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Hybrid Education in Higher Education on the Example of Students' Experiences in Post-pandemic Reality

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***Abstract*—The article concerns the experiences of students related to hybrid education conducted in the first semester of the academic year 2021/2022. The aim of the study was to find out the opinions of students on hybrid education conducted at The Maria Grzegorzewska University and to compare it with traditional education and distance education. The subject of the research was, among others, the readiness of students to participate in hybrid learning, assessing its quality and other related experiences. The research used the method of diagnostic survey. The obtained results indicate that students rate their readiness to participate in hybrid education higher than the readiness of lecturers to conduct it. They see the possibility of using a hybrid approach to education and science, organization of education and health. They indicate convenience, organization and health safety as the most important advantages and social costs, student attitudes and technical problems as the most important disadvantages of hybridization. The article also presents the expectations of students in relation to the systemic sanctioning of hybrid education. It was suggested to use the lessons learned by developing and testing the effectiveness of a hybrid approach, the potential of which is undeniable and scientifically proven.**

***Keywords*—hybrid education; higher education; students; blended learning; COVID-19; SARS-CoV-2**

I. Introduction

THE introduction of hybrid solutions, in the face of the gradually extinguished SARS-CoV-2 pandemic, has become a natural consequence of the mass use of online learning [1] and earlier - traditional forms of education. It is a deliberate change related to the fact that people are not fully satisfied with the complete domination of online education - especially this introduced in an emergency, with the simultaneous need to use it in the face of health threats or organizational difficulties [2, 3]. Similarly, to other universities, the increasing level of IT competences of the staff and students [4] was appreciated, the improvement of the university infrastructure enabling the implementation of online and mixed solutions and the change of attitude, including greater readiness of teachers and students to a more flexible choice of the education mode [5].

Medical students indicate the problem of the dominance of the remote mode in the conducted hybrid form. Sometimes the "hybrid form" is distance learning, only under a different name. The difficulty is the proper organization of classes to be able to reconcile these two modes of work. It is particularly difficult when it is necessary to move between the university and home. It is also problematic to inform students late about the applicable mode of classes. It was considered a mistake when some students were doing seminar classes at the same time stationary, and some remotely. Due to these disadvantages, a significant part of students would not like to continue this form of education, especially in relation to practical classes [6]. On the other hand, students appreciate the possibility of carrying out some of the online classes, especially those that introduce practical topics. And these can be done faster as part of stationary exercises. For some students, it is the optimal form of conducting practical classes [6]. The opinions of students are not unambiguous but depend on their experiences in this field.

In the hybrid mode, the most important thing is to integrate the best in traditional education and the best in technological solutions for education [7]. Such teaching has four properties: it combines individual and collective learning, synchronous and asynchronous, independent and group learning, as well as formal and non-formal learning [8]. Hybrid learning motivates greater involvement compared to e-learning [9]. The learner is largely in control of the time, place, and pace of learning. At the same time, teaching remains within the teacher's supervision over the educational process. It should be understood what content is transmitted online and what is transmitted in-line [10]. Hybrid teaching teaches you how to manage your own time and the awareness of your own learning style increases; it is a positive learning experience for learners [11]. Hybrid education is helpful for people who have limitations in mobility or availability, it allows to combine institutions and informal environments, and allows for various forms of cooperation [12]. The implementation of hybrid education requires investment, also on the part of the learner [11].

II. Method

The conducted research concerned the experiences of students of The Maria Grzegorzewska University related to hybrid education conducted in the first semester of the academic year 2021/2022.

The aim of the study was to find out the opinions of students on hybrid education conducted at The University and to compare it with traditional education and distance education. The subject of the research was, among others, the readiness of students to participate in hybrid learning, assessing its quality and other related experiences. Traditional, distance and hybrid education were compared, considering the views of students. The research formulated research problems with the following content: what are the opinions of The Maria Grzegorzewska University students about hybrid education? What are the similarities and differences between traditional, distance and hybrid education?

The research used the method of a diagnostic survey, the questionnaire technique. A research tool was prepared - aquestionnaire, which was sent by e-mail to all students. Responses from respondents were collected using the Google Forms electronic form. The statistical analysis of the research results was carried out in the IBM SPSS Statistics 27 program. The analysis of the respondents' statements and their categorization was carried out by two competent judges.

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III. Results

In the study addressed to students 364 people took part, which constitutes 8.5% of students. The youngest respondent was 18 years old, and the oldest 51 ($M = 24.1$; $Me = 22$; $Mo = 22$). Most of the respondents were women (322 people; 88%), a minority were men (34 people; 9%) and people declaring themselves non-binary (7 people; 2%).

Most of the respondents were first-year students (156 people; 43%). Students from the second year accounted for 23% (83 people), from the third and fourth year to 12% (42 people each), and from the fifth year to 11% (41 people). More than two-thirds of the respondents (250 people; 69%) are full-time students, and almost one-third (112 people; 31%) are part-time students. Two people from the Doctoral School completed the questionnaire.

Students were asked to assess the readiness of lecturers to implement hybrid teaching depending on the situation and needs. They assessed 6 cases as illness or isolation of the lecturer, illness or isolation of students, random factors (e.g., bomb alarm), top-down legal regulations, student request, own convenience (e.g., conducting classes remotely from the conference trip) on a scale from "Very low "(1) to" Very High "(5). The results are presented in Table I.

TABLE I
DESCRIPTIVE STATISTICS
READINESS OF LECTURERS TO IMPLEMENT HYBRID TEACHING ACCORDING TO STUDENTS

	M	Min	Max	Me	Mo	Ske	K
Lecturer's illness or isolation	3.60	1	5	4	4	-0.48	-0.20
Illness or isolation of students	3.15	1	5	3	4	-0.27	-0.91
Random factors (e.g., bomb alarm)	3.32	1	5	3	3	-0.28	-0.49
Top-down legal regulations	3.84	1	5	4	4	-0.86	0.50
At the request of the students	2.83	1	5	3	4	0.03	-1.05
Due to your own convenience (e.g., going to a conference)	3.33	1	5	3	3	-0.33	-0.34

Students also assessed their readiness to implement hybrid learning in the above situations. The results are presented in Table II.

TABLE II
DESCRIPTIVE STATISTICS
READY TO IMPLEMENT HYBRID TEACHING

	M	Min	Max	Me	Mo	Ske	K
Lecturer's illness or isolation	4.41	1	5	5	5	-1.52	2.81
Illness or isolation of students	4.38	1	5	5	5	-1.40	1.93
Random factors (e.g., bomb alarm)	4.18	1	5	4	5	-1.24	1.06
Top-down legal regulations	4.40	1	5	5	5	-1.70	3.44
At the request of the students	4.30	1	5	5	5	-1.57	2.76
Due to your own convenience	4.24	1	5	5	5	-1.48	1.94

Students indicated all organizational forms of hybrid learning that they experienced in the last semester. Most people dealt with typical distance learning, i.e., the lecturer conducted classes from home for students who were also in their own homes (354 people; 100%). A popular form was that the classes were conducted by a lecturer at the university when some students participated in them personally, and others remotely (326 people; 92.1%); all students worked remotely (271 people; 76.6%); or when lectures were held remotely and exercises stationary (162 people; 45.8%). Less frequent forms of work were organizing some of the classes stationary, e.g. with an introduction to the topic, and some remotely, e.g. students' own work (79 people; 22.3%); when the lecturer was at home and conducted classes for some students who were at home, and some at the university (45 people; 12.7%); the lecturer conducted classes from home when the students were at the university (35 people; 9.9%) or organizing lectures stationary and training remotely (32 people; 9%).

Students rated the quality of hybrid education offered by the university above average ($M = 3.67$; $Me = 4$; $Mo = 4$; $Ske = -0.69$; $K = -0.11$), and the contact with lecturers was high ($M = 3.97$; $Me = 4$; $Mo = 4$; $Ske = -0.80$; $K = 0.26$).

Students rated selected elements of hybrid education on a scale from 1 (definitely negative) to 5 (definitely positive). The highest grades were the compliance of classes with the subject syllabus ($M = 4.06$) and the readiness of lecturers to use hybrid solutions ($M = 3.62$). The IT competences of lecturers and technical support from universities were rated above average ($M = 3.45$), as well as the equipment of rooms for conducting hybrid classes ($M = 3.36$). The results are presented in Table 10. The students assessed the attitude of the authorities regarding the periodic change in the mode of education as average ($M = 2.95$). Descriptive statistics are presented in Table III.

TABLE III
DESCRIPTIVE STATISTICS
STUDENTS 'EVALUATIONS ON ELEMENTS OF HYBRID EDUCATION

	M	Min	Max	Me	Mo	Ske	K
Equipping classrooms with equipment for conducting hybrid classes	3.36	1	5	4	4	-0.52	-0.18
IT competences of lecturers	3.45	1	5	4	4	-0.60	0.05
Technical support from the university	3.45	1	5	3.5	4	-0.33	-0.12
Attitude of university authorities regarding periodic changes in the mode of education	2.95	1	5	3	4	-0.09	-1.05
Readiness of lecturers to use hybrid solutions	3.62	1	5	4	4	-0.68	-0.06
Compliance of the classes with the syllabus of the subject	4.06	1	5	4	4	-0.83	0.68

Students indicated elements that, according to them, were missing for the effective implementation of hybrid education. The most numerous groups mentioned were the lack of goodwill of lecturers (140 people; 39.5%), systemic solutions at the university level (126 people; 35.6%) and IT skills of lecturers

(115 people; 32.5%). Students complained about the lack of computer equipment at the university (66 people; 18.6%), goodwill of the students themselves (41 people; 11.6%), as well as IT competences of students (31 people; 8.8%) and computer hardware in dormitories (29 people; 8.2%) and lecturers' houses (10 people; 2.8%) Almost a third of students (109 people; 30.8%) believe that everything was fine and that nothing was missing.

A. The scope of using hybrid education

Students were asked an open question: For what and in what situations, excluding the pandemic situation, hybrid education can be used in academic education? 20 (5.5%) people did not answer this question, 14 (3.9%) people did not know what to answer, and 8 (2.2%) people decided that this mode of education was not applicable.

The remaining responses were categorized in Table IV.

TABLE IV
MAIN APPLICATION CATEGORIES FOR HYBRID EDUCATION IN THE STUDENTS 'OPINIONS

Category	Number of responses	Percentage
Didactics	185	50.8
Organizational matters	174	47.8
Health conditions	146	40.1
Improving the academic environment	33	9.1
Other answers	23	6.3

The greatest number of responses from the surveyed students concerned various dimensions of teaching (185 people; 50.8%). The most important, in their opinion, is the possibility of using hybrid classes to carry out all activities that are not based on student activity, in particular lectures (127 people; 34.9%). The possibility of conducting classes all the time (maintaining the continuity of education) (27 people; 7.4%), for the implementation of subjects that work better remotely (e.g., computer science, statistics) (6 people; 1.7%) is much less emphasized. Five people (1.4%) indicated teaching part-time students and exams so that there was no need to go to the university. In addition, the following items were indicated: consultations (4 people; 1.1%), diploma seminar (3 people; 0.8%), a place for storing files and doing homework (two answers each). Individual persons indicated the possibility of student internships, tutoring, large exams and international education.

Hybrid solutions are also helpful in various organizational conditions (174 people; 47.8%). Therefore, they provide support for people who live or are far away from university (35 people; 9.6%); are absent from the university for objective, no-fault reasons (32 people; 8.8%); in case of bad weather conditions (19 people; 5.2%); for problems with public transport and for (business) trips (11 people each; 3%); to make up for missed classes (10 people; 2.8%). Six statements (1.7%) each referred to the possibility of studying pregnant students or mothers of young children, filling the gaps between classes and the possibility of reconciling work with the university. 5 statements (1.4%) each referred to the facilities around the holiday season and the situation when there is only one class a day at the university. Four statements indicated the possibility of afternoon or evening activities in this form, three people (0.8%) - facilitation for people with special educational needs. Individuals found it to be a good form when there is no need to come to the university when there is little space at the university, during the session, for one-cycle classes, in the winter, for a small group of students, for better organization.

A significant part of the statements (146 people; 40.1%) related to health issues: the situation when the student (98 people; 26.9%) or the lecturer (48 people; 13.2%) are ill.

Some of the statements (33 people, 9.1%) focus on various forms of improving the academic community: conducting training, courses, and workshops (14 people; 3.9%); organization of conferences (7 people; 1.9%); implementation of projects (6 people; 1.7%), development of IT competences of students and the work of scientific clubs (3 people each; 0.8%).

Other categories of statements (23 people; 6.3%) include: convenience of students and lecturers (9 people; 2.5%); communication with others (5 people; 1.4%); response to students' requests and their needs. Individuals indicate greater student involvement, better education, and better student outcomes.

The above analyzes show examples of students' statements:

"To conduct lectures in a remote form, which will be convenient for people commuting from other cities to the university. There should be lecture days during which students would be home and practice days during which they would be at university." "Lectures should be strictly hybrid, and recorded so that everyone has access to them, and if the student wants, he can also come to the university." "I believe that it should always be possible to participate in lectures and exercises remotely."

B. Advantages of hybrid education

When asked what advantages characterize hybrid education, 10 people (2.8%) among the surveyed students did not answer, another 10 people considered that this type of education had advantages, and 3 people (0.8%) stated that they did not know the answer to this question.

The students' responses are categorized in Table V.

TABLE V
THE MAIN CATEGORIES OF ADVANTAGES OF HYBRID EDUCATION IN THE STUDENTS 'OPINIONS

Category	Number of responses	Percentage
Convenience	235	64.6
Organizational matters	180	49.5
Health and safety	86	23.6
Didactic importance	62	17.0
Other benefits	58	15.9

The most important category of advantages mentioned by students are those related to convenience (235 people; 65.6%). Among them, the key is the lack of the need to travel to the

university (102 people; 28%) and time savings (92 people; 25.3%). To a lesser extent, these are also: the possibility of participating in activities at home (19 people; 5.2%), saving money (e.g., due to the reduction of the cost of commuting or renting an apartment) (13 people; 3.6%), longer rest (5 people; 1.4%), the ability to eat a meal in peace (2 people; 0.6%). Individuals noticed that they could listen to the lecture calmly and that they can turn it down when the teacher speaks too loudly.

The second category of responses relates to organizational aspects (180 people; 49.5%). These include the possibility of participating in classes despite the disease (63 people; 17.3%), adapting to the student's needs in random situations (37 people; 10.2%), easier organization of time and availability (18 people each; 5%), mobility (13 people; 3.6%), the possibility of using breaks between classes (11 people; 3%), the possibility of combining studying with work (8 people; 2.2%), carrying out classes according to the plan despite random situations and no delays for classes (5 people each; 1.4%), the possibility of combining motherhood with education (2 people; 0.6%).

The third category is health and safety, indicated by 86 people (23.6%). Thanks to hybrid education solutions, the risk of infection is lower (33 people; 9.1%), and the respondents have a greater sense of security (25 people; 6.9%). Other aspects of this category relate to reducing stress (9 people; 2.5%), reducing meetings in crowded places (8 people; 2.2%), and increasing the level of health and mental comfort of students (5 people; 1.4%), the possibility of working in smaller groups at the university (3 people; 0.8%), limiting contact (2 people; 0.6%) and the lack of exclusion or stigmatization by the group (1 person; 0.3%).

Hybrid solutions are also important for didactic processes (62 people; 17%). The respondents indicated a better focus on classes (18 people; 5%), more time for study (17 people; 4.7%), better availability and quality of materials (7 people; 1.9%), easier notetaking (6 people; 1.7%), no differences between full-time and hybrid education (4 people; 1.1%), combining the possibilities of technology in teaching (2 people; 0.6%). Individuals also indicated a better quality of hybrid lectures, better sound and image, and the possibility of participating in classroom exercises.

Other benefits (58 people; 15.9%) mentioned by students were: better contact (18 people; 5%), flexibility (13 people; 3.6%), the ability to choose the form of participation (remotely or stationary) (12 people; 3.3%), involvement of students and lecturers in this type of classes (4 people; 1.1%), greater motivation (3 people; 0.8%), faster results of exams and tests (2 people; 0.6%). Individuals mentioned more efficient communication, the possibility of adjusting education to life, independence, organization and support of the University lecturers and students, diversity and increasing the digital competences of students.

The students wrote about the advantages as follows:

"More time, you do not have to waste it on commuting, on lectures where the lecturer does not talk to students anyway, you do not have to sit in the auditorium, and you still take the same amount of knowledge from the lessons." "I am often blind in classroom classes, and during remote classes, I have no problem with it." "The student can choose a more effective way to learn, understand and focus." "Everyone decides what is better for him and how he can better cope with the duties at the university, which in the end the exam sums up anyway."

C. Disadvantages of hybrid education

When asked about the disadvantages of hybrid education, 23 people (6.3%) did not answer, 48 people (13.2%) decided that there were no such defects, and 4 people (1.1%) did not know how to answer that question.

The remaining responses are categorized in Table VI.

TABLE VI
MAIN CATEGORIES OF DISADVANTAGES OF HYBRID EDUCATION NOTICED BY STUDENTS

Category	Number of responses	Percentage
Social	101	27.8
Student attitudes	81	22.3
Technical	76	20.9
Organizational	71	19.5
Didactic	59	16.2
Lecturers' attitudes	23	6.3
Other	22	6.0

The most pronounced disadvantages of hybrid education relate to the social aspects (101 people; 27.8%). Among them, the surveyed students mentioned: a lack of live contact with other people (42 people; 11.5%), difficult contact between students (24 people; 6.6%) and difficult contact with lecturers (17 people; 4.7%). Other responses related to communication difficulties (8 people; 2.2%), isolation (7 people; 1.9%), lack of ties between students and lecturers (2 people; 0.6%) and the lack of development of soft skills (1 person; 0.3%).

A significant disadvantage is also the attitudes and behavior of students (81 people; 22.3%). They include difficulty in focusing (23 people; 6.3%), less commitment and lack of motivation (13 people each; 3.6%), laziness (9 people; 2.5%), less activity (6 people; 1.7%), overuse of this form of classes (4 people; 1.1%), stress and low level of regularity (3 people each; 0.8%), lack of IT competences and focus on cheating (2 people each; 0 6%). Individuals also mentioned: dissatisfaction with such activities, decreased creativity and a sense of injustice.

Students also noticed shortcomings related to technical issues (76 people; 20.9%). These generally include technical problems with hardware or software (49 people; 13.5%) and problems with the Internet (27 people; 7.4%).

The disadvantages of hybrid education are also organizational issues (71 people; 19.5%). Among them are general organizational difficulties (30 people; 8.2%), chaos, lack of rules and unclear timetables (18 people; 5%), the necessity to visit the university (7 people; 1.9%), too short time for a change of place and the lack of readiness and conditions at the university for this form of classes (6 people each; 1.7%). Individuals wrote about: the lack of home conditions for this

form of education, difficulties in combining study and work, difficulties in combining distance and stationary education, and pointed to the great organizational effort borne by students.

Another category of disadvantages of hybrid education is related to didactics (59 people; 16.2%). These include lower effectiveness and quality of classes (17 people; 6.7%), limitations in its use in various classes or activities (11 people; 3%), maladjustment of examinations and forms of checking student competences (10 people; 2.8 %). To a lesser extent, they include difficulties in working in a group (3 people; 0.8%) and: lack of control over the work of students, preferring stationary exercises, lack of climate for people studying at home, excess work, loss of people participating remotely in the elements of the classes, worse transmission, and reception of information (2 responses each; 0.6%). Individuals mentioned: monotony, compulsion to turn on the cameras, low quality of the remote part and lack of comfort in a situation when most of the activities are remote.

The attitudes of lecturers are also considered a defect (23 people; 6.3%). This category includes lecturers favoring the traditional form (9 people; 2.5%), low IT competences (6 people; 1.7%), lack of convenience for lecturers and lack of trust and understanding on their part (3 people each; 0.8%). Individuals referred to the lower involvement of lecturers and the lack of respect for students' private time.

The category of other defects included 22 indications (6%). Among them, 4 people (1.1%) noticed that they had to rent an apartment in Warsaw and sit at the computer for a long time; 3 people each (0.8%) - that it generates health problems and that there is no academic atmosphere; 2 people each (0.6%) - that it requires multitasking and that it is not sure how long it will take. Single students wrote about: electronic exclusion, random situations, the disadvantage of everything and the disadvantage of hybridization itself (and not remote).

The disadvantages of hybrid education were indicated by the respondents, inter alia, with the following statements:

“It is difficult to reconcile the time of classes that take place at the university and remotely after the break. It is inconvenient and embarrassing for out-of-town students." "Not everyone has the equipment that lecturers require." "People have an ignorant attitude, we learn little, we have no contact with other students/lecturers. No development of soft skills, no work on self-confidence. Mentally focused on cheating, not learning."

D. Difficulties related to the implementation of hybrid education

Some students (18; 5%) did not answer the question about the difficulties that students associate with hybrid education. Some (37 people, 10.2%) do not see any difficulties in this mode of education, and 12 people (3.3%) do not know what difficulties accompany it.

The remaining responses were categorized in Table VII.

TABLE VII
MAIN CATEGORIES OF DIFFICULTIES ACCOMPANYING HYBRID EDUCATION

Category	Number of responses	Percentage
Technical	130	35.7
Organizational	83	22.8
Problems on the part of the lecturers	62	17.0
Student attitudes	44	12.1
Didactic	26	7.1
Communication	21	5.8
Other	6	1.7

The greatest difficulties in implementing hybrid education are related to technical issues (130 people; 35.7%). Among them, 67 people (18.4%) indicated general technical problems, and 63 people (17.3%) - related to the Internet.

Difficulties are also related to various organizational aspects (83 people; 22.8%). These include short time to move from university to home or from home to university (17 people; 4.7%), lack of university readiness for this type of education (12 people; 3.3%), lack of university preparation (organizational facilities) for this type of education (9 people; 10.4%), no conditions at the student dormitory (6 people; 1.7%), and confusion and chaos (1 person; 0.3%).

Various dimensions of the lecturers' work are also problematic (62 people; 17%). Among them are teachers' attitudes (31 people; 8.6%), their competences (30 people; 8.2%) and their recognition that hybrid education is inconvenient (1 person; 0.3%).

Also, the attitudes and behavior of students are a source of difficulties in the implementation of hybrid education (44 people; 12.1%). The following were mentioned here: low concentration (11 people; 3%), lack of commitment (9 people; 2.5%), lack of self-discipline (8 people; 2.2%), lower motivation (6 people; 1.7%), stress (4 people; 1.1%), lack of regularity and abuse of this form by students (2 people each; 0.6%). One indication each referred to honesty and the lack of time allotted to oneself.

The respondents also mentioned various aspects related to didactics (26 people; 7.1%). Among them, the most important are all didactic limitations related to the implementation of hybrid education (16 people; 4.4%). To a lesser extent, they also relate to verification of the learning outcomes and lower quality of education (3 people each; 0.8%) exclusion of some students (2 people; 0.6%) as well as monotony and recognition that this type of education is just as good as traditional mode (one indication each).

For a group of students, communication issues are a problem (21 people; 5.8%). Among them were communication difficulties in general (9 people; 2.5%), contact with instructors and the lack of contact and relations with others (5 responses each; 1.4%), and isolation (2 people; 0.6%).

In the category of other problems (6 people; 1.7%) there are: health problems (3 people; 0.8%), financial problems (2 people; 0.6%) and an excess of stimuli (1 person; 0.3%).

The difficulties are also illustrated in some way by the examples of students' statements:

"The lecturers are unprepared." "Remembering which activities are remote and which are stationary is hard." "The timetable is not adapted to hybrid education." "The pace of introducing changes, introducing this mode, the lack of stability, the inability to develop a longer-term action plan."

E. General remarks on hybrid education

Among the statements of students expressing their reflections on hybrid education, there are the following.

A call to maintain hybrid education regardless of epidemiological conditions. Here there will be both arguments for keeping this mode in the university and suggestions for solutions:

- It is facilitation related to the lack of necessity to come to the university.
- This solution creates the conditions for performing tasks that do not require physical presence - online.
- The same high level of education as in the case of traditional education is maintained; some classes (e.g., computer science) do not lose their quality in a remote or even asynchronous form.
- It is facilitation for students and lecturers.
- The availability of education for the sick, mothers of young children and people with disabilities is increasing - it allows them to combine learning with other duties and activities.
- Attendance increases, especially at lectures, in the event of illness or random events.
- The chances of passing the exams increase.
- Health safety is maintained, in particular during part-time studies attended by students from various regions of Poland.
- It is possible to introduce adequate forms of checking the level of mastery of learning outcomes in a way that allows for the verification of students' independence.
- It is effective, it allows for effective learning, especially for people with passion, of whom there are many at the teaching university.
- Allows the introduction and maintenance of technological innovations in education.
- It is less exhausting than stationary, and is also more comfortable, especially in the case of problems with traveling to the university.
- Allows you to store materials from classes in one place (MS Teams) and increases their availability for students.
- Improves the process of contacting lecturers.
- Allows for the continuity of classes, so students do not lose content.

Since hybrid education gives the freedom to choose the mode of participation in classes, it should be implemented not only in a health emergency but even as the optimal choice of the mode of education made by students. According to students, the lecturers, especially the elderly, who are concerned about their health, should also choose whether to conduct classroom or remote classes.

The surveyed students note that it is worth leaving the lectures permanently in the remote mode, and the exercises in the traditional mode, or introducing the possibility of choosing a permanent education mode (another proposal concerned a solution: stationary specialty classes, and the rest remotely, or the autumn and spring season - hybrid). Moreover, lectures should be recorded and made available to students until the end of the exams. An analogous suggestion concerned the creation of the so-called webinars (but also podcasts and databases), which students could reach after classes or in case they could not be present. In this regard, discipline is also recommended so that the materials appear quickly, e.g., after a day or two after classes.

According to the students, it is also important that the information about what form of classes is being provided in advance.

Among the statements, there was an appeal to decide on one mode of education (either remote or traditional), which will reduce organizational chaos and increase the psychological comfort of students or give up remote education altogether.

There are students who definitely prefer the full-time stationary mode, regardless of the circumstances, especially because it allows contact with other people, which prevents personal and mental difficulties, and in this mode, the quality of education is higher, which increases involvement in education ("I don't like, I don't want to, I don't find any sense of it and I didn't go to college to spend it in front of the screen").

With regard to hybrid education, there are voices praising lecturers: for their kindness, empathy, trust in students, and understanding of random situations.

However, there are also calls for lecturers to always be ready to start an online meeting, whether or not they have received a message from a student. And at the student's request, the possibility of joining the meeting is always available. On the other hand, there are opinions which are illustrated by the statement "The hybrid form should be only for those people who report to the lecturers that they need it this day and it should be at least an hour before the lecture - then let them report their possible absence on the subject channel. The hybrid form should not be something like "I don't feel like it, I will go remotely", only in the case when it is really impossible, in random situations, to take care of a family member, being in a traffic jam or feeling unwell."

For some students, the problem in hybrid education is limited, worse or completely abandoned online contact with lecturers, which is treated as disregard for adult people. They also indicated a limited number of subjects that were carried out in the hybrid mode and the chaos that was the result of a sudden transition from stationary to remote mode (which made it difficult to plan various non-academic activities). It also happened that this form evoked a sense of injustice related to the need to come to the university for some people, clearly limited the activity of students and led to the implementation of examinations inadequate to the content. For some students, hybridization deprived them of academic life, contacts, and social and educational opportunities.

As organizational guidelines, students wrote about designing the plan in such a way that it would be possible to move

comfortably and efficiently, for example, to consolidate lectures in one day. In some cases, the desire to maintain hybridization was also expressed through the implementation of remote classes around Christmas or on Friday afternoon (when students go to their family homes), and in the case of classes when students present their papers and no interactions between them are necessary. It was also advised not to introduce restrictions for students, allowing them to use the hybrid mode in random situations (e.g., during menstruation), without the need to document it.

There was also an incentive to offer courses that will be mainly conducted remotely.

The accusation against the lecturers was the expectation of turning on the camera and good internet connections, which is not always within the reach of students, and the lack of trust in students and treating everyone as potential fraud. The solution to the problem of cheating on tests is, for example, conducting oral exams.

Expectations also concerned the IT competences of lecturers (there are suggestions that people who are not able to meet the technological requirements should retire) and their access to good-quality equipment and the Internet. Lecturers should also be trained to conduct hybrid classes in an interesting way. On the other hand, according to students, some lecturers were not ready to conduct hybrid classes, because it meant they had to bring their private laptops and connect them to the projector in the classroom.

At the same time, despite various critical voices or suggestions for changes and improvements, there were statements appreciating the fact that, despite the difficult, dynamically changing situation, universities and lecturers were ready to conduct hybrid classes, and the classes themselves were conducted at a high standard.

IV. Discussion

Before the pandemic, students were more interested in hybrid education (compared to remote education), which, for example in medical education, allows for the maintenance of key personal contact between all educational entities [13]. The study showed that, according to students, both themselves and lecturers are now ready to pursue classes in a hybrid mode. Especially in a situation of isolation or illness. At the same time, in the opinions of students, this readiness is greater in themselves, compared to the attitudes of academic teachers. The form of e-learning [14], which is overwhelming for some students, does not exclude their interest in the hybrid mode, which ensures direct contact with the lecturer while using technological solutions and flexibility of applied solutions. The transition from remote to hybrid education was natural due to the easing of the restrictions resulting from the pandemic, but it was done with the use of knowledge and experience acquired in previous semesters and the application of the indicated recommendations [15].

All respondents experienced remote education, but also other organizational forms, i.e., situations in which some students were at the university and some at home, and when lectures were conducted remotely, and classes were conducted stationary.

It should be emphasized that although the students rated hybrid education at the university on average, the contact with the lecturers was rated high. In addition, students highly rated the readiness of lecturers to use a hybrid form of work and their compliance with the syllabus of subjects. They also appreciate the fact that such a mode of work can be used in teaching and in organizational activities and in situations of health difficulties. They consider this form convenient and conducive to efficient organizational solutions. Convenience concerns not only the process of teaching and learning but also checking knowledge [16] and examining [17], which, despite doubts as to the honesty of students, are also declared by lecturers [18, 19].

The disadvantages, but also factors that were missing in hybrid education, were the readiness and goodwill of lecturers, their IT competences and system solutions introduced at the university. Discouragement of academic teachers toward students may result from their negative experiences related to distance learning and the dishonesty of students [20]. An important drawback is the social issues and attitudes of the students themselves, as well as a certain technical unpredictability. This is in line with the findings of other researchers that the difficulties with hybrid education include social, integration and costs [12]. It is necessary to go beyond exploratory research and, on the basis of the collected data, develop various pedagogical scenarios and check their effectiveness and impact on students' learning outcomes [21]. Learning in a hybrid space, offering much greater opportunities than traditional space [22], may be more attractive for students. The effectiveness of the implemented hybrid learning models has already been confirmed [23], not only in the case of the lesson material but also in teaching, for example, critical thinking [24]. This shows the potential of a hybrid form of learning that should be exploited.

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