement no. 101082928.



Project Name:
Students' Personalised Learning Model, Based on the Virtual Learning Environment of Intellectual Tutoring "Learning with No Limits"

8. Which of the digital tools listed below does your HEI use to organize / support student learning?

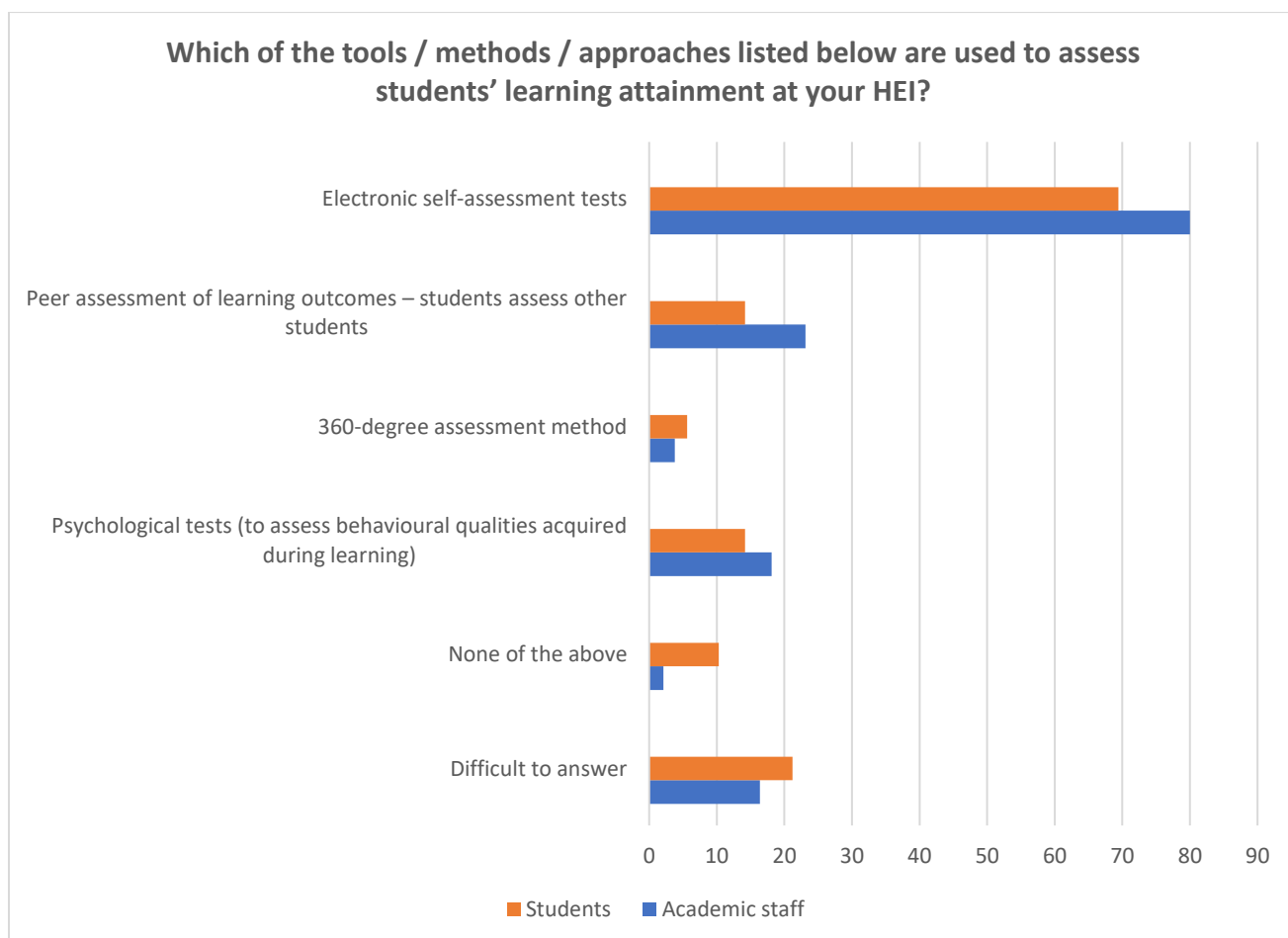
	Academic staff (596)		Students (1189)	
	Persons	%	Persons	%
Individual student cabinet	414	69,4	920	77,3
Digital student portfolio	79	13,2	324	27,2
Digital class schedule	533	89,4	929	78,1
Digital communication on the organization of educational process	443	74,3	621	52,2
Digital performance / success record	496	83,2	802	67,4
Digital survey on teaching quality	487	81,7	769	64,6
Digital survey on the quality of organizational and instructional support	348	58,3	576	48,4
Digital voting	303	50,8	596	50,1
Difficult to answer	10	1,6	59	4,9
Other (specify)	4	0,6	6	0,5





9. Which of the tools / methods / approaches listed below are used to assess students' learning attainment at your HEI?

	Academic staff (596)		Students (1189)	
	Persons	%	Persons	%
Electronic self-assessment tests	477	80	826	69,4
Peer assessment of learning outcomes – students assess other students	139	23,1	170	14,2
360-degree assessment method	23	3,8	67	5,6
Psychological tests (to assess behavioural qualities acquired during learning)	108	18,1	169	14,2
None of the above	13	2,1	123	10,3
Difficult to answer	98	16,4	255	21,2





11. Conclusions

1. *Institutional policies and PL.*

- PL is "sewn up" / embedded into most institutional policies, starting with university strategies and quality codes and ending with the regulations on mobility, individual pathways, elective courses etc.
- The study did not reveal separate institutional policies directly targeted on PL.

2. *Infrastructure, environment, tools, technologies, LMS, digitalization etc. for PL.*

- As a rule, typical university infrastructure that provides PL includes different capacities for learning, tools, co-working zones, platforms, communication tools, technical and support services etc.
- Digitalization is one of the key ways and tools to realize and improve PL that covers LMSs, digital infrastructure, equipment and software, development of digital skills, e-learning and e-teaching materials, e-tests etc.
- Mobility is a widespread and effective tool in personification of student learning pathways and personal development.

3. *University departments and staff responsible for PL.*

- PL is a task and responsibility of many and different university departments and staff.
- Realization of PL in the university is the result of common efforts of different units and services as well as special responsible staff (tutors, curators, mediators, counsellors, facilitators etc.).
- As a rule, Dean's Offices and Programme Directors consult students and provide the support on issues related to studies / a study programme.

4. *QA system in the university and PL.*

- Personification in terms of quality assurance means providing equal opportunities for all groups of students, participation of students in curricula development and improvement, impact of student voice on quality of learning, teaching and social services.
- Accreditation of educational programmes includes criteria oriented on PL.

5. *Students and PL: individual needs; individual learning pathways / trajectories; elective courses / modules; formative assessment; support and tutoring; community of learners; engagement and active role in education process; collaboration with teachers; impact into study content and methods etc.*

- Students are active creators of their own PL by determining individual learning needs, forming individual learning pathways, providing impact on content and format of study process (teaching and learning), participating in evaluation and decision-making etc.
- Student Unions and other student bodies are key actors in the direction and support of university efforts on PL.

6. *University teachers and PL: innovative methods of teaching and learning; pedagogic strategies for PL; training and support for university teachers on PL; PL and personalized teaching (PT) etc.*

- Universities support and motivate teachers to improve the teaching process with the focus on PL by development and implementation of innovative practices, pedagogical strategies and learner-centred teaching methods.
- Universities offer and develop a wide spectrum of services for the professional development of teachers on PL (including special units / centres/ labs, training programmes, initiatives, projects, competitions, researches, coaching, tutorial sessions, mentors, peer-to-peer support etc.)



7. Management and PL: reflection, feedback, evaluation and decision-making on PL.

- Student evaluation of teaching, courses and organisation of studies is a regular and obligatory element of university life.
- Such feedback, on the one hand, reflects personalized opinions on university processes. At the same time, student feedback provides information for decision-makers on how to provide and improve PL.
- Results of student evaluation are recorded and taken into account in the staff portfolio.
- The European universities use educational data mining for providing information about the learning process and learner behaviour in design personalized learning systems.

8. Inclusion in education process.

- Inclusion in education process concerns the facilities for students with disabilities, special status and exceptional individual circumstances.
- Inclusion aims at creating a space to ensure that a student feels safe and completes the educational programme without unnecessary obstacles.
- Inclusion is provided by special infrastructure as well as special policies, procedures, support and culture.
- The European universities – partners of the Projects – have provided more specific and practically oriented information about implementation of inclusion in their universities. Information provided by Ukrainian partner universities is more general and formal.

9. Other important information

- The information obtained as a result of student and staff survey in the Ukrainian universities is of value and has to be taken into account by the concrete universities to improve their PL approach as well as at level of the Project implementation, in particular for organization of trainings for staff development.
- The survey showed that Ukrainian universities have a wide spectrum of policies, procedures, tools, methods, forms etc. to provide PL-approach in education process.
- But at the same time, the answers on request to describe specific practices, procedures, tools are quite general, formal and not specific. Another revealed contradiction is the significant differences in some of the answers of the students and the teachers. The mentioned facts may indicate the presence of certain problems that require additional clarification.