MENTOR 2.0

Erasmus+

Mentoring in Polish School Systems

State of the art and future scenarios

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MENTOR 2.0

Cooperation Partnerships in School Education

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Result 1: Mentor 2.0 Curriculum

REPORT

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Mentoring in the Polish School System
State of the art and future scenarios

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Author: Joanna Bochniarz
Contributor: Jakub Urbański.

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Introduction

This publication collects the results of research carried out in Poland to analyze the state of the art and opportunities for modernizing the national education system, particularly with regards to the paradigm shift in teachers' role, from knowledge transmitters to mentors for their students. The research work was conducted through desk research, surveys and focus groups with primary, lower and upper secondary school teachers and students, and focused on the country's regulatory context and latest policy developments supporting mentoring in formal education, as well as teachers' and students' perspectives about the needs and gaps in the preparation of educators towards a mentor's role. The analysis covered multiple topics, relevant to support the desired paradigm shift, such as:

- competences and tools for strengthening students' self-motivation;
- competences and tools for discovering and managing talents;
- current practices to foster team building at school, in the classroom and during outdoor learning;
- available and needed digital tools to enhance inclusive education;
- the school's role in the circular economy;
- current practices and needs to foster the cooperation between schools and external environments, particularly employers;
- competences, practices and tools for preparing students to make educational and professional decisions about their future.

Therefore, this report aims to provide a detailed picture of the missing tools and competences for the enhancement of mentorship in formal education and, ultimately, to select the elements of the existing *Mentor Programme*, good practice developed by the Polish Center for Innovative Education and enrich it in order to develop **a new innovative curriculum for teachers** to be transferred to a digital environment through the Mentor 2.0 project.

1. Mentoring in School Education: The Polish national context

This chapter analyses Polish regulations and the latest policy developments that directly or indirectly support mentoring structures in the national formal education system. Particularly:

- direct support, such as activities directly related to improving mentoring tools and skills in schools. They can be found, for example, in initiatives that had their origins in the 1990s. However, they appeared mainly in education at the university level, mainly based on inspirations from the classic forms of the Anglo-Saxon tutorial system, derived from the education of students at the universities of Oxford and Cambridge. They are discussed in section 1.1 of this publication;
- indirect support can be found in multiple measures and guidelines addressing transversal topics that are essential to support effective mentoring programmes in school environments, such as:

  a. students' soft skills development (section 1.2);

  b. digital tools enhancing inclusive education (section 1.3);

  c. school's role in circular economy and practical environmental education (section 1.4);

  d. cooperation between schools and external environments, particularly employers (section 1.5).

In order to inscribe such measures in the wider national system and, particularly, in the key decision-making sphere, below the main institutional stakeholders are presented:

Responsible institution for developing pedagogical content in Poland	Article 47 sec. 1 of the Act of 14 December 2016 - Education Law obliges the minister responsible for education and upbringing - currently heading the Ministry of Education and Science - MEiN - to determine the core curriculum by way of a regulation. The minister of the Ministry of Education and Science appoints a team of experts creating individual core curricula: "academic teachers, experienced teachers of particular types of schools, methodologists, experts in the examination system, as well as experts in the field of special educational needs."
Decision-makers in the general curriculum content	The Minister of Education and Science prepares guidelines and supervises the process of creating the curriculum. However, the Ministry of Education and

	Science does not interfere in the way individual teachers are taught. According to Art. 51 sec. 1 point 1 of the Education Law, the superintendent of education, on behalf of the voivode, exercises pedagogical supervision over schools at the voivodeship level. The pedagogical supervision mentioned here, according to art. 55 sec. 2 point 2 of the Act, in particular the implementation of the core curriculum. The method of teaching is also verified by education authorities. The education authorities carry out inspections: regular and in the event of reporting potential irregularities
Institution responsible for initial teacher training	The provisions of the Regulation of the Minister of Science and Higher Education of July 25, 2019 on the standards of education in preparation for the teaching profession define the requirements that must be met by all postgraduate study programs preparing for the teaching profession, regardless of whether teaching takes place at a state or private university.
Potential obstacles for integrating Mentor 2.0' results in schools	The main barrier to the implementation of Mentor 2.0 solutions in Polish schools is the lack of teachers' time. If educators do not find the digital Mentor a useful tool, they will not use it. If Polish teachers really increase their motivation, will know how to find students' strengths or support them in further development thanks to Mentor 2.0, they will also use the tools we have developed at school. Even if other teachers or principals are not in favor of these tools, they should not block their use by other educators in the school.

1.1 Mentoring in the National Recovery and Resilience Plan

According to Greek mythology, Mentor was a friend of Odysseus, who entrusted him with the care of his wife Penelope and son Telemachus when he set out for Troy. The mentor became Telemachus' teacher, a master who not only shared his knowledge, but also listened, asked difficult questions to his ward and tried to support his development in the best possible way. "Mentoring sees the person as a whole, and its goals are to support the broad development

of the individual, including their psychosocial functions. It is most often associated with professional development in the workplace and the care of academic teachers over the student. It can also be successfully used in various educational and upbringing institutions". Nevertheless, due to the rapidly changing labor market, students of primary and secondary schools expect their teachers to also be able to share their knowledge about the professions of the future and advise them on how best to build their educational and professional path. Mentoring is therefore supposed to be "[...] a process that stimulates and supports learning" [1].

Already in the Preamble to the core curriculum, further developed in its third part, the goals of the child's development and the effects that should be achieved by the student in specific years of work (at the first level - grades 1-3 of primary school and at the second educational stage) are clearly set out.) so as to be prepared to start learning at the next stage of education or to start a professional career. "The most important goal of education in primary school is to care for the integral biological, cognitive, emotional, social and moral development of the student." This means that the Polish core curriculum is based on values close to those implemented by mentors as part of the original MENTOR program created by CIE.

In addition, since 2008, tutoring based on the educational experience of the ALA Author's Artistic and Academic High Schools and the ASSA Author's School of Self-Development, managed by the School Tutoring Institute of the Open Education Association, has been implemented in some Polish schools as a bottom-up initiative. This educational practice covered 111 Polish schools between 2017 and 2021 and owes its popularisation to a thorough research procedure.

In turn, since 2015, the Centre for Innovative Education has been training primary and secondary school teachers and principals to become student mentors. This is also an out-of-system initiative, not funded by national programmes. In some cases (the cities of Bielsko-Biała, Poznań, the Marshal of the Wielkopolska Voivodeship), MENTOR workshops have been publicly funded, but so far these are exceptional situations rather than structural solutions. By November 2022, the Centre for Innovative Education had trained more than 130 school principals and more than 220 primary and secondary school teachers across Poland, primarily trying to reach educators from smaller towns.

The implementation of the MENTOR programme and the research carried out as part of the Mentor 2.0 project have identified a number of barriers to the full implementation of Polish teachers as mentors for their students. The biggest obstacles are related to the overloaded core curriculum and the overemphasis on the administrative tasks of educators rather than

[1] Parsloe E., Wray M, (2002) „Trener i Mentor", s. 81.

their individual work with students. This is also confirmed by the results of other published studies. "The implementation of the aforementioned methods, although tempting in terms of novelty and (seemingly) 100 per cent effectiveness, requires organisational changes in each organisation, which are usually costly and lengthy." Mentoring thus provides an opportunity to work effectively in a school on a master-apprentice basis with an emphasis on the all-round development of the young person rather than on the transmission of knowledge. No less without the facilitation of teachers and the adaptation of the core curriculum to their new role, structural changes in Polish formal education will not be possible.

1.2 Soft skills development

According to the Polish core curriculum, general education aims to:

- ⇒ introduce pupils to the world of values, including self-sacrifice, cooperation, solidarity, altruism, patriotism and respect for tradition; indicate models of behaviour and build social relations conducive to the safe development of the pupil (family, friends);
- ⇒ strengthen the sense of individual, cultural, national, regional and ethnic identity;
- ⇒ form students' sense of self-dignity and respect for the dignity of others;
- ⇒ develop competences such as creativity, innovation and entrepreneurship;
- ⇒ develop critical and logical thinking, reasoning, argumentation and inference skills;
- ⇒ demonstrate the value of knowledge as a basis for the development of skills;
- ⇒ stimulate pupils' cognitive curiosity and motivation to learn;
- ⇒ equip pupils with the kind of knowledge and skills that enable them to understand the world in a more mature and structured way;
- ⇒ support pupils in recognising their own predispositions and determining the path of further education;
- ⇒ comprehensive personal development of a student through deepening knowledge and satisfying and stimulating his/her natural cognitive curiosity;
- ⇒ shaping an attitude of openness towards the world and other people, activity in social life and responsibility for the community;
- ⇒ encourage structured and conscious self-education based on the ability to prepare one's own work;
- ⇒ guide the student towards values.

This canon largely corresponds to the values the mentor aims to develop in the students. In addition to the core curriculum, since the class-room reform of 1999, teachers autonomously create or select for implementation and interpretation one curriculum most relevant to the developmental needs of their classes . This autonomy is in accordance with educational law, provided that the chosen curriculum is based on the core curriculum.

The primary aim of formal education at the first and second level of education is therefore to support the pupil holistically in his or her development. The teacher is obliged to stimulate learning situations that will develop all areas of the child's development. The core curriculum also places great emphasis on an individual approach to each pupil, looking for personal predispositions and strengths in each pupil and avoiding didactic mechanisms that randomly test the level of knowledge acquired by the child. Tests, quizzes and examinations should therefore be replaced by careful observation and diagnosis taking into account the student's environmental conditions. Unfortunately, as already indicated in subsection 1.2 above, the Polish education system does not provide teachers with the space in which they could implement the assumptions contained in the core curriculum. In particular, the educational system does not provide them with sufficient time to focus on the development of their students' transversal competences.

1.3 Digital tools in school enhancing inclusive education

In almost half of the European education systems, including Poland, digital competence is defined as a key competence by referring to the European Key Competence and is taught at all three school levels. Of the 21 digital competences described in the DigComp reference framework, the Polish core curriculum stipulates among the digital learning outcomes group problem solving using technology, creating a secure digital identity, creating and editing digital content in different formats and expressing oneself through digital means. However, 76% and 79% of upper secondary and lower secondary students, respectively, never or hardly ever undertake such activities. Significant differences can also be observed with regard to the gender of students already in lower secondary schools, with more boys than girls engaging in programming. This becomes even more apparent in upper secondary schools, where 85% of girls never or hardly ever engage in programming compared to 66% of boys.

In Polish primary schools, digital competences are taught as a separate compulsory subject. The new core curriculum for teaching digital education includes the introduction of programming from the first grade of primary school. Recommendations include the use of ICT skills in classes other than computer science and an increase in the number of hours of computer science teaching (+70 hours - from 210 to 280 hours).

In addition, in the Polish education system, the Ministry of Education and Science participates in the implementation of in-service teacher training in the area of digital education and has included it in the standards for teacher education. Teachers' competences include basic ICT knowledge and skills (e.g. word processing, use of spreadsheets, databases, presentation graphics and IT network services, and information retrieval and processing). At the same time,

there are no provisions measuring the digital competences of teachers prior to their work in education.

"The effectiveness of the development of digital competences depends primarily on the state of knowledge and skills of teachers and the appropriate adaptation of the school environment and curricula - so that the school equips graduates with the necessary competences to move efficiently in modern society" . The necessity to develop digital competences in view of the challenges posed to society by the pandemic situation was also recognised by the authors of the draft resolution of the Council of Ministers of 2021 on the establishment of a multiannual government programme called the Programme for the Development of Digital Competences (PRKC), as well as in the annual "Basic directions for the implementation of the educational policy of the state in the school year" from 2014 onwards. Nevertheless, Polish teachers still assess ICT learning in formal education as anachronistic and not keeping up with the digital transformation we are witnessing.

1.4 School's role in the circular economy

"From kindergarten onwards, children learn about ecology. At school, in various educational activities, pupils learn about environmental protection, climate change, saving energy, water, raw materials, segregating and reusing waste. They develop their environmental competences. Underlining the importance of the topic of environmental education, the Ministry has introduced a provision that obliges teachers to discuss the most relevant climate and environmental issues with their pupils in their classes with educators as early as 1 September 2020."
Examples of environmental education teaching content listed in the core curriculum are listed below by primary school (first-level education and lower secondary education) and secondary school (upper secondary education).

Primary school

- Technology - adopting a pro-environmental attitude; an attitude of responsibility for the present and future state of the environment; developing the ability to separate and reuse waste found in the immediate environment; eco-technologies to help protect the environment; environmentally sound handling of technical products, especially used ones.
- Geography - the impact of human activity on the atmosphere using smog as an example, hydrological investments on the geographical environment, agriculture, mining and tourism on the geographical environment, transport on living conditions and the degradation of the natural environment, human-environmental conflict of interest, revitalisation processes and pro-environmental action.

- Biology - the student presents lichens as indicator organisms, assesses the degree of air pollution by sulphur oxides, using the lichen scale; presents renewable and non-renewable resources of nature and proposals for rational management of these resources in accordance with the principle of sustainable development.
- Chemistry - the pupil: identifies the causes and effects of the decrease in the concentration of ozone in the stratosphere of the Earth; proposes ways to prevent the expansion of the "ozone hole"; lists the environmental factors that cause corrosion; describes the oxygen and carbon cycles in nature; designs and carries out an experiment proving that air is a mixture; describes the composition and properties of air; lists the sources, types and effects of air pollution; lists ways to protect the air from pollution.

1.5 Cooperation between schools and external environments

The key role of employers in vocational education has been reflected in the Education Law. Article 3 of the Act was clarified, according to which the education system in the field of vocational education is also supported by employers, employers' organisations, economic or other economic organisations, associations or professional self-governments, sectoral competence councils and the Programme Council for Competence .

By virtue of Article 68(7c) of the Act of 14 December 2016. - Education Law, this obliges the headmaster to establish cooperation with an employer competent for the profession or industry to which the profession is assigned or with a person who runs an individual farm before introducing a new profession into school education. Such cooperation is carried out within the framework of a contract or agreement covering at least one cycle of education and may consist, in:

⇒ creating patronage classes,
⇒ implementation of vocational education, including practical vocational training, in cooperation with employers,
⇒ equipping workshops or school workshops,
⇒ organisation of vocational examinations,
⇒ in-service training of vocational education teachers, including the organisation of professional training,
⇒ implementation of vocational counselling and promotion of vocational education.

A patronage class should be understood as a class covered by the patronage of a specific company. The patron, in agreement or on the basis of a contract or agreement concluded with the school, declares support for the educational process, which may take various forms, e.g.

admission of pupils to apprenticeships, equipping school laboratories with equipment and teaching materials, additional training, funding scholarships for the most talented. In addition, the patron can participate in the development of a curriculum tailored to the demand profile of his company. The employer, as cooperating with the school or jointly implementing the vocational curriculum, can also participate in the meetings of the educational board. Representatives of employers' organisations, associations or professional self-governments and sectoral competence councils may also attend council meetings in an advisory capacity.

The obligation for the headmaster of a school providing vocational education to establish cooperation with an employer applies in the school years 2019/2020 - 2021/2022 to schools starting education in new professions, and from the school year 2022/2023 and in subsequent school years to all schools providing vocational education. This obligation does not apply to upper secondary sector schools, as vocational education there will be provided in qualified vocational courses.

Unfortunately, the Education Law does not regulate the issue of cooperation of non-vocational schools with employers.

2. Teachers-Mentors at School: Surveys

In the months of June - September 2022, the Center for Innovative Education - CIE conducted online surveys addressed to Polish teachers and students of primary and secondary schools. The survey was designed by the transnational project team MENTOR 2.0, led by the Center for Innovative Education, and involved over 400 teachers and over 400 students in Austria, Greece, Italy, Poland, and Spain. In Poland, 72 students and 197 teachers participated in the study and presented their views on the needs of educators and students in the field of training and tools supporting the process of student development.
The surveys were conducted via an online platform to reach teachers and students in their homes instead of at school. This was to ensure appropriately neutral conditions for completing the surveys.

2.1 Survey Analysis: Teachers

Composition of the group. The questionnaires for teachers included a total of 27 questions, including 15 open-ended and 12 closed-ended questions.

Question 1	You are a: [1] primary school teacher, [2] lower secondary school teacher, [3] upper secondary school teacher, [4] other.

As determined by Question No. 1, the majority of the surveyed teachers were teachers of primary grades 4-8 (128 people - 56%), then teachers of primary grades 1-3 (58 - 25% of all respondents), and 43 - 19 % of all surveyed teachers were secondary school teachers.

Questions 3-4-5	Question 3: Could you identify your strengths and/or any particular talents that distinguish you in your role as a teacher? Question 4: If you ticked "Yes" in the previous question, provide a minimum of three examples. Question 5: If you ticked “No” in the previous question, what talents/strengths would you like to develop in yourself as a teacher? Name at least three.

This set of questions is aimed at assessing teachers’ self-awareness competence, particularly the ability to recognize their strengths and talents.

181 – 95% of respondents were able to show their strengths as teachers. The most common examples of teacher strengths were:

• good contact with the student: empathy, listening, patience (69% of teachers);

• work organization and responsibility (48% of respondents);

• creativity and innovation (45% of teachers).

Only 18% of teachers indicated commitment/enthusiasm/passion in the teaching process as their strengths, which distinguish them as teachers.
5% of respondents do not see their strengths or talents that distinguish them as teachers.

Questions 2-6-7	Question 2: As a teacher, what support do you need the most in terms of developing students' transversal (soft) competences such as critical thinking, innovative, reflection and communication skills, collaboration, internal motivation, perseverance, leadership? Question 6: During the last year, have you participated / participated in training courses on building student teams, working in groups, or managing the classroom? Question 7: If you ticked "Yes" in the previous question, please provide the names of the training or topics.

This set of questions aimed at analyzing the needs of teachers in terms of learning opportunities for improving their educational practices addressed to develop their students' soft skills and build cohesive communities inside their classrooms.

78 respondents - 40% of all surveyed teachers would like to take part in workshops during which they would have the opportunity to improve their teaching skills.

Moreover:

• 30% of all surveyed teachers declare that they need support in motivating and supporting the perseverance of their students;

• 20% of all surveyed teachers declare that they need support in improving cooperation with parents and other teachers and

• 14% of all surveyed teachers declare that they need additional audiovisual materials in order to develop transversal (soft) competences of their students.

One teacher pointed to a specific example of support: "Training for students conducted by external experts. Less numerous classes (classes consist of 36 people)."

Another pointed out that students need: "transversal (soft) competences such as critical, innovative, reflective thinking and intrinsic motivation, perseverance

Over the last year:

• 137 teachers (72%) took part in team building training;

26% of teachers indicated that these trainings concerned the "integration of students after returning to school", both in the context of COVID quarantine and summer holidays.

Question 8	On a scale from 1 to 10 (where 1 is the least and 10 is the most), indicate to what extent you need to develop your skills to effectively manage student teams.

The most frequently indicated grade was 5 (out of 10) marked by 36 teachers (19%),

15 teachers (8%) marked the mark as 0, 1 or 2.

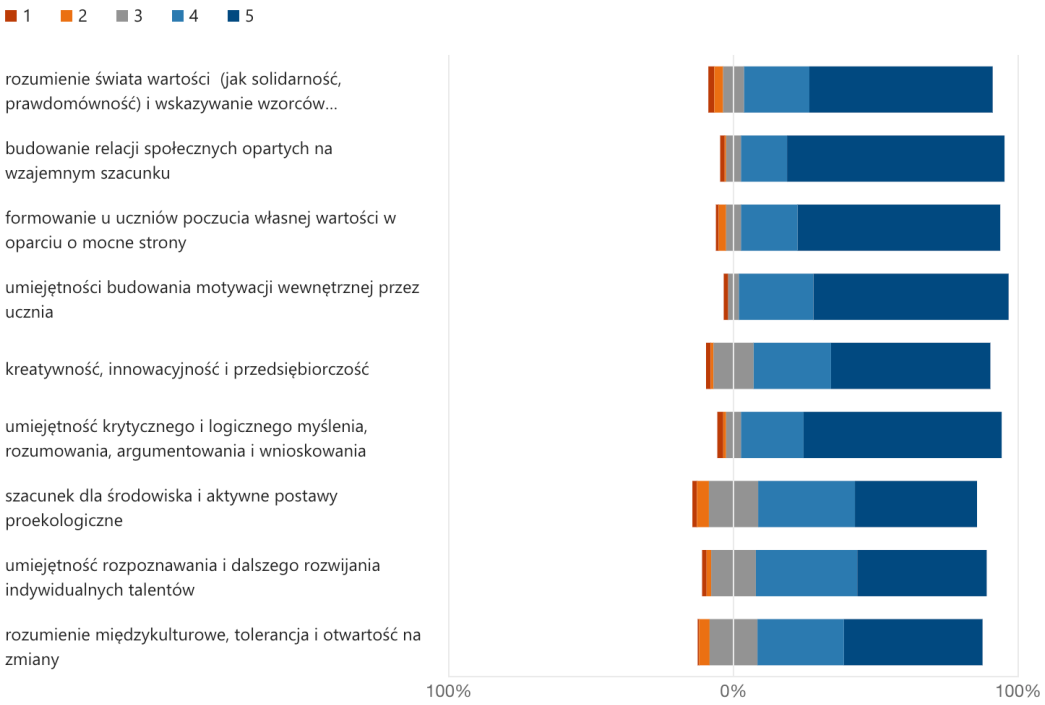
70 teachers (36%) marked the grade as 8, 9 or 10.

Translation:

- supportive - 35
- passive - 55
- critical - 101

Questions 9-10	Question 9: On a scale from 1 to 5, where 5 is the highest value and 1 is the lowest, indicate what you think should be developed in students first. Question 10: Other? What?

76% of the respondents considered building social relationships based on mutual respect of students as the most important value to be developed in students (average score of 4.65 out of 5).
71% of respondents considered the formation of students' self-esteem based on students' strengths as the most important value to develop in students (average score 4.58 out of 5).
70% of the respondents considered the ability of students to think critically and logically, reason, argue and draw conclusions as the most important value to be developed in students (average score of 4.56 out of 5).
69% of respondents considered the ability to build internal motivation by a student as the most important value to develop in students (average score 4.60 out of 5).
64% of respondents considered understanding the world of values (such as solidarity, truthfulness) and pointing to patterns of behavior as the most important value to develop in students (average score 4.45 out of 5).
56% of respondents considered creativity, innovation, and entrepreneurship of students as the most important value to be developed in students (average score of 4.35 out of 5).
49% of respondents considered the ability to recognize and further develop students' individual talents as the most important value to develop in students (average score 4.23 out of 5).
46% of respondents considered intercultural understanding, tolerance, and openness to change by students as the most important value to be developed in students (average score of 4.22 out of 5).
The least important value that requires development, but still highly indicated (with an average rating of 4.13 out of 5) turned out to be building respect for the environment and active pro-ecological attitudes.
According to one teacher, students need to develop self-confidence first: “Students answer questions from teachers and colleagues very quietly during the lesson; they are ashamed to say/read their answers or questions on the forum. They stand out from their foreign colleagues, who are much more confident." It is also important that the student has: "the ability to speak in public".



Questions 11-12

Question 11: On a scale of 1 to 5, where 5 is the highest value and 1 is the lowest, indicate what, in your opinion, should be the most important in everyday work with students?

Question 12: Other? What?

According to the majority of respondents (with an average grade of 4.63 out of 5), the main emphasis in everyday work with students should be on strengthening motivation.

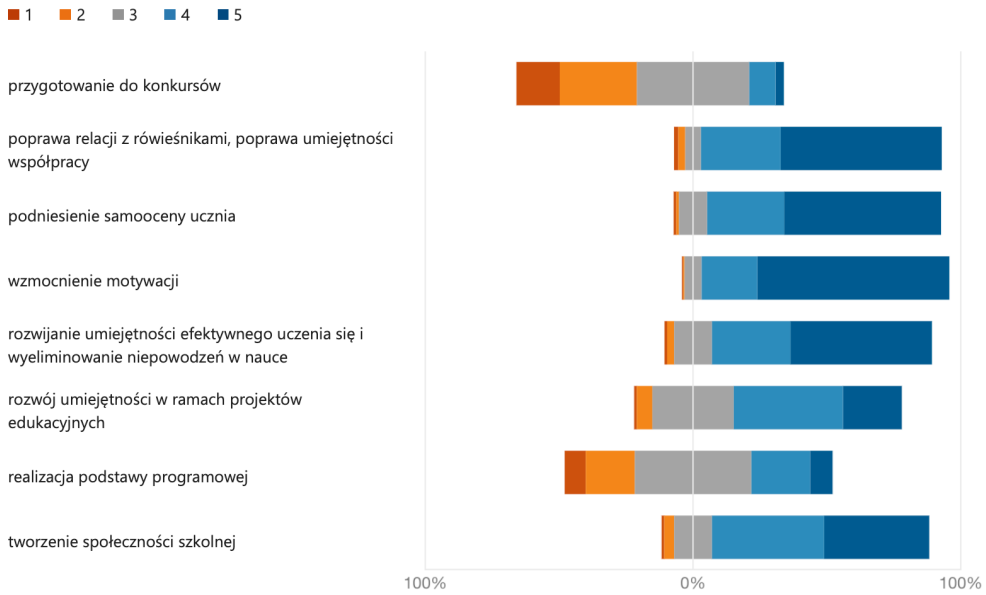
The second most popular answer (with an average rating of 4.45 out of 5) was improving peer relationships and improving cooperation skills.

Then in sequence:

- Improved relationships with peers, improved cooperation skills (4.45).
- Increasing the student's self-esteem (4.43).
- Developing effective learning skills and eliminating learning failure (4.30).
- Creating a school community (4.15).
- Skills development through educational projects (3.77).
- Implementation of the core curriculum (3.05).
- Preparation for competitions (2.55).

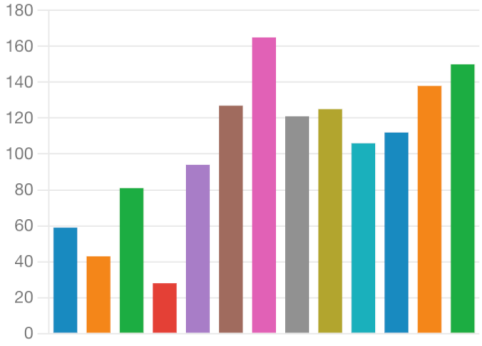
Only 8% of respondents (16 people) indicated the curriculum as one of the most important topics (value 5) that should be emphasized in everyday work with students.

3% of teachers (6 people) added that in everyday work with students, the greatest emphasis should be placed on teaching resourcefulness.



Question 13 Please indicate examples of mutual support and teacher learning that you use because you find them effective and necessary.

Frequent answers:
Examples of peer support and teacher learning:
Exchange of experiences 165 teachers, 86%
Exchange of information about students, class teams 150 teachers, 79%
Joint organization and conduct of activities (trips, competitions, events) 138 teachers, 72%
Joint project management 127, teachers 66%
Sharing knowledge gained from training 125 teachers, 65%
Mutual motivation of 121 teachers, 63%
Exchange of materials and teaching aids 112 teachers, 59%
Disseminating examples of good practice 106 teachers, 55%
Peer observation 94 teachers, 49%
Preparation of teaching materials 81 teachers, 42%
Developing work schedules 59 teachers, 31%
Development of lesson plans for 43 teachers.



Questions 14-15

Question 14: How often in your lessons do you use ICT (Information and Communication Technologies)?
Question 15: In which context would you most likely like to use ICT in your lessons?

Teachers indicated that they use ICT:
Every day - 116 teachers (60%);
Once a week - 50 teachers (26%);
Once a month – 15 teachers (8%);
Less or never – 10 teachers (5%).
30% of teachers would most like to use mobile applications and computer programs.
12 teachers (6%) would like to use interactive whiteboards to better cooperate with students.
According to one teacher, the school needs: "videos with experiments, various teaching materials: diagrams, drawings, charts, etc."

Comment:
This result should be compared with the results of the student surveys, which are discussed in more detail below in this Report.

Questions 16-17

Question 16: In your opinion, does the school equip students with practical knowledge and skills needed to choose the educational and career path?
Question 17: If you ticked "Yes" in the previous task, list which ones.

Frequent answers:

Only 32% of respondents believed that schools provide students with the practical knowledge and skills needed to choose an education and career path.
The most frequently mentioned forms of such assistance were:
vocational guidance (67%) and psychological assistance (22%).
Among the mentioned ways of equipping students with practical knowledge, there were ideas such as: "culinary classes, conducted in a specially adapted room", "Students getting to know their strengths and weaknesses", "competence tests, going to educational fairs".

Comment:

Many of the skills that, according to teachers, should be instilled at school are related to meetings with representatives of universities or entrepreneurs who can direct students to the directions of development necessary for the correct choice of educational and professional path.

Questions 18-19	Question 18: Do you do practical environmental education projects at school, such as discussing with students how to use less paper in your lessons? Question 19: If you ticked "Yes" in the previous task, provide examples.

Frequent answers:

115 respondents (60%) carry out environmental education projects at school. 76 (40%)
of teachers say that they do not take up this topic
4 teachers (2%) answered that they talk to students about ecology.
One of the teachers pointed out that "homework is digital".
One teacher boasted of having created an ecological garden in the school.
When it comes to tests on paper, teachers try to use used sheets or use both sides of the paper.

Questions 21	Question 21: Justify your choice.

According to 129 respondents (68%), their schools are developing strategic changes to move to a circular economy. Teachers justify this answer with the following examples:

- the school uses segregation of waste, collection of waste paper and widely understood recycling (eg batteries, paper) (64% of teachers);
- ecology competitions and meetings are organized (50% of teachers);
- the school uses energy saving methods (18% of teachers);

• in the school of one of the teachers, the save electricity campaign is organised.

According to one teacher at his school, "The restrooms have lights on all the time."

Questions 22-24

Question 22: Does your school cooperate with companies - potential employers of your students?
Question 24: What kind, in your opinion, should be a teacher-mentor - educator who in her/his work focuses more on supportive participation in students' development and less on transferring knowledge?
Question 23: If you marked "Yes" in the previous question, do you think students are aware of this collaboration?

25% of teachers stated that their school cooperates with companies – potential employers of their students.
The most frequently cited examples of such cooperation are:
• meetings and tours on company premises (17% of respondents);
• internships (8% of respondents).

According to 89% of teachers out of the 25% who believe that their school cooperates with employers, students are aware of such cooperation.

Important individual answers:

According to one of the teachers, the school organizes: "Activities on the premises of the plant, inviting employees to meetings with young people at school as part of the career counseling programme."
In another teacher's school, students attend: "site visits in the city".
One teacher pointed out that: "a large production company sponsors extracurricular sports activities".

Questions 25-28

Question 25: Would you like to improve your teacher's skills as a mentor?
Question 26: If you marked 'Yes' in the previous question, please explain the relevance to your daily work with students and what tools would be most useful to you.
Question 27: If you marked "No" in the previous task, please explain why.
Question 28: If you ticked "No" in the previous question, justify why.

According to 68% of respondents, a mentor or educator who focuses more on supporting students' participation in the development of students and less on transferring knowledge should be an open, accepting, empathetic and supportive partner.
4% of teachers (8 people) indicated that the mentor should be charismatic and inspiring.
Over 82% of all surveyed teachers want to improve their teaching skills as a mentor. “In order to properly support them, you first need to understand and diagnose them.”
9% of teachers (17 people) indicated the need for additional courses, training and workshops to motivate themselves and learn about the needs of students.

Important individual answers:

According to one teacher, a mentor should be: “creative, with broad horizons in various fields of science and social life”.
Another educator pointed out that "a teacher-mentor should give students a sense of security."
One of the pedagogue's answers was the statement that the teacher-mentor should be "equipped with the necessary pedagogical and psychological knowledge and skills, brave, reflective, innovative, keen on such a way of teaching, trusting in the effects of his work".
One of the teachers motivates the desire to improve his didactic skills as a mentor as follows: "The teacher's ability as a mentor will allow you to reach each student more, each student is different and each of them should be reached individually."
One teacher indicated that he was already a mentor to his students, so he did not need to further improve his skills.
13 respondents - 6.8% of respondents indicated that they did not want to improve their skills as mentors.
10 of them believe that it is impossible to mentor students because they are close to retirement. One of them believes that teachers are not able to play such a role in the Polish education system.

Summary

Strengthening internal motivation. 69% of respondents considered the ability to build internal motivation by students as the most important value to develop in students. At the same time, only 8% of respondents indicated the curriculum as one of the most important topics to focus on in everyday work with students. According to the majority of respondents (with an average grade of 4.63 out of 5), the main emphasis in daily work with students should be on strengthening motivation.

Talent discovery and management. 95% of the teachers who took part in the survey were able to name their strengths, and among them the most frequently mentioned was good contact with the student: empathy, listening, patience (69% of teachers). 71% of respondents considered the formation of students' self-esteem based on students' strengths as the most important value to develop in students.

Teamwork at school. Over the past year: 72% of the teachers who completed the surveys took part in team building training. In addition, the second most frequently chosen value to develop among students (with an average score of 4.45 out of 5) was improving relationships with peers and improving cooperation skills between students. It is therefore not surprising that as many as 72% of the teachers surveyed took part in team building training in the last year.

Digital tools in education. 60% of teachers indicated that they use ICT in their daily work with students. In addition, 30% of teachers would most like to use mobile applications and computer programs, but only 6% would like to use interactive whiteboards to better cooperate with students.

School in the circular economy. A highly indicated value, which the surveyed teachers indicated as necessary to develop among their students, with an average grade of 4.13 out of 5, turned out to be building respect for the environment and active pro-ecological attitudes. According to 68% of the teachers surveyed, their schools are developing strategic changes to move to a circular economy. Examples of such activities, however, are activities that have been present in Polish schools since at least the 1980s, such as widely understood recycling and organizing competitions and meetings on ecology.

Collaboration of the school with the external environment. Only 25% of teachers confirmed that their school cooperates with companies – potential employers of their students. This cooperation mainly consists of trips to workplaces and organization of internships for students. 43 out of 197 teachers surveyed claim that their students are aware of the cooperation between their school and business.

Preparation for choosing an educational and professional path. Only 32% of respondents believed that schools provide students with practical knowledge and skills needed to choose an education and career path, and forms of such support take place inside school buildings,

mainly in the form of career guidance and psychological assistance. At the same time, over 82% of all surveyed teachers want to improve their teaching skills as a mentor who focuses more on supporting students' participation in the development of students and less on transferring knowledge, should be an open, accepting, empathetic and supportive partner.

2.2 Survey Analysis: Primary School Students

The survey aimed at primary school students aimed to assess three main issues:

1. the scale of difficulty of conducting reliable surveys among students aged 6-9;
2. students' overall satisfaction with the school's activities;
3. students' overall satisfaction with their teachers.

The scope of the research, focusing mainly on students at the second level of education (from grade 4 of primary school), did not include an in-depth analysis of the above-mentioned issues, but was aimed at collecting a general picture of the current level of satisfaction of a limited sample of primary school students, grades 1-3. Further research is needed to assess the underlying causes of the responses collected, as well as to assess the relevance of the results to a larger sample.

Question 1	How are you feeling today?

The Mentor 2.0 consortium differentiated surveys for primary school students from those designed for older students to make it easier for respondents to participate in the research. For most of the questions, we used graphics such as emojis so that the surveys were more approachable and “friendly” for children. To kick off the survey, kids were asked about their feelings, particularly if they felt “Happy” or “Sad” during the survey. All the respondents indicated “Happy”.

Questions 2 -3-4	Question 2: How old are you? Question 3: Are you a primary school student? Question 4: What grade are you in?

Question 2: The most common answer was: 8.

Question 3: Answer: "Yes."

Question 4: The student is in the 2nd year of primary school.

Question 5	Do you like going to school?

The surveyed student does not like going to school.

Questions 6-7	Question 6: What I like most about schools is: Question 7: What I like the least in school is:

The respondent at school likes his friends the most.

The surveyed student dislikes lessons the most

Questions 8-9-10	Question 8: Do you like your teachers? Question 9: Do/Don't your teachers help you with your homework? Question 10: Would you like to have the same teachers next year?
	The surveyed student likes his teachers According to the surveyed student, teachers do not help him with his homework. The surveyed student answered affirmatively when asked if he would like to have the same teachers next year.
Question 11	How are the lessons? Select if they're "Fun" or "Boring". Lessons are boring according to the surveyed student.
Question 12	When at school, would you like to do more activities outside of class (e.g., on the playground)?
	The surveyed student answered affirmatively to this question.
Question 13	How many stars would you give to your school? The surveyed student gave 3 stars on a scale of 1 to 5

Summary

Reaching the youngest students with surveys. The process of preparing and conducting surveys among children aged 6-9 turned out to be very difficult. Partners of the Mentor 2.0 consortium tried various types of solutions, including graphic ones, to make it easier for the youngest children to work with the survey. Nevertheless, almost all attempts to complete the survey turned out to be unsuccessful, as they could put too much pressure on the children and thus be unreliable. Also, the presence of parents when filling in the questionnaires made it necessary to cancel them, as caregivers often suggested answers to their children.

Overall student satisfaction with school activities. The surveyed student indicated that he does not like going to school, he likes his classmates. A surveyed student thinks his lessons are "boring". Thus, this student would like more activities to take place outdoors.

Overall student satisfaction with their teachers. The surveyed student indicated that he liked his teachers and would like to have the same teachers in the next school year, even though he claims that the teachers do not help him with his homework.

2.3 Survey Analysis: Lower and Upper Secondary School Students

The survey addressed to junior high school students was aimed at evaluating:

- students' overall satisfaction with their schools;
- active involvement of students in classes;
- current mentoring practices that students have encountered in their schools;
- use of ICT tools in primary and secondary schools;
- cooperation of primary and secondary schools with external entities.

The surveys for students in grades 4-8 of primary schools included a total of 18 open and closed questions, 12 of which are presented below as a fragment together with the answers received. The surveys for secondary school students additionally contained 3 closed questions.

Question 1	Are you studying lower / upper secondary school?

Of the 73 students surveyed:

- 45 were primary school students in grades 4-8;

28 were secondary school students.

Questions 2-3-4	Question 2: Enter how often the teachers give you tips on how to learn effectively: (choose one of the following) Question 3: If you indicated that you were getting tips/directions, choose which: Question 4: What do you miss the most in order to learn effectively?

This set of questions is designed to determine whether students receive guidance from their teachers in different areas and how often.

7% of secondary school students indicated that their teachers give them tips on how to study effectively once or more times a week.

Among students in grades 4-8 of primary school, 34% indicated that they receive such tips once or more a week.

18% of all students receive such guidance once a month or more.

40% of students receive guidance less than once a month.

18% of students said that teachers never give them such guidance.

According to students, teachers advise their students to learn by:

- taking notes - 33% of students;
- creating associations - 30% of students;
- learning how something works in practice - 19% of students;
- using methods of better remembering - 18% of students.

2/3 of students answered that they lack motivation to learn effectively.

37% of students believe that they lack more understanding from teachers.

36% of students lack focus.

35% change in teachers' attitudes.

24% of students lack thinking outside the box by teachers.

Important individual answers:

11% of students lack a discussion of teaching techniques.

8% of students did not know what they lacked to learn effectively.

Question 5-9-13	Question 5: Are you eager to take part in lessons? Question 9 During lessons, you have the opportunity to: Question 13: Thanks to my school, I can:

This set of questions aims to understand the level of student engagement in lessons and the opportunities that come from participating in lessons and participating in school life.

Only 2 students (5%) said that they willingly take part in all lessons. 23 students (32%) willingly participate in most lessons and the same number in half of the lessons. 22 students willingly participate in a minority of lessons. 2 students do not willingly participate in any lesson.

Frequently appearing answers to the question: During the lesson, you have the opportunity to:

- using a smartphone for learning purposes

we wszystkich lekcjach	0
w większości lekcji	18
w połowie lekcji	14
w mniej niż połowie lekcji	10
w żadnej lekcji	2

Classes 4-8

we wszystkich lekcjach	2
w większości lekcjach	5
w połowie lekcji	9
w mniej niż połowie lekcji	12
w żadnej lekcji	0

Secondary school classes

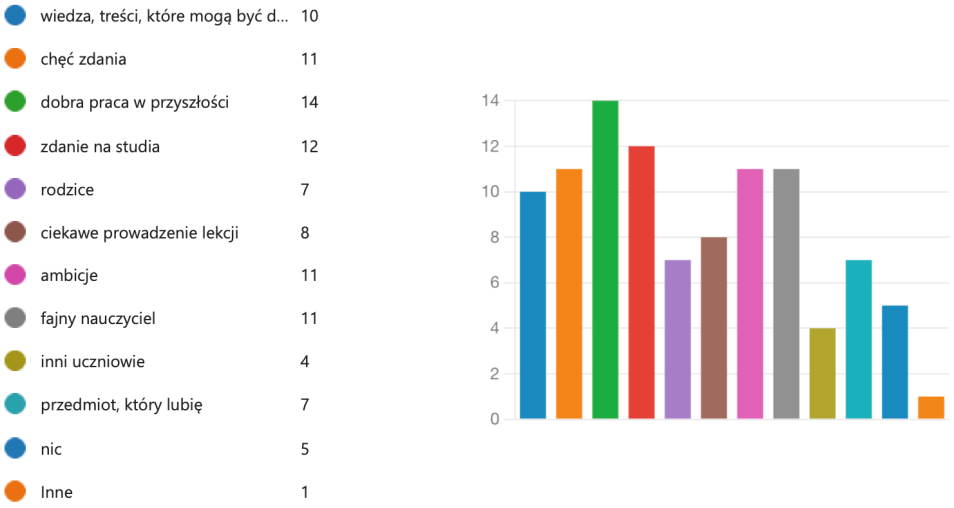
- Never: 36.4% in primary / 25% in post-primary
- Less than once a month: 27.3% / 32.1%
- Less than once a week: 11.4% / 14.3%
- More than once a week: 13.6% / 21.4%
- Daily: 11.4% / 7.1%

- use the computer and the Internet to perform tasks in the classroom

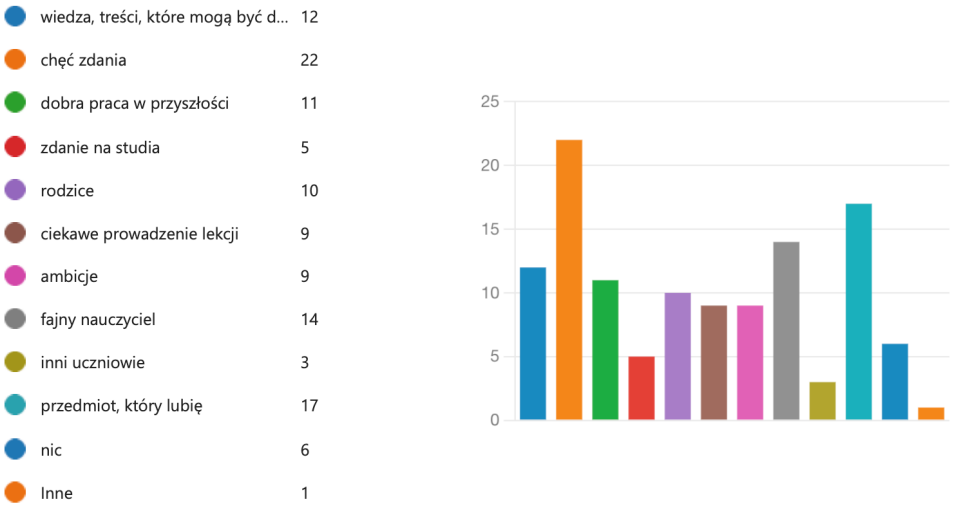
- Never: 22.7% in primary / 25% in post-primary
- Less than once a month: 20.5% / 39.3%
- Less than once a week: 31.8% / 21.4%
- More than once a week: 20.5% / 14.3%
- Daily: 4.5% / 0%

Question 6: What/who motivates you to learn? Choose 3 main motivators:

Question 6-7-12	Question 7: What demotivates you to learn? Choose the 3 main reasons for demotivation: Question 12: How do teachers motivate you and create a learning atmosphere? Choose the 3 most common ways



Secondary school classes



Classes 4-8

Frequent answers:

This set of questions aims to understand what motivates and demotivates students in learning and how teachers try to inspire students.

The most important motivating reason for students to study was the desire to pass the next grade or the desire to pass the exam (indicated by 46% of students, 33 people).

Moreover:

• 35% of students are motivated by the prospect of a good job in the future. (25 students)

• Similarly, thanks to a good teacher, 35% of students feel motivated to learn and by their parents.

• 33% of students (24) feel motivated by a subject they enjoy.

• 30% of students enjoy learning content they find useful.

• 7 students feel motivated by other students. (10%)

• 11 students feel they are not motivated.

The main demotivating aspects are:

• learning useless things (64% of students, 46),

• too much information to absorb, too much material to learn (46% of students, 33).

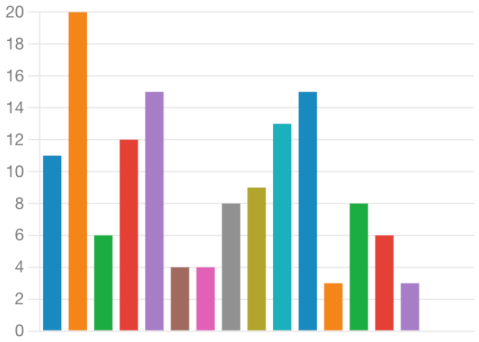
• learning boring things (42% of students, 30)

• getting up early in the morning (36% of students, 26)

• the opportunity to do something different, more interesting, while studying (36% of students, 26)

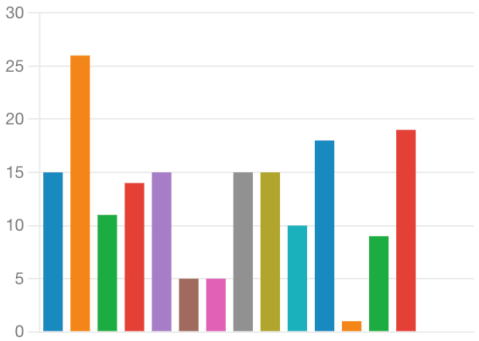
• 13% of students feel demotivated by growing gaps and repetition of the same topics in subsequent classes. (9 students for each demotivator

wczesne wstawanie	11
uczenie się bezużytecznych rzeczy	20
presja ewentualnej porażki	6
możliwość robienia czegoś inne...	12
nudne przedmioty	15
braki ciągnące się za Tobą	4
powtarzanie się tematów w kole...	4
fakt, że za wszystko jesteś oceni...	8
konieczność uczenia się przedm...	9
dostawanie złych ocen pomimo ...	13
natłok materiału	15
postawa rówieśników	3
uwagi nauczycieli	8
mało czasu wolnego	6
za dużo pracy domowej	3
nic	0
Inne	0



Secondary School Classes

wczesne wstawanie	15
uczenie się bezużytecznych rzeczy	26
presja ewentualnej porażki	11
możliwość robienia czegoś inne...	14
nudne przedmioty	15
braki ciągnące się za Tobą	5
powtarzanie się tematów w kole...	5
fakt, że za wszystko jesteś oceni...	15
konieczność uczenia się przedm...	15
dostawanie złych ocen pomimo ...	10
natłok materiału	18
postawa rówieśników	1
uwagi nauczycieli	9
mało czasu wolnego	19
nic	0
Inne	0



Classes 4-8

The grading system is perceived differently by students:

• 48% of them said that receiving a grade results in a decrease in motivation to learn (34 students);

• 36% of students are demotivated because they think they could do something while studying

something else they are more interested in (26 students);

• 30% decide to improve their grade (21 students);

• 29% still do not know what they should improve in learning. (20 students);
• 6 students (8%) want to continue teaching.

Secondary School Classes

Classes 4-8

Question 8 Question 8: Do the teachers talk to you about your strengths / talents and how to develop them?

Frequently Asked Answers:

36% of primary school students said there are no teachers to talk to them about their strengths and talents in the educational process.

Among senior secondary school students surveyed, 46% of them indicated that there are at least two or three such teachers who talk to them about their strengths/talents and how to develop them.

43% of secondary school students said there was no teacher to talk to them about their strengths.

Important, individual answers:

Only one student from primary school grades 4-8 and one from secondary school reported that there were 3 or more teachers who talked to him about his/her strengths and talents.

Question 10 Question 10: During lessons, teachers give you tips on how to:

Frequent answers:

According to students, teachers give tips on how to:

- Repeat important content 15 students, 34%
- Remember important information 9 students, 20%
- Take useful notes 14 students, 32%
- Use your strengths to learn 6 students, 14%
- How to find the necessary knowledge on the Internet 71 students, 16%
- Give no clues 18 students, 41%

Question 11 Question 11: How do you usually feel when you are assessed? Choose the descriptions that best suit you

The grading system is perceived differently by students:

- 48% of them said that receiving a grade results in a decrease in motivation to learn (34 students);
- 36% of students are demotivated because they think that while studying they could do something else that interests them more (26 students);
- 30% decide to improve their grade (21 students);
- 29% still do not know what they should improve in learning (20 students);
- 6 students (8%) want to continue teaching.

Question 14 If you could change something about your school, what would it be?

Students in grades 4-8 would like to change:

• teachers' attitude towards students (50% of students); student assessment system (45% of students);

• 42% of students would like to learn only "useful things";

• 14% of students would like classes to start later

Secondary school students would like to:

• would like to learn only "useful things" (64% of students);

• get useful information (62%);

• student assessment system (57%).

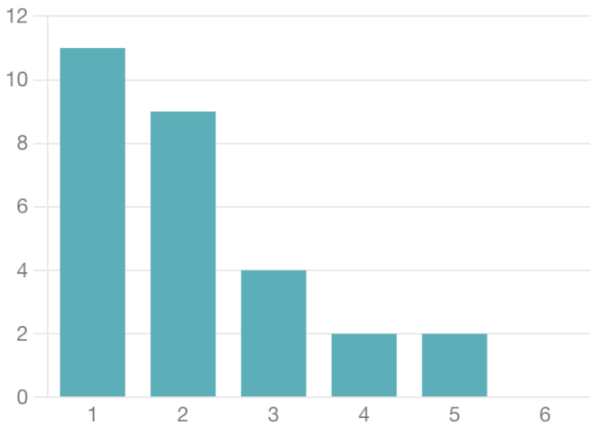
• change teachers' attitude towards students (53%).

Question 15/18	What would you wish for your teachers?

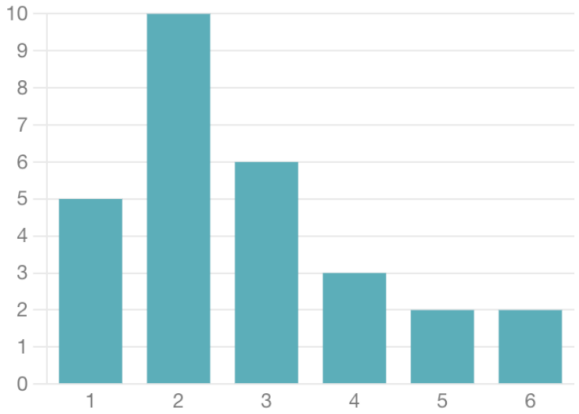
Most students wish their teachers peace and health. 15 students wish their own teachers understanding and patience.

Upper Secondary School Question 14-15-16	Question 14: On a scale from 1 to 6, determine at what level teachers in your school discuss with you the emergence of new professions and changes taking place on the labour market? (Where 1 is very low and 6 is very high level). Question 15: On a scale from 1 to 6, determine at what level your school prepares you to choose a field of study and choose a profession. (Where 1 is very low and 6 is very high level). Question 16: On a scale from 1 to 6, how often does your school undertake activities aimed at cooperation with employers? (Where 1 means that the school does not take such actions, and 6 means that the school engages them very often).

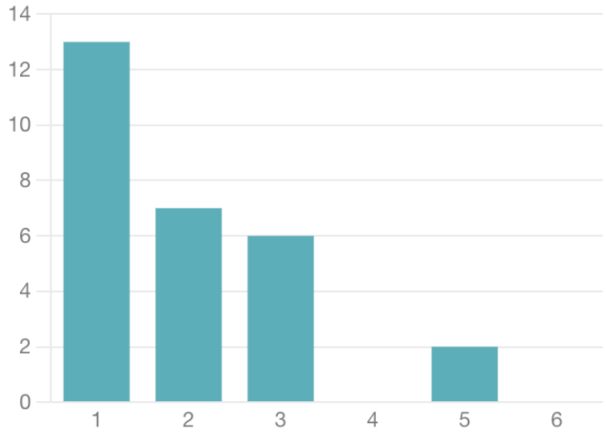
39% of secondary school students believe that teachers do not talk to them about the emergence of new professions and changes on the labor market. According to the majority of respondents (54%, marked 1 or 2), the school does not prepare them well for choosing a field of study and choosing a profession.



Only 14% of students positively assess the level of conversation with teachers about the changes taking place on the labor market (with a score of 4, 5). None of the students gave a grade of 6.



54% of students negatively assessed (with a grade of 1 or 2) the level of preparation of their school to help students find and choose the desired profession. 7% of students rated the level of the school in this category as 5. Also 2 students gave a 6.



46% of students believe that their school does not organize any activities aimed at cooperation with employers. 46% of students gave a grade of 2 or 3, negatively assessing the school's preparation for activities with employers. Only 2 students indicated (assessed 4 and 6) that the school cooperates well with employers.

Summary

Students' overall satisfaction with their schools. Only 5% of the respondents said that they willingly attend and engage with all lessons. 58% of students receive learning guidance less than once a month or never from their teachers. 2/3 of the students participating in the surveys answered that they lack the most motivation to learn effectively.

Active involvement of students in lessons. 5% of the surveyed students are not willing to participate in any lessons. 36% of students lack focus in the learning process in the classroom. 24% of students participating in surveys lack thinking outside the box by teachers. The main demotivating factor of the surveyed students in science is learning useless things (64% of students) and too much learning material to absorb (46% of students).

Digital tools at school. During lessons, 36.4% of students in primary schools and 25% in secondary schools have never had the opportunity to use a smartphone for learning purposes. Every day, 11.4% of primary school students and 7.1% of post-primary school students could take advantage of this opportunity. During lessons, 22.7% of pupils in primary schools and 25% in secondary schools have never had the opportunity to use a computer and the Internet to perform tasks in the classroom, and only 4.5% of pupils in primary schools could use them on a daily basis. (0% in secondary schools).

Mentoring present in a Polish school. 36% of primary school students and 43% of secondary school students said that in the educational process there are no teachers who talk to them about their strengths and talents. 37% of students believe that they lack teachers' understanding, and as many as 35% would expect a change in teachers' approach to students.

Collaboration of the school with the external environment. 39% of secondary school students believe that teachers do not talk to them about the emergence of new professions and changes on the labor market. According to the majority of respondents (54%, marked 1 or 2), the school does not prepare them well for choosing a field of study and choosing a profession. 54% of students negatively assessed (with a grade of 1 or 2) the level of preparation of their school to help students find and choose the desired profession. 46% of students believe that their school does not organize any activities aimed at cooperation with employers.

3. Advancing School Education: Focus Groups

Four focus groups were implemented by the Center for Innovative Education - CIE to analyse more in-depth the results of the surveys with teachers and students.

3.1 Focus Group with Teachers

On the 13th and 18th of October 2022, the Center for Innovative Education - CIE implemented 3 focus groups with total of 24 teachers to discuss the results of the surveys. The three group were composed, as follows:

- 12 upper secondary school teachers from Bielsko-Biała (on 18th of October);
- 12 primary and lower secondary school teachers from Tuławki (8 teachers) and Bukwałd (4 teachers) with fewer opportunities. The fewer opportunities resulted from:
  - Geographical obstacles: these are schools in villages of less than 300 inhabitants, which suffer communication exclusion (just 3 buses per day to a bigger village) and lay in the rural areas;
  - Cultural differences: in both of these villages there are Ukrainian and Gypsy minorities;
  - Social obstacles: due to lack of funding the villagers have a limited access to social networks and events which can enhance their self development;
  - Educational difficulties: schools in Tuławki have a harder access to innovative educational training, workshops, conferences and exchange of knowledge of experience with other teachers, mostly due to geographical location.

The following questions were addressed:

1 In our the surveys addressed to the teachers, we asked: “In your opinion, does the school equip students with practical knowledge and skills needed to choose the educational and career path?” Only 30% of 191 teachers answered positively to this question. What do you think is missing the most for the school to equip students with practical knowledge and skills to choose their future pathways? What are the obstacles for implementing it?

2 What do you think are the biggest obstacles for the school to equip students with practical knowledge and skills to choose their future pathways and – are there any difficulties of a legal nature – i.e. laws that make it harder for school to equip

students with practical knowledge and skills to choose their future pathways?

3 In question 22 of our survey, we asked teachers the following question: “Does your school cooperate with companies - potential employers of your students?” Only 25% of the 191 teachers responded Yes to this question. What do you think is missing the most for the school to cooperate with local businesses? What are the obstacles for implementing it?

4 What do you think are the biggest obstacles for engaging local business and – if there are difficulties of a legal nature – i.e. laws that make it harder for schools to cooperate with companies?

5 In question 26 of the Teachers’ surveys, 82% of the 191 surveyed teachers answered Yes to the question: “Would you like to improve your teacher's skills as a mentor?” What do you think are the biggest obstacles for becoming a Mentor to your students and are there difficulties of a legal nature – i.e. laws or internal school regulations - that make it harder for teachers to undertake such a role?

6 In the students’ Surveys we asked if they work in groups or teams in school and 46% of them responded that they never do or they work in teams less often than once a month. What do you think are the biggest obstacles for the students to work in teams or in groups in your classroom and are there difficulties of a legal nature – i.e. laws or internal school regulations - that make it harder for such teamwork?

7 In question 14 of the Teachers’ surveys: “How often in your lessons do you use ICT (information and communication technologies), e.g. use of educational platforms, provide students with links to additional teaching content?”. 87% of the surveyed teachers answered that they use ICT in class on a daily or weekly basis. However, 25% of the students in our survey responded that they never use ICT at school. What do you think are the biggest obstacles for ICT to be used at school and are there difficulties of a legal nature – i.e. laws or internal school regulations - that make it harder for teachers to use ICT?

8 If you were to choose which topics of the MENTOR pedagogy you would like to pursue, if they were available online and for free, what would they be:

- strengthening self motivation of the teacher / student;
- discovering and managing talents of the teacher / student;
- team building and leadership at school, in the classroom;
- digital tools in school enhancing inclusive education;

- school's role in circular economy, practical environmental education;
- cooperation between school and the external environment, particularly employers.

The responses to the questions are reported in the following paragraphs.
Please, note: participants were assigned an individual number (P#) to simplify the transcription and analysis of the results, and maintain anonymity and confidentiality.

Q1. In our the surveys addressed to the teachers, we asked: "In your opinion, does the school equip students with practical knowledge and skills needed to choose the educational and career path?" Only 30% of 191 teachers answered positively to this question. What do you think is missing the most for the school to equip students with practical knowledge and skills to choose their future pathways? What are the obstacles for implementing it?

Distance between school and subjects taught at school the changing labor market is growing as the civilization changes arrive quickly. Also students' environment, like digital communication, is disconnected from school's life. The biggest obstacle for equipping students with practical knowledge and skills that would help them choose their educational and professional career paths is the lack of time. The Curriculum is getting bigger and bigger with time. Teachers don't have space to provide youth with practical tools that relate to actual world of work.

Such practical knowledge and skills should be done in all classes and each teacher should relate the subject their teach to concrete professions available on the labor market. Trough such approach, students could become more interested in particular subject the teacher is teaching but also embed the knowledge they learn in relation with concrete job post

Q2. What do you think are the biggest obstacles for the school to equip students with practical knowledge and skills to choose their future pathways and – are there any difficulties of a legal nature – i.e. laws that make it harder for school to equip students with practical knowledge and skills to choose their future pathways?

The Polish Curriculum provides only 20 hours for professional orientation to students over the whole educational process. This is recognizably not enough time for the youth to get oriented on what they should do with their professional lives. On the other hand, teachers do not posses access to knowledge on the changing labour market and development of new professions.
While there are no legal obstacles for the teachers to take their students outside of school to show them local enterprises or to give them more practical trainings, still there

is just not enough time to do so. Still if the teacher wanted to apply more activities engaging students, the bureaucracy would make it impossible to implement the idea. The teacher would need to provide written explanations to all alternation he/she implemented.

"About twenty years ago, during technical studies (home economics), kids could verify themselves: through making food salads, drilling, sowing. They could discover job professions behind such skills and they could test if such qualities are in line with their talents and interests" P2

Such hands-on approach within the school would also help students further develop their individual qualities in the direction of a concrete profession. Such classes are not organized anymore. Due to such circumstances, it is harder for students to receive a professional orientation. Their technical skills, like manual flexibility, may not be as well developed as they should be. Hence these factors impede youths chances of deciding on their future careers and chances on the labor market.

Moreover, students have developed unrealistic visions of particular job posts, for example "influencers", and their expectations of how their future professions can look like. They receive simplified and exciting information via TikTok, Instagram or similar social media and based on them they think they know which job to take. Young people tend not to see the hardship of each job if someone wants to be a true professional. On the other hand school doesn't provide a space for in-depth discussions on development of professional career, mostly because of:

- ⇒ lack of time due to overloaded Curriculum;
- ⇒ teachers not connecting the subjects they teach with concrete professions;
- ⇒ teachers not being aware of new professions developed resulting from to i.e. green and/or digital transition;
- ⇒ professional orientation of students being disconnected from subjects students learn at school;
- ⇒ subjects being taught using theories and no practical experience.

Q3. In question 22 of our survey, we asked teachers the following question: "Does your school cooperate with companies - potential employers of your students?" Only 25% of the 191 teachers responded Yes to this question. What do you think is missing the most for the school to cooperate with local businesses? What are the obstacles for implementing it?

Schools don't cooperate with companies mostly due to lack of time. Teachers are not being taught how to contact local and regional employers and how to maintain a valuable relation with them. Also this task is very time consuming.

"Are kids in elementary school ready to develop a career pathway?" P2

Two teachers in the Focus Group stated that employers are also not that keen on cooperating with schools due to lack of time and financial means to cover costs of such trips. One teacher reported that a trip to industrial site might also be hazardous for kids. The majority of the upper secondary school teachers (95%) highlighted the lack of effective cooperation with companies as the main obstacle of why the school programs are detached from the real life.

Q4. What do you think are the biggest obstacles for engaging local business and – if there are difficulties of a legal nature – i.e. laws that make it harder for schools to cooperate with companies?

All teachers in the focus groups declared that they don't know the employers in the local and regional surroundings. As the biggest obstacle for cooperating with future employers of their students, pedagogues list:

- lack of time combined with schools' bureaucracy and rigid safety requirements;
- lack of logistics resources: buses, coordination, enough students on trips.

"Before COVID-19 there was a two-years program of study visits to companies in the region organized by the Kuratorium – Regional School Board which is instituted by the national government. Even before the pandemic, Kuratorium often cancelled the trips to the companies because of logistics difficulties. Then the pandemic came." P4

Teachers proposed that, instead of visiting 2-3 companies a year, students could learn about different professions through short (2-3 minutes) films posted on internet. In order to get the youth interested, such films should be a bit like TikTok but made with professional who actually does such job, speaks from his/her experience, mentions the good and bad sides of particular profession.

Q5. In question 26 of the Teachers' surveys, 82% of the 191 surveyed teachers answered Yes to the question: "Would you like to improve your teacher's skills as a mentor?" What do you think are the biggest obstacles for becoming a Mentor to your students and are

there difficulties of a legal nature – i.e. laws or internal school regulations - that make it harder for teachers to undertake such a role?

All teachers taking part in the Focus Groups would like to have more individual approach when working with each and every student.

"Not all teachers are motivated enough to have such individual relation with youth they teach." P4

Generally, pedagogues agree that the Curriculum is not the most important part in their work at school. This means that the teachers spend most of their time doing things they don't want to do: preparing lessons that would fit everything from the Curriculum, testing students, checking exams, filling in loads of paper to describe what they did during each lesson, etc. This is the main reason why teachers are so frustrated.
There are no laws that would prevent teachers to become Mentors to their students, moreover, actually the Curriculum actually promotes such approach of teachers towards their students. However they see the risk of their objectiveness being questioned by students and their parents, as well as devotion of the same quality and quantity of time to each student.

"Younger teachers have a worse, more general and shallow professional preparation, with not enough psychology in pedagogy. Further, they lack experience. Also younger teachers want to earn more and this financial aspect strongly demotivates them. There is no additional incentive for them at work." P4

All teachers expressed a decline of authority of the teachers' profession. They relate this problem to their low salaries. Also parents of the students often don't respect the pedagogues, narrating this with low financial status of the Polish teacher in comparison with other professions. Kids observe their parents' approach and follow their lead.

Q6. In the students' Surveys we asked if they work in groups or teams in school and 46% of them responded that they never do or they work in teams less often than once a month. What do you think are the biggest obstacles for the students to work in teams or in groups in your classroom and are there difficulties of a legal nature – i.e. laws or internal school regulations - that make it harder for such teamwork?

The work in teams is happening in the classes, and if it doesn't the school's principal needs to enforce it. This is because the Polish Curriculum obliges the teachers to use teamwork as part of the learning method.

"At our school we "develop educational "situations", for example for one week our

school operated as a tourist office. Travel was the main focus for the whole school. Kids working in groups had to plan, calculate and prepare for potential trips. Next week we dedicated to kitchen as a place of learning." P1

Learning process taking place in teamwork is effective but there is a lot of noise. Furthermore some teachers find it hard to give a leadership to students. It is also hard to grade students' work when not everyone contributes the same amount or quality of work.

"We often use teamwork with students so they socialize more. Besides nowadays there are almost no professions in which there is no cooperation. This is more important than the Curriculum." P3

The secondary level school teachers participating in the Focus Group expreseed the lack of proper spaces at school, i.e. the classrooms do not allow the implementation of dynamic group activities.

Q7. In question 14 of the Teachers' surveys: "How often in your lessons do you use ICT (information and communication technologies), e.g. use of educational platforms, provide students with links to additional teaching content?". 87% of the surveyed teachers answered that they use ICT in class on a daily or weekly basis. However, 25% of the students in our survey responded that they never use ICT at school. What do you think are the biggest obstacles for ICT to be used at school and are there difficulties of a legal nature – i.e. laws or internal school regulations - that make it harder for teachers to use ICT?

The discussion focused on the contents made available by the Polish national government during COVID-19 pandemic. Teachers agreed that they were provided with numerous sources to digital contents to use in their classes. However, most of these sources turned out to be very unprofessional, boring and/or outdated. This resulted in teachers' frustration as they were forced to search by themselves for such content and/or to create their own addressing the subject they teach. All the pedagogues felt frustrated because of it because they knew that there are hundreds of teachers teaching the same subject somewhere else and that by sharing their inputs they could save time and provide something more attractive to their students.

All teachers taking part in the Focus Groups agreed that the COVID-19 has greatly contributed to strengthening their digital competencies. However, some teachers still share a common approach that they should be only teaching and not also learning from their students. Hence they are afraid that if they make a mistake when using ICT, children will not respect them.

Among the noteworthy individual responses, the following collects some of core

arguments shared during the Focus Group:

"Some of the teachers, particularly women, lack the basic ICT qualities." P4
"We need to balance what we can transmit online and what definitely should stay on face-to-face classes". P3.

In the participants' opinion, one of the issues they saw their students were struggling with during COVID-19 was the diversity of technologies used by different teachers in the same school. Each time it was the kid and his/her parent that had to learn how to use particular platform for communication.

Teachers also stated that most of the schools are well equipped already. Sometimes though they are equipped with ICTs teachers don't know how to use. It seems some investments have had little or no impact on the teaching just because teachers are not using them.

Q8. If you were to choose which topics of the MENTOR pedagogy you would like to pursue, if they were available online and for free, what would they be:

- strengthening self motivation of the teacher / student;
- discovering and managing talents of the teacher / student;
- team building and leadership at school, in the classroom;
- digital tools in school enhancing inclusive education;
- school's role in circular economy and practical environmental education;
- cooperation between school and the external environment, particularly employers.

All the teachers participating in the Focus Groups, agreed that the self-motivation of the teacher is a key to the success of the school environment. The students know right away which teacher is truly engaged in the subject he/she teaches, and who just pretends. If the teacher doesn't like his/her profession, such pedagogue can discourage the youth from pursuing particular subject, hence have a negative impact on the decision making of the students about their future professions.
On the other hand, if the teacher knows how to maintain self-motivation and even enhance it, such teacher can pass this knowledge to his/her students enabling them to focus better on their studies.

"The most important is motivation. If we are demotivated, it is no surprise our students are not motivated either". P4.

The need for training teachers in all six areas of Mentor Pedagogy has been directly

expressed during all three Focus Groups with teachers. The second priority was given to cooperation with the environment outside of school. Only one of the participants, an upper secondary school teacher, gave a priority to the school's *role in circular economy and practical environmental education*.

Summary

The teacher-mentor role. All 24 teachers participating in the Focus Groups identified the Curriculum as the biggest obstacle for them becoming mentors to their students. Their mentoring role is limited mostly by overloaded program. School bureaucracy also doesn't help. Young teachers don't have enough psychological background to handle such role. All the six areas of the Mentor 2.0 Curriculum should become available online to help training teachers and school. The priority, for most of the participants, is strengthening teachers' and students' self-motivation.

Digital tools enhancing inclusive education. Finding attractive educative content is the biggest challenge for the teachers. Secondly some teachers still lack basic digital skills. Because of that they omit using digital tools when teaching their subjects. They are afraid students will not respect them if they see pedagogue failing to use ICT or using it a wrong way. There is still a common approach of teachers that they should be only teaching and not also learning from their students.

Cooperation between school and external environment. The teachers participating in the Focus Groups named several important obstacles for a limited cooperation between them and the companies. The most important, repeated by most of the teachers, expressed lack of knowledge of the environment outside of school, lack of time and lack of logistics resources to enhance such cooperation. Further obstacles included lack of interest in cooperation from the side of businesses and bureaucracy on the side of the schools.

Preparing students to undertake educational and professional decisions about their future. All the participants agreed that school does not equip young generation with knowledge and skills helping them to undertake their professional choices. Teachers are unaware of the changing labor market, nor they know where to receive such knowledge. Distance between the school and external environment does not help. Learning only theory, without practical application, also discourages youth to learn how their potential future jobs can look like.

Moreover, the school looses competition for students' attention with more attractive providers of information, mostly social media. Teachers are aware that the material provided by TikTok and such, is shallow and is not sufficient enough for a young person to take a decision on his/her future education and/or profession.

3.2 Focus Group with Students

Eleven upper secondary school students were engaged by the center for Innovative Education in two focus group on the 11th and 12th of October 2022 (one in Warsaw, second in Bielsko-Biała). The groups were composed of 5 and 6 students from 16 to 19 years old, from the first to the fourth year of upper secondary school.

The participants were invited to discuss the results of the survey addressed to upper secondary school students. Particularly, the following questions were addressed:

1. 54% of the surveyed students responded that teachers never talk to them about their individual talents and strengths. Why do you think it is like this?
2. 71% of the surveyed students who responded to our survey marked "studying unhelpful knowledge" as one of the highest demotivators. Can you give an example? What do you think is the reason?
3. 25% of the surveyed students who responded to our survey marked that they never use ICT in classroom. What do you think are the biggest obstacles for ICT to be used at school? Would you like to use smartphones for learning purposes during lessons?
4. What would be other advice you would give to teachers to make learning more interesting to you?
5. What do you think is the biggest obstacle for introducing solutions you proposed in the previous question?
6. Do you think any of your present teachers would be a good Mentor to you – meaning a person who rather supports you in developing your future pathway rather than being the transmitter of knowledge?
7. If you were to choose which topics of the MENTOR pedagogy you would like your teachers to pursue, if they were available online and for free, what would they be:
    - strengthening self motivation of the teacher / student;
    - discovering and managing talents of the teacher / student;
    - team building and leadership at school, in the classroom;
    - digital tools in school enhancing inclusive education;
    - school's role in circular economy, practical environmental education;
    - cooperation between school and the external environment, particularly employers.

The responses to the questions are reported in the following paragraphs. Please, note: participants were assigned an individual number (P#) to simplify the transcription and analysis of the results, and maintain anonymity and confidentiality.

Q1. 54% of the surveyed students responded that teachers never talk to them about their individual talents and strengths. Why do you think it is like this?

All students agreed that teachers focus too much on grading students, rather than teaching. Hence pedagogues often don't notice what individual qualities of their students are. Therefore the youth strongly recommended qualitative assessment as the best way of giving grades to students. This method would require the teacher to indicate strong and weak sides of the student. Though this method is time-consuming, it would enable the teacher to recognise talent of particular student faster. It would be also easier for the teacher to indicate on what other competencies the student should focus on.
Students also pointed out that the Polish Curriculum does not provide a room for individual development.
Further, students expressed their fear that such teacher cannot concentrate just on one student as his/her "favourite". This may result in such student being treated differently by the teacher, by other students or both.
Below, some noteworthy individual responses are presented.

"The grading system makes assessment even. Assessment in the form of review is better, as long as the teacher uses clear expressions". P4.
"The system concentrates on grades, rather than on strengthening concrete qualities of students". P3.
"Because there is a system, and the system kills the individual." P2.
"It may be badly received by other students, if the teacher focuses his attention on one student". P2.

Generally students in both Focus Groups stated that there is no profound personal connection between students and teachers in their classroom.

Q2. 71% of the surveyed students who responded to our survey marked "studying unhelpful knowledge" as one of the highest demotivators. Can you give an example? What do you think is the reason?

All the students participating in the Focus Groups expressed that their teachers don't explain to them why they need to learn particular matters. When being asked, teachers often decline profound answer or say that this will be at the exam. Usually no further explanation is provided by them.

Students lack further sense of learning and in the result they just focus only on final exams. They learn to remember stuff at the test (i.e. dates at history lessons).

"I learn something to pass the exam because that's what the teacher said". P2.
"I can sign below this statement with 71% with both hands. For example they don't explain to us which part of mathematics will be useful if I wish to study chemistry or social studies." P3.

Some of the participants also point out that teachers are unable to explain some processes, for example why particular battle took place in the concrete month, why chemistry process produces such results. Teachers often can't explain why students need particular knowledge.

Q3. 25% of the surveyed students who responded to our survey marked that they never use ICT in classroom. What do you think are the biggest obstacles for ICT to be used at school? Would you like to use smartphones for learning purposes during lessons?

The students participating in both Focus Groups discussed whether ICT tools can be used when learning all subjects. For example, moth seemed to them particularly not transferable to digital environment. On the other hand, they stated that learning foreign languages using ICT may be attractive and effective.
In terms of using smartphones for learning purpose during class time, students agreed that through such devices they could access most of the knowledge they need. However, they indicated also the following risks:

- ⇒ in case of boring classes, students may tend to use smartphones for purposes other than learning;
- ⇒ teachers may not know how to supervise work in the classroom;
- ⇒ teachers may fear they are not leading the learning process and don't have control over it, and students may learn somethings in advance or learn them a wrong way;
- ⇒ teachers may fear their function is not needed or that their authority is lesser;
- ⇒ subjects will still be boring to some students, as the "interesting lesson" is a subjective term.

Most students who took part in the Focus Groups stated that some students will not engage in the learning process no matter what the teacher does to make the lesson more attractive.

"The teachers started to be more open after COVID-19". P2.
"I agree that without smartphones students focused on learning more." P3.
"Some students still won't be learning stuff, even if it is more attractive and they can

use smartphones or other ICT in the learning process, just because their motivation is so low." P2.

Oldest students in the Focus Groups expressed their fear that the ICT is a risk to the old ways of learning. Further, they declared that when learning the old way, students stayed focused for a longer time and learnt more.

Q4. What would be other advice you would give to teachers to make learning more interesting to you?

The students participating in both Focus Groups have given multiple and diverse suggestions in terms of tools, which could make learning more engaging and interesting:

- ⇒ Teachers should put more effort in creating atmosphere which enhances asking questions. Now we are all being judged by the teacher and/or the class when we ask questions.
- ⇒ We should be able to use our notes during the exams.
- ⇒ The emphasis should not be put on the covering of all Curriculum, but rather on encouraging students to be interested in the subject, so they then learn by themselves.
- ⇒
- ⇒ One exercise per day should be sufficient for each subject. We get exercises from almost all of them.
- ⇒ Less material covered in each class.
- ⇒ Less material to cover as a homework. We shouldn't have to work during the weekends.
- ⇒ Exercises which are done before the test should be treated lightly so that the teacher really knows who still needs help with material.
- ⇒ Exams should be very concrete, focusing on the particular subject.
- ⇒ Teachers should use example, showing films and other such tools to help students keep focus during class.

Q5. What do you think is the biggest obstacle for introducing solutions you proposed in the previous question?

All the interviewed students expressed their concern with the way teachers react when a student asks a question. If the teacher doesn't respond in an open, welcoming way, the student will not ask any more questions.

Also students are not willing to ask questions in front of the whole class. The teacher should develop a way, in which a student may contact him/her to ask additional

questions and or explanations in a comfortable environment.
Another obstacle for introducing above mentioned solutions in the classroom is the strong emphasis on giving grades to students. Such approach results in teachers not organising teamwork, which is harder for them to be evaluated.
All students also agreed that one of the biggest obstacles hinges on the fact that teachers have an approach that "they know the best" and they are not willing to open their minds to different approaches, explanations, manners for coming up to the same solution.
Finally, students taking part in both Focus Groups noted that the Curriculum is a huge program and teachers rush to be able to complete it before the exams. They excuse the teachers for not using diverse learning techniques, not making breaks, not asking students if they follow the material because they know that pedagogues don't have influence over the amount of Curriculum they teach.

Q6. Do you think any of your present teachers would be a good Mentor to you – meaning a person who rather supports you in developing your future pathway rather than being the transmitter of knowledge?

7 out of 11 students participating in both Focus Groups stated they could identify at least one teacher who could be a good mentor for them, while four students stated the opposite. The participants in both Groups engaged in a discussion what "Mentor" actually means to them. Some have underlined that this should be the teacher who can give them advice concerning concrete career they want to pursue. So, for example, a Polish language teacher cannot be a mentor to someone who wants to become a chemist. Others argued that the role of a mentor is broader. This should be person who is genuinely focused on the interests of the student, not necessarily being an expert in this particular field. This teacher – mentor should be first of all a good listener.
The students have given examples that such teachers – mentors are more focused on a wellbeing of their students rather than on the work a student should perform. If the student explains that he went through a tough time and therefore his homework is delayed, the teacher should take this into consideration. Also if a student declares he is not prepared for a test due to important reasons, the teacher should listen to him.

Q7. If you were to choose which topics of the MENTOR pedagogy you would like your teachers to pursue, if they were available online and for free, what would they be:

- strengthening self motivation of the teacher / student;
- discovering and managing talents of the teacher / student;
- team building and leadership at school, in the classroom;
- digital tools in school enhancing inclusive education;

- school's role in circular economy, practical environmental education;
- cooperation between school and the external environment, particularly employers.

The participants identified needs for improvements in all the six topics. The responses to the question are grouped per topic in the table below.

Topic	Participants' responses
Strengthening self motivation	All students participating in the Focus Groups believe that teachers should work on their self-motivation. This exercise should help them become more aware of what motivates or demotivates students in the learning process. Then they can contribute to keeping students motivated by providing tailored support, also in terms of motivating tools, and by avoiding behaviours and solutions that discourage their learning.
Discovering and managing talents	All students participating in the Focus Groups expressed a sentiment that teachers do not know the individual strengths and talents of their students. The most important reason for this is the overloaded Curriculum causing teachers to rather focus on the material they need to deliver and put on exams, rather than on the pupils.
Team building and leadership	All students participating in the Focus Groups stated that they would appreciate if more of the learning process was done in a teamwork. They are aware that through such learning they can enhance their team building and management skills.
Digital tools enhancing inclusive education	All students participating in the Focus Groups expressed the need of using more ICT tools at school, such tools including also smartphones. Only 2 participants stated that maybe the traditional manner of learning was better because students learnt more and stated more focused on learning. One of the biggest challenges for having a digital learning is the approach of teachers. Pedagogues lack digital skills and are afraid of loosing control over the learning process of their students.
School's role in circular economy	6 out of 11 students – participants of the Focus Groups highlighted the importance on learning about climate warming, green transition and active manners which can slow

	the climate changes.
Cooperation between school and employers	All students participating in the Focus Groups agreed on the need to foster the cooperation between schools and employers. They would like to meet their potential employers, so that they could ask questions and learn what the particular job posts are all about. The visits to the companies should play an important part in the Curriculum. All students were against group professional orientation and treat it as a waste of time. Students put an emphasis on the fact that each of them is different, has different needs, strengths and talents on which they want to build their future.

Summary

The teacher-mentor role. Most of the members of the Focus Groups highlighted the importance of building trust end empathy with their teachers in order for a successful mentor-pupil relation to develop. The students put most of emphasis on the quality of listening by the teacher. Firstly, teachers are used to talking rather than listening and, secondly, teachers do not have much time for listening to students. Their main focus is placed on delivering the overloaded Curriculum and testing students on their level of its comprehension.

As mentors, teachers should also know how the labour market is changing and what it means to the region they live and study in. Through this, pedagogues can give valuable tips to their students on how to develop their educational and professional pathways.

Digital tools enhancing inclusive education. Most of the students - members of the Focus Groups expressed their concerns about their teachers' level of digital skills. Second biggest obstacles for ICT to be used at school was identified as teachers' lack of self-confidence, resulting in their fear of loosing control over the learning process if the knowledge is to be transmitted on diverse digital devices. All students agreed that diversification of tools and teaching methods would make learning more interesting for them, however, two students expressed a concern about staying focused on the subject being taught when using ICT.

Cooperation between school and external environments. All the participants agreed that the cooperation between school and the business environment should be strengthened and play an important role in the Polish Curriculum. They would welcome presence of companies at school, so they could learn first hand what are the job posts they offer.

Students also expressed strong views on professional orientation, underlining that it should always address the individual pupil.

4. Reccomendation

The educational system must adapt to a constantly changing environment in order to provide educators with the tools to help and support young people in navigating today's world. The research aimed to identify the main challenges in formal education, visible both from the perspective of students and teachers. On their basis, the partners of the Mentor 2.0 project will select the MENTOR pedagogy tools in order to be able to support teachers in this task as effectively as possible. Below, **in bold**, are listed topics particularly important to the Polish teachers and students.

Strengthening self-motivation of students and teachers

The results of the surveys conducted among the Polish teachers and students for the purposes of the Mentor 2.0 project seem to correlate with each other. According to the results of the questionnaires addressed to teachers, the main emphasis in school education should be on transversal competences such as building interpersonal relationships, cooperation, self-confidence and motivation.

Interdisciplinary teaching and teaching based on real life challenges

The implementation of the core curriculum is not the most important thing for them. Nor is for teachers. Students also recognize the importance of soft skills, emphasizing the struggle with the lack of internal motivation, reluctance to be assessed and the insufficient presence of interesting, useful and engaging topics in the classroom.

Relations with employers and what jobs really look like: making movies about concrete job posts with concrete professionals

In the eyes of both students and teachers, cooperation between schools and employers seems to be neglected, despite its many benefits. Both teachers and young people argue that today's school does not provide students with sufficient preparation to successfully and confidently enter the labour market. In addition, students indicate the need for a mentor who would give them time and attention. Teachers, on the other hand, show a will for self-development and determination to better prepare themselves to act as mentors to young people.

Digital competencies, links to valuable learning contents online

Another identified problem is the use of digital technologies in educational activities. The survey results show a discrepancy between the majority of teachers who say they use ICT very day, and the over 50% of students who say that they either never use digital tools in class or use them less than once a month. Teachers report a lack of access to the resources to introduce digitized teaching methods. Despite availability of applications and mobile tools, most students use smartphones once a month or less during lessons for educational purposes. This approach to modern technologies does not support digital transformation.

Green transition: teachers want to learn what it means to school and to their students' future

The lack of implementation of innovative pro-ecological solutions is also visible in the results of questionnaires addressed to teachers. 68% of them declare that their workplace uses solutions that adapt their schools to the circular economy. On the other hand, the most frequent responses under this slogan indicate waste segregation, including waste paper collection (64% of teachers from all teachers participating in the surveys), i.e. a solution known and used in Polish education for 50 years.

Discovering and managing talents of the teacher / student, creation of a class/school community: improving relationships with parents, teachers' leadership skills

Both teachers and students argue that the school should provide students with transversal skills and that teachers should become mentors for their students. Additionally, teachers declare their willingness to develop their competences in this area and to implement tools that will allow them to play such an important role in the life of young people. The vast majority of them are highly motivated and independently look for solutions that can be helpful in mentoring. They understand that the new teacher is less of a knowledge transmitter and increasingly more someone who provides support in the student's educational development. We hope that the consortium coordinated by the Center for Innovative Education as part of the Mentor 2.0 project will provide just such tools.

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Annex 1: Surveys for Teachers

We are starting the Mentor 2.0 project, which aims to create digital solutions available for teachers in 5 countries: Poland, Spain, Italy, Austria and Greece. Thanks to Mentor 2.0, teachers will be able to strengthen their workshop so that they come closer to acting as mentors for their students. We invite you to co-create with us modern methods of supporting educators!
The survey is anonymous and will take approximately 15 minutes:

1. You are a teacher?
    a. Yes
    b. No

2. As a teacher, what support do you need the most in terms of developing students' transversal (soft) competences such as critical thinking, innovative, reflective, communication skills, collaboration, internal motivation, perseverance, leadership?

3. Could you identify your strengths and/or any particular talents that distinguish you in your role as a teacher?
    a. Yes
    b. No

4. If you ticked "Yes" in the previous question, provide a minimum of three examples:
5. If you ticked “No” in the previous question, what talents/strengths would you most like to develop in yourself as a teacher? Name at least three:

6. During the last year, have you participated / participated in training courses on building student teams, working in groups, or managing the classroom?
    a. Yes
    b. No
7. If you ticked "Yes" in the previous question, please provide the names of the training or topics

8. On a scale of 1 to 10 (where 1 is the least and 10 is the most), indicate to what extent you need to develop to effectively manage student teams:

0	1	2	3	4	5	6	7	8	9	10

I don't need it at all I need it very much

9. On a scale of 1 to 5, where 5 is the highest value and 1 is the lowest, indicate what you think should be developed in students first?

	1	2	3	4	5
understanding the world of values (such as solidarity, truthfulness) and pointing to models of behavior					
building social relations based on mutual respect					
building students' self-esteem based on strengths					
student's ability to build intrinsic motivation					
creativity, innovation and entrepreneurship					
respect for the environment and active pro-ecological attitudes					
the ability to recognize and further develop individual talents					
intercultural understanding, tolerance and openness to changes					

10. Other, what?

11. On a scale of 1 to 5, where 5 is the highest value and 1 is the lowest, indicate what, in your opinion, should be the most important in everyday work with students?

	1	2	3	4	5
preparing for competitions					
improving relationships with peers, improving cooperation skills					
increase student self-esteem					
strengthening of motivation					
developing effective learning skills and eliminating learning failures					
skills development in educational projects					
implementation of the core curriculum					
creating a school community					

12. Other, what?

13. Please indicate examples of mutual support and teacher learning that you use because you find them effective and necessary: (Select as many answers as you like):

a. developing curriculum work plans
b. developing lesson plans
c. preparation of teaching materials
d. test development
e. peer observations
f. joint project management
g. exchange of experiences
h. mutual motivation
i. sharing the knowledge gained during the training
j. disseminating examples of good practice
k. exchange of materials and teaching aids
l. jointly organizing and conducting activities (trips, contests, events)
m. exchange of information about students and class teams

14. How often in your lessons do you use ICT (information and communication technologies), e.g., use of educational platforms, provide students with links to additional teaching content? (Choose one answer)
    a. every day
    b. once a week
    c. once a month
    d. less frequently than once a month
    e. I do not reach for such solutions

15. In which context would you most likely like to use ICT in your lessons?

16. In your opinion, does the school equip students with practical knowledge and skills needed to choose the educational and career path?
    a. Yes
    b. No
17. If you ticked "Yes" in the previous task, list which ones:

18. Do you do practical environmental education projects at school, such as discussing with students how to use less paper in your lessons?
    a. Yes
    b. No
19. If you ticked "Yes" in the previous task, provide examples:

20. Is your school making strategic changes to enter a closed loop economy i.e., waste reduction, recycling, electricity and water consumption, environmental education, renewable energy, reuse of used school materials?
    a. Yes
    b. No
21. Justify your choice

22. Does your school cooperate with companies - potential employers of your students?
    a. Yes
    b. No
23. If you marked "Yes" in the previous task, provide an example:
24. If you marked "Yes" in the previous question, do you think students are aware of this collaboration?
    a. Yes
    b. No

25. What kind, in your opinion, should be a teacher-mentor - educator who in her/his work focuses more on supportive participation in students' development and less on transferring knowledge?

26. Would you like to improve your teacher's skills as a mentor?
    a. Yes
    b. No
27. If you marked 'Yes' in the previous question, please explain the relevance to your daily work with students and what tools would be most useful to you:
28. If you marked "No" in the previous question, please explain why:

Annex 2: Surveys for primary school students

Hello! 😊 Can you tell us what your school is?

The survey is anonymous and takes about 15 minutes. We thank you very much

1. How are you feeling today?
    a. Happy
    b. Sad
2. How old are you?
3. Are you a primary school student in grades 1-3?
    a. Yes
    b. No
4. What grade are you in?
    a. Class 1
    b. Class 2
    c. Class 3
5. Do you like going to school?
    a. Yes
    b. No
6. What I like most about school is:
    a. Teachers
    b. Classmates
    c. Lessons
    d. Playground
    e. Additional activities
7. What I like the least about school is:
    a. Teachers
    b. Classmates
    c. Lessons
    d. Playground
    e. Additional activities
8. Do you like your teachers?
    a. Yes
    b. No
9. My teachers:
    a. They help me with my homework
    b. They won't help me with my homework.
10. Next year I want to have the same teachers:
    a. Yes
    b. No

11. The lessons are:
    a. Funny
    b. Boring
12. At school I want to do more activities outside of class (e. g. on the playground):
    a. Yes
    b. No
13. How many stars you give to your school?
    a. 1
    b. 2
    c. 3
    d. 4
    e. 5

Annex 3: Survey for Lower secondary school students

We are starting the Mentor 2.0 project, which is to improve teaching in schools in Poland, Spain, Italy, Austria and Greece. Also, thanks to your help, we want teachers to focus more on supporting students than on imparting knowledge. We appreciate your help!

The survey is anonymous and will take approximately 15 minutes to complete. We kindly ask for honest answers:

1. Are you studying in grades 4-8??
    a. Yes
    b. No
2. Enter how often the teachers give you tips on how to learn effectively: (choose one of the following)
    a. once or several times a week
    b. once a month or more frequently
    c. less than once a month
    d. never
3. If you indicated that you were getting tips/directions, choose which: (select any number)
    a. Methods for better memorization
    b. Creating associations
    c. Create good notes
    d. Learn how something works in practice
4. What do you miss the most in order to learn effectively? (Choose any number)
    a. Motivation
    b. changes in teachers' attitudes
    c. to discuss teaching techniques
    d. help if I don't understand or know something
    e. forbearance of teachers
    f. thinking outside the box by teachers
    g. concentration
    h. I don’t know
    i. other factors, which?
5. Are you eager to take part in lessons? (Choose one answer)
    a. All
    b. the majority
    c. half
    d. less than half

e. none

6. What / who motivates you to learn? Choose 3 main motivators:
   a. knowledge, useful content
   b. willingness to pass
   c. good work in the future
   d. sentence for studies
   e. parents
   f. interesting lessons
   g. ambitions
   h. cool teacher
   i. other students
   j. school subjects I like
   k. nothing
   l. If something else, what?
7. What demotivates you to learn? Choose the 3 main reasons for demotivation:
   a. getting up early
   b. learning useless things
   c. pressure of possible failure
   d. the ability to do something that interests you more
   e. boring school subjects
   f. the shortcomings that follow you
   g. repetition of topics in subsequent classes
   h. the fact that you are judged for everything
   i. the need to study subjects that you don't like
   j. getting bad grades despite studying
   k. material congestion
   l. the attitude of peers
   m. teachers' comments
   n. little free time
   o. too much homework
   p. nothing
   q. If something else, what?
8. Do the teachers talk to you about your strengths / talents and how to develop them?
   a. one teacher
   b. two or three teachers
   c. more than three teachers
   d. no teacher

9. During lessons, you have the opportunity to: Choose as many answers as you want
    a. ask questions
        i. never
        ii. less than once a month
        iii. less than once a week
        iv. more than once a week
        v. daily
    b. take visual (mind map) notes
        i. never
        ii. less than once a month
        iii. less than once a week
        iv. more than once a week
        v. daily
    c. participate in the discussion
        i. never
        ii. less than once a month
        iii. less than once a week
        iv. more than once a week
        v. daily
    d. work in groups and pairs
        i. never
        ii. less than once a month
        iii. less than once a week
        iv. more than once a week
        v. daily
    e. work independently
        i. never
        ii. less than once a month
        iii. less than once a week
        iv. more than once a week
        v. daily
    f. express your opinion on the topics discussed during the lesson
        i. never
        ii. less than once a month
        iii. less than once a week
        iv. more than once a week
        v. daily
    g. Submit own ideas and implement them with the help of teachers
        i. never

ii. less than once a month
iii. less than once a week
iv. more than once a week
v. daily

h. use of the computer and the Internet in the performance of classroom assignments
i. never
ii. less than once a month
iii. less than once a week
iv. more than once a week
v. daily

i. use a smartphone for learning purposes
i. never
ii. less than once a month
iii. less than once a week
iv. more than once a week
v. daily

10. During the lesson, the teachers give you tips on how to: (Choose any number of answers)
a. Review important content
b. Remember important information
c. Take notes that are useful for you
d. Use your strengths to learn
e. How to find the necessary knowledge on the Internet
f. Give no hints

11. How do you usually feel when you are assessed? Choose the descriptions that best suit you:
a. I still want to learn
b. I decide to improve
c. losing motivation to continue studying
d. I still don't know what to do/correct
e. I know what to improve and how to do it

12. How do teachers motivate you and create a learning atmosphere? Choose the 3 most common ways:
a. when they conduct the lesson in an interesting way
b. when they answer the questions asked by exploring the topic
c. when they praise you when you succeed?
d. by saying that the topic will be related to future lessons
e. I don't know

f. They don’t motivate me
g. differently, how do they motivate you?

13. Thanks to my school, I can: (Choose any number of answers)
    a. get involved in environmental actions and events
    b. participate in volunteering
    c. present my own talents, talents and / or strengths
    d. implement my ideas
    e. participate in social projects
    f. participate in ecological projects
    g. participate in projects developing cooperation and communication skills
    h. participate in projects involving local entrepreneurs and other companies
    i. none of the above
    j. other:
14. If you could change something about your school, what would it be?
    a. learning useful things
    b. classes starting at a later hour
    c. more conversations and activities on different life paths
    d. more outdoor activities and experiments instead of sitting at the desks
    e. teachers' approach to students
    f. more interschool and international projects, trips and initiatives
    g. grading system
    h. ways of teaching
    i. I wouldn't change anything
    j. If something else, what?
15. What would you wish for your teachers?

Annex 4: Survey for Upper-secondary school students

We are starting the Mentor 2.0 project, which is to improve teaching in schools in Poland, Spain, Italy, Austria and Greece. Also, thanks to your help, we want teachers to focus more on supporting students than on imparting knowledge. We appreciate your help!

The survey is anonymous and will take approximately 15 minutes to complete. We kindly ask for honest answers:

1. Are you a student in upper secondary education?
    a. Yes
    b. No
2. Enter how often the teachers give you tips on how to learn effectively: (choose one of the following)
    a. once or several times a week
    b. once a month or more frequently
    c. less than once a month
    d. never
3. If you indicated that you were getting tips/directions, choose which: (select any number)
    a. Methods for better memorization
    b. Creating associations
    c. Create good notes
    d. Learn how something works in practice
4. What do you miss the most in order to learn effectively? (Choose any number)
    a. Motivation
    b. changes in teachers' attitudes
    c. to discuss teaching techniques
    d. help if I don't understand or know something
    e. forbearance of teachers
    f. thinking outside the box by teachers
    g. concentration
    h. I don’t know
    i. other factors, which?
5. Are you eager to take part in lessons? (Choose one answer)

a. All
b. the majority
c. half
d. less than half
e. none

6. What / who motivates you to learn? Choose 3 main motivators:
   a. knowledge, useful content
   b. willingness to pass
   c. good work in the future
   d. sentence for studies
   e. parents
   f. interesting lessons
   g. ambitions
   h. cool teacher
   i. other students
   j. school subjects I like
   k. nothing
   l. If something else, what?
7. What demotivates you to learn? Choose the 3 main reasons for demotivation:
   a. getting up early
   b. learning useless things
   c. pressure of possible failure
   d. the ability to do something that interests you more
   e. boring school subjects
   f. the shortcomings that follow you
   g. repetition of topics in subsequent classes
   h. the fact that you are judged for everything
   i. the need to study subjects that you don't like
   j. getting bad grades despite studying
   k. material congestion
   l. the attitude of peers
   m. teachers' comments
   n. little free time
   o. too much homework
   p. nothing
   q. if something else, what?
8. Do the teachers talk to you about your strengths / talents and how to develop them?
   a. one teacher
   b. two or three teachers

c. more than three teachers
d. no teacher

9. During lessons, you have the opportunity to: Choose as many answers as you want
    a. ask questions
        i. never
        ii. less than once a month
        iii. less than once a week
        iv. more than once a week
        v. daily
    b. take visual (mind map) notes
        i. never
        ii. less than once a month
        iii. less than once a week
        iv. more than once a week
        v. daily
    c. participate in the discussion
        i. never
        ii. less than once a month
        iii. less than once a week
        iv. more than once a week
        v. daily
    d. work in groups and pairs
        i. never
        ii. less than once a month
        iii. less than once a week
        iv. more than once a week
        v. daily
    e. work independently
        i. never
        ii. less than once a month
        iii. less than once a week
        iv. more than once a week
        v. daily
    f. express your opinion on the topics discussed during the lesson
        i. never
        ii. less than once a month
        iii. less than once a week
        iv. more than once a week
        v. daily

g. Submit own ideas and implement them with the help of teachers
    i. never
    ii. less than once a month
    iii. less than once a week
    iv. more than once a week
    v. daily
h. use of the computer and the Internet in the performance of classroom assignments
    i. never
    ii. less than once a month
    iii. less than once a week
    iv. more than once a week
    v. daily
i. use a smartphone for learning purposes
    i. never
    ii. less than once a month
    iii. less than once a week
    iv. more than once a week
    v. daily

10. During the lesson, the teachers give you tips on how to: (Choose any number of answers)
    a. Review important content
    b. Remember important information
    c. Take notes that are useful for you
    d. Use your strengths to learn
    e. How to find the necessary knowledge on the Internet
    f. Give no hints
11. How do you usually feel when you are assessed? Choose the descriptions that best suit you:
    a. I still want to learn
    b. I decide to improve
    c. losing motivation to continue studying
    d. I still don't know what to do/correct
    e. I know what to improve and how to do it
12. How do teachers motivate you and create a learning atmosphere? Choose the 3 most common ways:
    a. when they conduct the lesson in an interesting way
    b. when they answer the questions asked by exploring the topic
    c. when they praise you when you succeed?

d. by saying that the topic will be related to future lessons
e. I don't know
f. They don’t motivate me
g. differently, how do they motivate you?

13. Thanks to my school, I can: (Choose any number of answers)
    a. get involved in environmental actions and events
    b. participate in volunteering
    c. present my own talents, talents and / or strengths
    d. implement my ideas
    e. participate in social projects
    f. participate in ecological projects
    g. participate in projects developing cooperation and communication skills
    h. participate in projects involving local entrepreneurs and other companies
    i. none of the above
    j. other:

14. On a scale from 1 to 6, determine at what level teachers in your school discuss with you the emergence of new professions and changes taking place on the labour market? (Where 1 is very low and 6 is very high level)
    a. 1
    b. 2
    c. 3
    d. 4
    e. 5
    f. 6
15. On a scale from 1 to 6, determine at what level your school prepares you to choose a field of study and choose a profession. (Where 1 is very low and 6 is very high level)
    a. 1
    b. 2
    c. 3
    d. 4
    e. 5
    f. 6
16. On a scale from 1 to 6, how often does your school undertake activities aimed at cooperation with employers? (Where 1 means that he does not take such actions, and 6 means that he engages them very often)
    a. 1
    b. 2
    c. 3

d. 4
e. 5
f. 6

17. If you could change something about your school, what would it be? Choose the 3 most important in your opinion:
    a. learning useful things
    b. classes starting at a later hour
    c. more conversations and activities on different life paths
    d. more outdoor activities and experiments instead of sitting at the desks
    e. teachers' approach to students
    f. more interschool and international projects, trips and initiatives
    g. grading system
    h. ways of teaching
    i. if something else, what?
    j. I wouldn't change anything
18. What would you wish for your teachers?

MENTOR 2.0

Erasmus+

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