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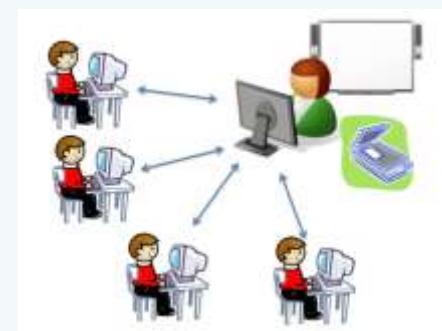


BREST STATE TECHNICAL UNIVERSITY

Problems and perspectives of online education in Belarus. Experience of Brest State Technical University

Natallia Chetyrbock, Head of Management, Economics and Finance Department, Associate professor.

Maryia Tsukanava, Department of World economy, marketing, investment,
Assistant professor.

20th century	21st century
Education	
 A black and white illustration of a traditional classroom from the 20th century. A teacher stands at a podium in front of a large chalkboard, facing a row of students seated at their desks. The room has large windows on one side.	 A diagram illustrating a distance education setup in the 21st century. It shows a central computer monitor connected via arrows to five smaller computer monitors, each representing a student. One student is also shown holding a tablet device.

"Distance form of education is a type of correspondence form of education, carried out mainly with the use of modern communication and information technologies."

Advantages of distance education:

1. Students living in areas of the world where the level of education is not corresponding to modern society, got the opportunity to have access to the latest information resources.
2. New opportunities have emerged for the education of people with disabilities, who now have access to education in the same volume and quality as their peers attending regular universities.
3. The indisputable advantage of distance learning is financial savings: the cost of distance learning is much cheaper than usual, and the costs of travel, food and accommodation are also excluded.
4. Opportunity to receive education during periods of worsening of the epidemiological situation (Covid-19).



Disadvantages of distance education

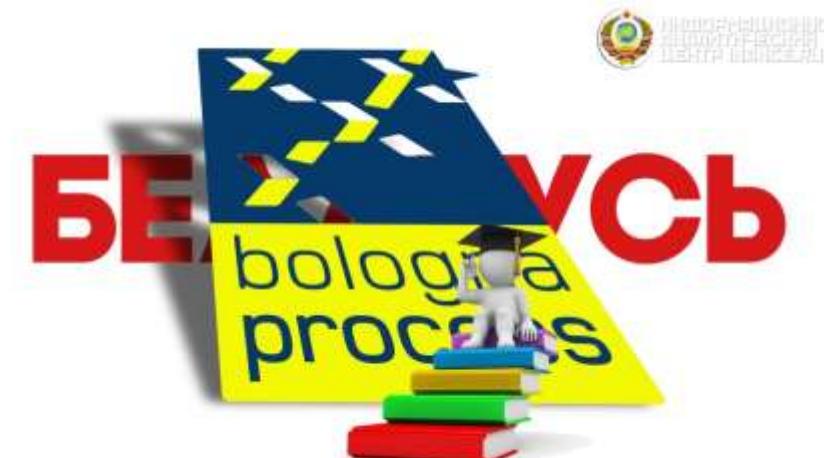
Students have to master the bulk of the educational material on their own. What requires willpower and self-control skills.

Distance learning programs are not suitable for developing communication skills and mastering professions that require a lot of practice (for example, medicine, engineering education, military professions).



Bologna Process provides for the active implementation and development of distance learning in Belarus.

The Ministry of Education of the Republic of Belarus has developed the Concept of informatization of the education system in the Republic of Belarus for the period until 2020, which defines the main goals and objectives of informatization of education, creation of a single educational space throughout the country, and indicates the main ways to improve the quality of educational services.



There is a huge potential for the development of distance learning (DL) in the Republic of Belarus, however it is constrained by the lack of funds, appropriate professional staff and the imperfection of the telecommunications infrastructure.

In order to solve these problems, there are purposed following directions of distance form of higher education development:

- 1) development of national quality standards for the distance education system in higher education;
- 2) stimulation of distance learning by the state through providing educational institutions with financial resources;
- 3) implementation of courses for teachers in order to teach them modern distance technologies;
- 4) increasing the degree of interactivity of DL, and the variety of forms of presentation of material and teaching aids;
- 5) increasing the motivation of students through DL.



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Distance learning is purposed by



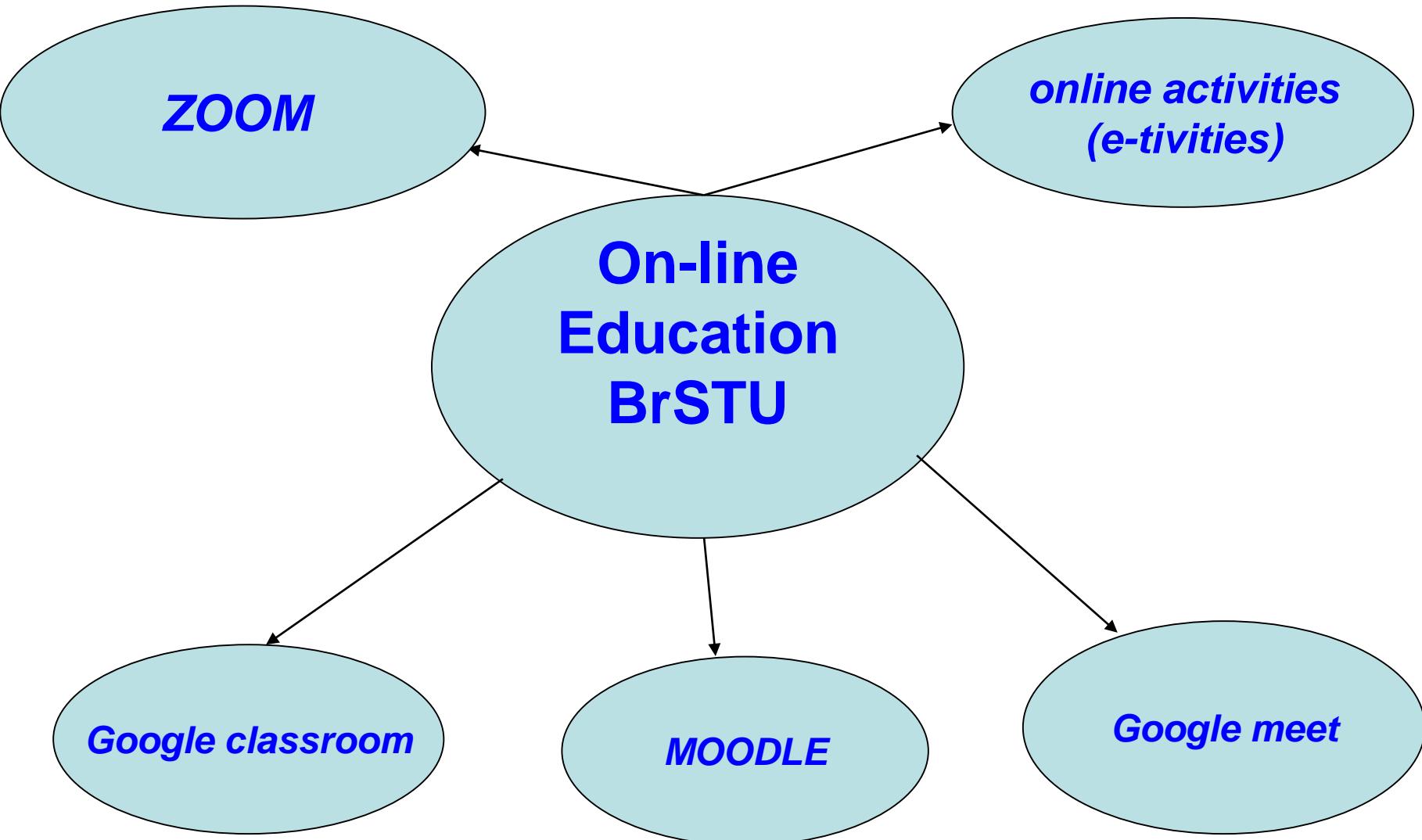
**BUT EXAM SESSION IS IN THE
UNIVERSITY!**



The difficult epidemiological situation in Belarus has contributed to the active implementation of on-line learning.

From April 2020 till now, distance education is periodically used in many universities in Belarus.

BrSTU used distance learning in April-June 2020.





zoom



Google Meet

All lectures and exams were conducted in ZOOM or Google meet.

With the obligatory provision of a link to the university department of education.

The preparation of videos of lectures and tutorial was not paid separately though this took extra time and effort.

The teachers themselves installed ZOOM and Google meet platforms. There was no licensed acquisition. The result is poor quality and limited communication time.



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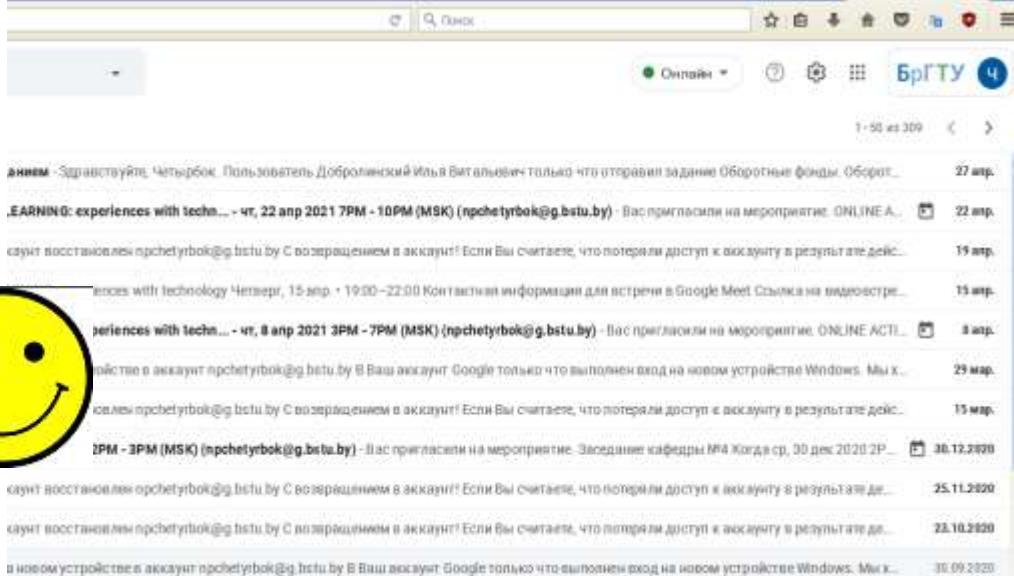
The DL system at BrSTU is based on Google classroom and MOODLE technologies.



All students have access to the e-learning environment.



Mandatory corporate registration of teachers and students on the Google classroom platform involves the creation of a personal corporate account. Registration of corporate accounts of students and teachers is handled by technical staff.



DНИМ - Здравствуйте Четырьбок. Пользователь Добролинский Илья Витальевич только что отправил задание Оборотные фонды. Обратите внимание на то, что в задании есть ссылка на скачивание файла.

EARNING: experiences with technology - чт, 22 апр 2021 7PM - 10PM (MSK) (prchetyrbok@g.bstu.by) - Вы приглашены на мероприятие. ONLINE ACTIVITIES

свойства аккаунта prchetyrbok@g.bstu.by С восстановлением в аккаунт! Если Вы считаете, что потеряли доступ к аккаунту в результате действий, обратитесь в поддержку.

experiences with technology Четверг, 15 апр. + 19:00–22:00 Конспектная информация для встречи в Google Meet. Ссылка на видеовстречу.

EARNING: experiences with technology - чт, 8 апр 2021 3PM - 7PM (MSK) (prchetyrbok@g.bstu.by) - Вы приглашены на мероприятие. ONLINE ACTIVITIES

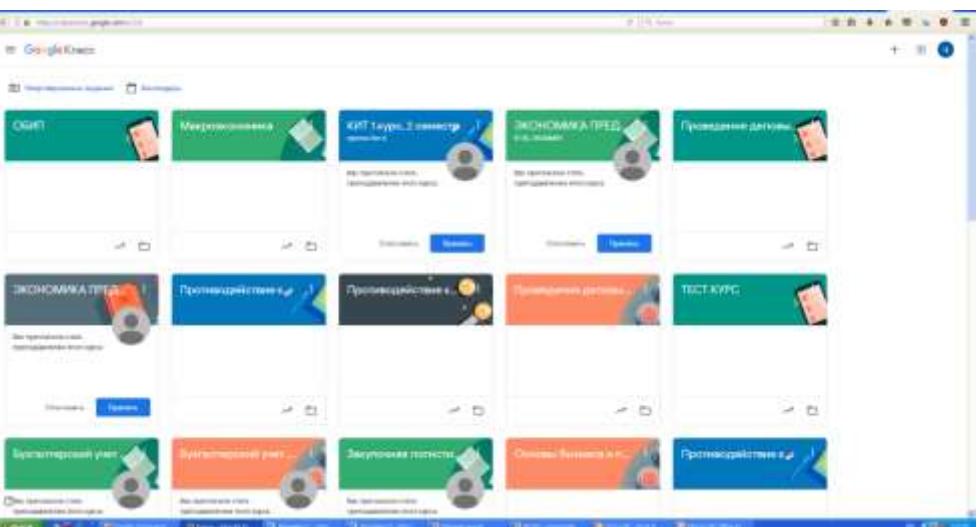
восстановление аккаунта prchetyrbok@g.bstu.by В Ваш аккаунт Google только что выполнен вход на новом устройстве Windows. Мы хотим, чтобы вы восстановили свой аккаунт prchetyrbok@g.bstu.by С восстановлением в аккаунт! Если Вы считаете, что потеряли доступ к аккаунту в результате действий, обратитесь в поддержку.

ZPM - ЗПМ (MSK) (prchetyrbok@g.bstu.by) - Вы приглашены на мероприятие. Заседание кафедры №4 Когда ср, 30 дек 2020 2PM

свойства аккаунта prchetyrbok@g.bstu.by С восстановлением в аккаунт! Если Вы считаете, что потеряли доступ к аккаунту в результате действий, обратитесь в поддержку.

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запрос на восстановление аккаунта prchetyrbok@g.bstu.by В Ваш аккаунт Google только что выполнен вход на новом устройстве Windows. Мы хотим, чтобы вы восстановили свой аккаунт prchetyrbok@g.bstu.by С восстановлением в аккаунт! Если Вы считаете, что потеряли доступ к аккаунту в результате действий, обратитесь в поддержку.



Google Classroom

САЙТ Маркетинговая КИТ-каур. Землетрясение ЭКОНОМИКА-ПРЕД-закупки Проведение данных

ЭКОНОМИКА-ПРЕД-закупки Промышленность и производство Дипломоцентре Гражданские права Тест-курс

Бизнес-матрицы Бизнес-планы Бизнес-идеи Бизнес-стратегии Бизнес-решения

Заслуженная постестовая Оценка-оценка и оценка Технологии обучения

Бизнес-планирование Бизнес-решения Бизнес-стратегии Бизнес-идеи Бизнес-планы Бизнес-матрицы



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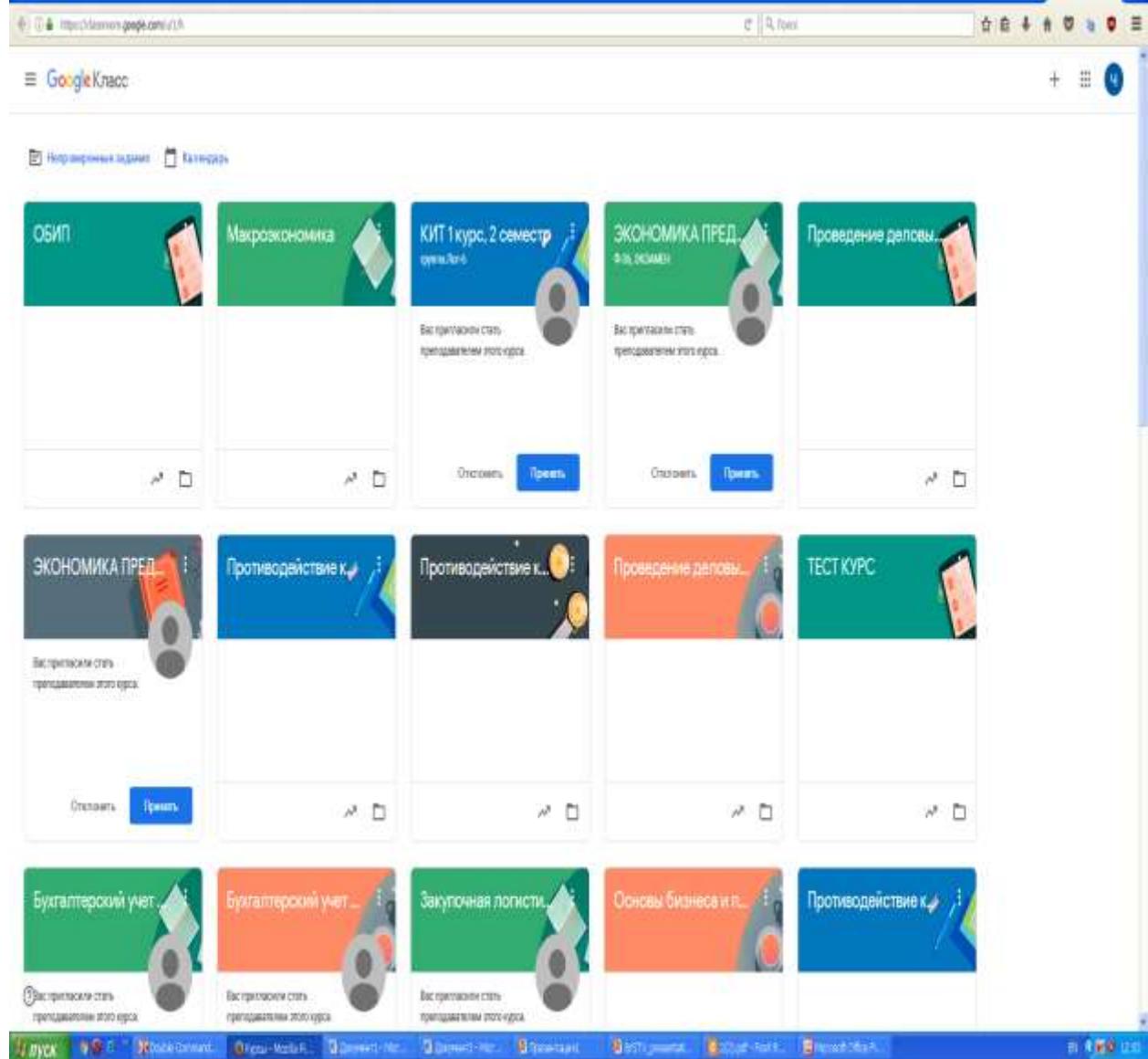


Teacher creates a folder with the course.

Students get the course access code from teacher.

The ability of Google classroom is sufficient for on-line learning on this platform the teacher places a course of lectures, conducts practical classes, conducts exams.

The department of education has access to the courses and can join at any time for verification.



The screenshot shows a Google Classroom dashboard with a grid of course cards. The cards are arranged in four rows:

- Row 1:** ОБИП, Макроэкономика, КИТ 1 курс, 2 семестр, Экономика ПРЕД., Проведение делов...
- Row 2:** ЭКОНОМИКА ПРЕД., Противодействие к..., Противодействие к..., Проведение делов..., ТЕСТ КУРС
- Row 3:** Бухгалтерский учет..., Бухгалтерский учет..., Закупочная логист..., Основы бизнес ана..., Противодействие к...
- Row 4:** Бухгалтерский учет..., Бухгалтерский учет..., Закупочная логист..., Основы бизнес ана..., Противодействие к...

Each card displays the course name, a small icon, and a message indicating that the student has been invited to join the class. Buttons for "Открыть" (Open) and "Принять" (Accept) are visible on some cards.



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Лента Задания Пользователи Оценки

+ Создать

Meet Google Календарь Папка курса на Диске

пересдача

Опубликовано 23 окт. 2020.

пересдача

Опубликовано 9 июл. 2020.

Задача 1

Опубликовано 23 июн. 2020.

Задача 2

Опубликовано 23 июн. 2020.

Задача 3

Опубликовано 23 июн. 2020.

Задача 4

Опубликовано 23 июн. 2020.

Задача 5

Опубликовано 23 июн. 2020.

Задача 6

Опубликовано 23 июн. 2020.

Задача 7

Опубликовано 23 июн. 2020.

Задача 8

Опубликовано 23 июн. 2020.

Задача 9

Опубликовано 23 июн. 2020.

Еще

Микроэкономика тест

Билет 1

Изменено: 29 мая 2020 г.

Лента Задания Пользователи Оценки

Преподаватели

2+

Четырбок Наталья Петровна

Учащиеся

18 учащихся

Действия Написать есени представителям

Якуш Алина Сергеевна Пригласить представителей

Давидович Анастасия Вяч... Пригласить представителей

Карпук Андрей Анатольевич... Пригласить представителей

Костикова Анна Александровна Пригласить представителей

Щербина Анна Витальевна Пригласить представителей

Турченко Анна Сергеевна Пригласить представителей

Пышко Вероника Николаевна Пригласить представителей

Соловьевич Виктория Александровна Пригласить представителей

Мордань Денис Петрович Пригласить представителей



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Untitled form (Ответы) Сохранено на Диске.

Файл Правка Вид Вставка Формат Данные Инструменты Форма Эта версия

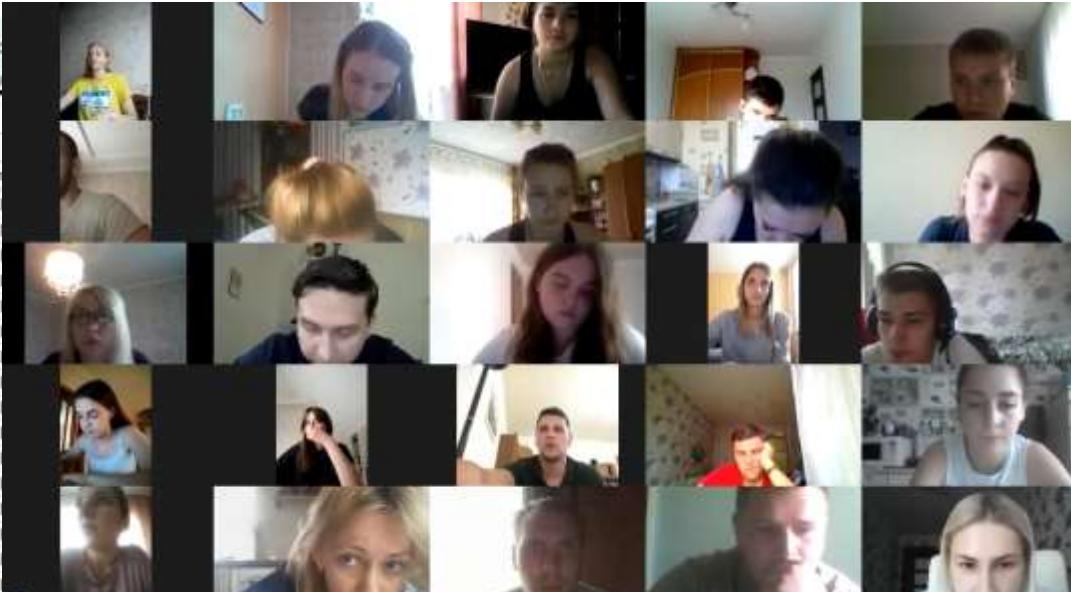
100% р. % .0 .00 123 По умолчанию 10 В. J. F.

A1 Отметка времени

	A	B	C	D	E
1	Отметка времени	Адрес электронной почты	Баллы	Фамилия, Имя	= Отметка времени
11	29.05.2020 21:04:50	iolog08417@g.bstu.by	9 / 9	Халинская Елена	3.1
12	29.05.2020 21:09:47	iolog0612@g.bstu.by	3 / 9	Масик Ксения	3.1
13	29.05.2020 21:11:22	iolog08409@g.bstu.by	9 / 9	Матвейчик Юлия	3.1
14	29.05.2020 21:13:05	iolog08415@g.bstu.by	6 / 9	Сквородник Анастасия	3.1
15	29.05.2020 21:16:25	iolog08416@g.bstu.by	9 / 9	Фетисова Александра	3.1
16	29.05.2020 21:17:51	iolog08407@g.bstu.by	6 / 9	Колос Наталья	3.1
17	29.05.2020 21:30:40	iolog0600@g.bstu.by	6 / 9	Эрешова Эльвира	3.1
18	29.05.2020 21:33:39	iolog0604@g.bstu.by	6 / 9	Голуб Ольга	3.1
19	29.05.2020 21:43:16	iolog0606@g.bstu.by	6 / 9	Жиракская Наталья	3.1
20	29.05.2020 21:43:58	iolog08501@g.bstu.by	6 / 9	Бессараф Мария	3.1
21	29.05.2020 21:54:17	iolog08510@g.bstu.by	9 / 9	Светлана	3.1
22	29.05.2020 21:58:38	iolog08403@g.bstu.by	3 / 9	Блоцкая Ксения	1.1
23	29.05.2020 22:03:04	iolog08401@g.bstu.by	9 / 9	Юлин Андреина	3.1
24	29.05.2020 22:04:09	iolog08412@g.bstu.by	6 / 9	Пашко Людмила	3.1
25	29.05.2020 22:04:09	iolog08411@g.bstu.by	6 / 9	Ничипорович Татьяна	3.1
26	29.05.2020 22:06:14	iolog08409@g.bstu.by	6 / 9	Матвейчик Юлия Валерия	3.1
27	29.05.2020 22:11:49	iolog08404@g.bstu.by	9 / 9	Драпун Арина	3.1
28	29.05.2020 22:36:59	iolog0614@g.bstu.by	6 / 9	Павлович Елена	3.1
29	29.05.2020 22:45:37	iolog0626@g.bstu.by	6 / 9	Юрашевич Светлана	3.1
30	30.05.2020 13:26:25	iolog08402@g.bstu.by	3 / 9	Беллер Владислав	4.1
31	30.05.2020 15:56:24	iolog0603@g.bstu.by	3 / 9	Гидлевская Татьяна	2.1
32	31.05.2020 13:38:05	iolog08408@g.bstu.by	9 / 9	Леонович Юлия	3.1
33	31.05.2020 14:40:49	iolog0619@g.bstu.by	6 / 9	Салешко Валентина	3.1
34	31.05.2020 14:48:35	iolog08508@g.bstu.by	9 / 9	Назарук Ирина	3.1
35	01.06.2020 20:25:02	iolog08507@g.bstu.by	6 / 9	Михальчук Екатерина	3.1
36	01.06.2020 22:19:05	iolog08511@g.bstu.by	9 / 9		1.1
37	02.06.2020 19:42:26	iolog06503@g.bstu.by	9 / 9	Демидович Анастасия	3.1
38	02.06.2020 21:31:40	iolog08512@g.bstu.by	6 / 9	Солоневич Виктория	1.1
39	02.06.2020 21:53:46	iolog08517@g.bstu.by	9 / 9	Азаров Никита	3.1
40	02.06.2020 22:10:41	iolog08515@g.bstu.by	9 / 9	Щербина Анна	3.1
41	02.06.2020 23:50:48	iolog08502@g.bstu.by	9 / 9	Боровец И.Н.	3.1
42	03.06.2020 15:12:05	iolog08514@g.bstu.by	9 / 9	Чернак Оксана	3.1
43	03.06.2020 16:30:26	iolog0622@g.bstu.by	6 / 9	Трофимчук Александр	3.1
44	03.06.2020 16:40:27	iolog08509@g.bstu.by	9 / 9	Ничипорчик Юлия	3.1

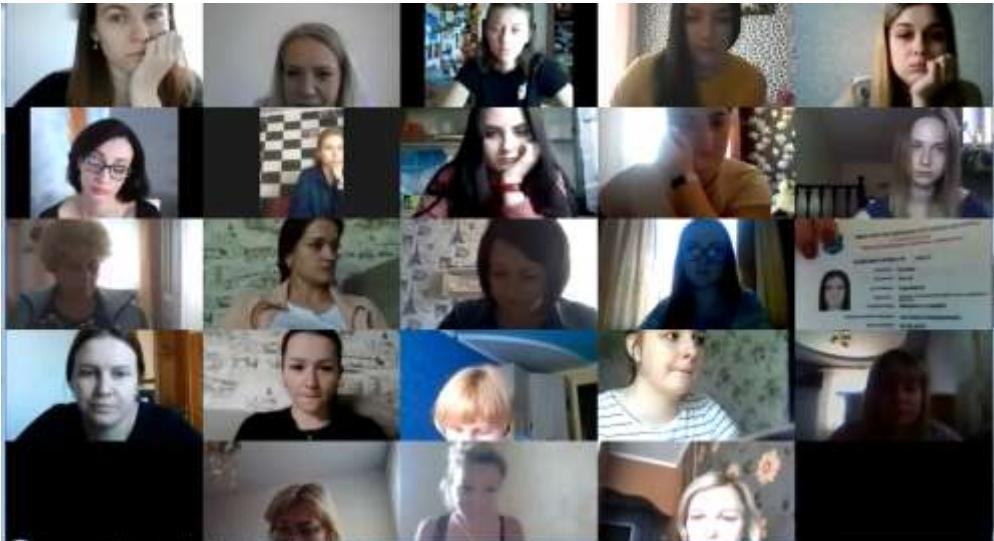
Передача данных с docs.google.com...

пуск Double Command... Untitled form (Ответы) Документ1 - Microsoft Word



During the exams was mainly used a test in the Google form format and a task.

Some students experienced difficulties with registering an account and subsequently working remotely



During the exam, a video recording was made.

It was also necessary to confirm the identity - a demonstration of the record book.

One of the contradictions is that, according to the regulations in BrSTU, exams are conducted only in writing form. It was then necessary to print and archive the answers.

The problem is how to fill out the record books?

Conclusion - the distance education system needs improvement.



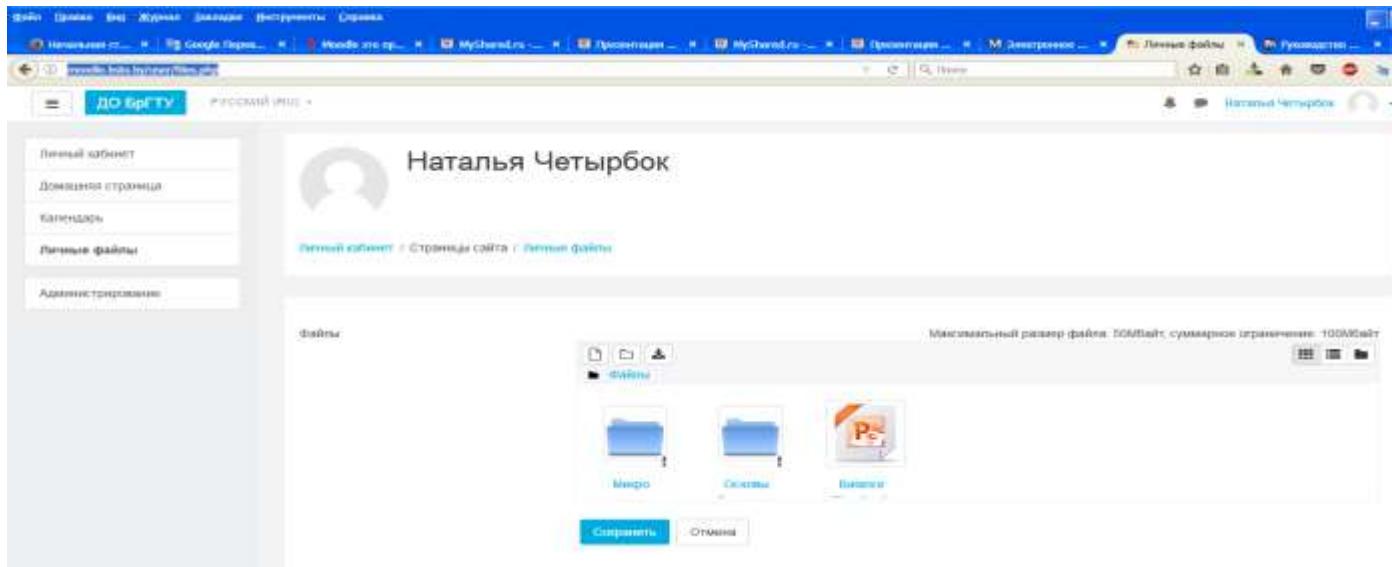
To enter the distance learning system, you must:
Get online;

Go to the website: <http://moodle.bstu.by/>.



Register your username.

Contact the person in charge to confirm your registration.



A screenshot of a Moodle file upload dialog box. The dialog shows three files selected: 'видео' (Video), 'Схемы' (Schemes), and 'Виктор' (Victor). The 'Виктор' file is highlighted with a red border. The dialog includes a message about maximum file size (50MB) and summary storage (100MB).





Students answer the test using the survey system TRIUMPH

Teachers learn innovative teaching methods using the supplied equipment. There is used video recording of the lesson.



The knowledge and equipment obtained from the PRINTEL project helped our university overcome the technical difficulties of distance learning during a pandemic. More than 100 teachers have been trained in the framework of the project and successfully use the acquired knowledge and equipment.

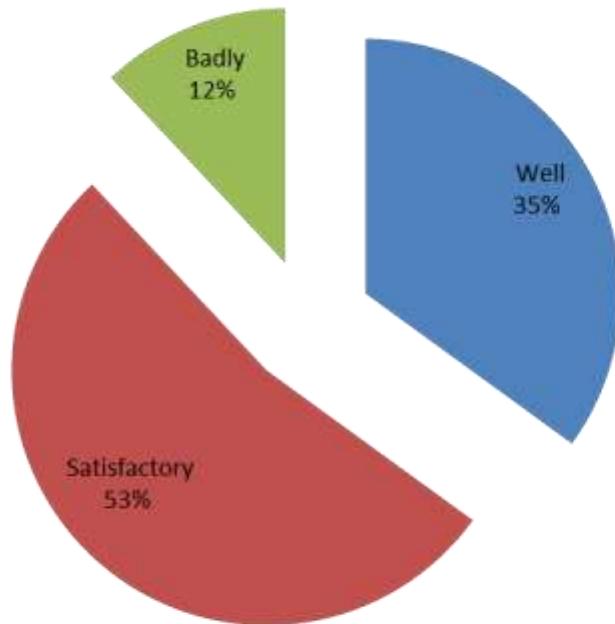


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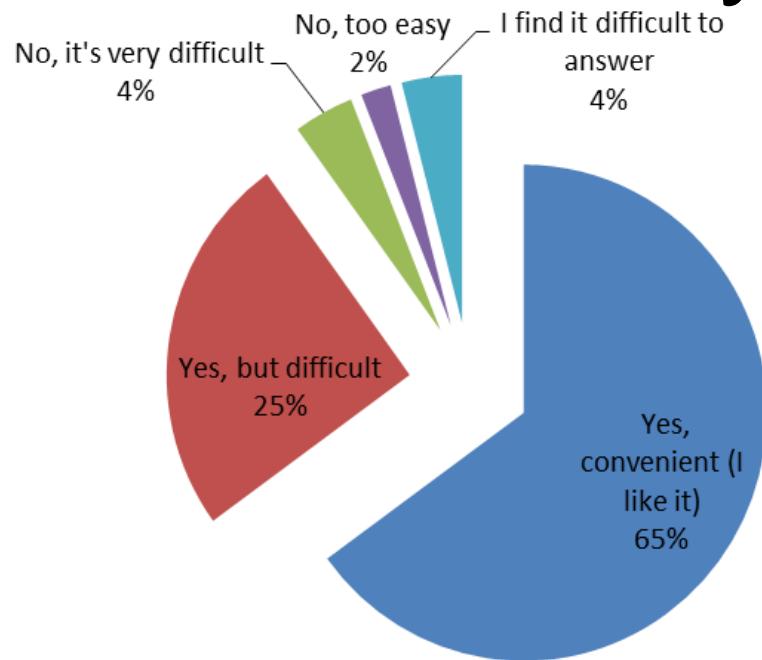


Student survey

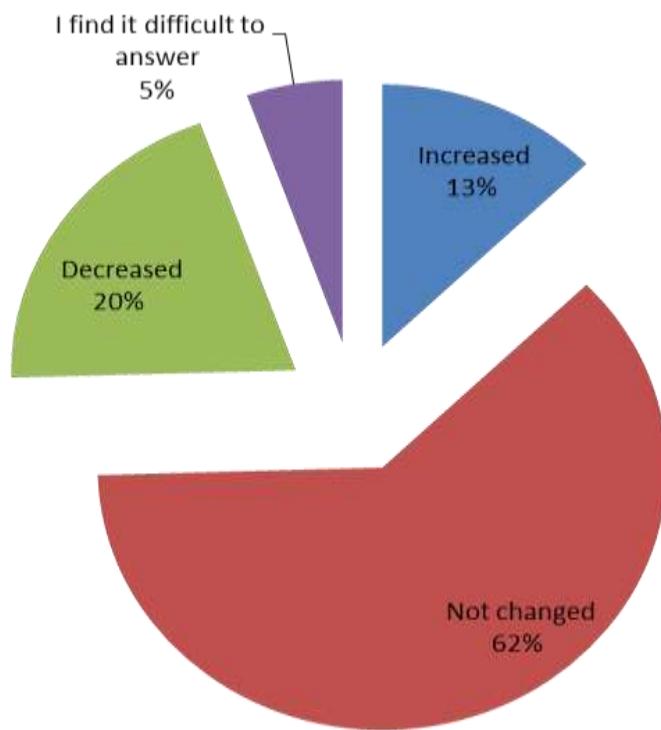
How did you adapt to the new conditions of distance learning?



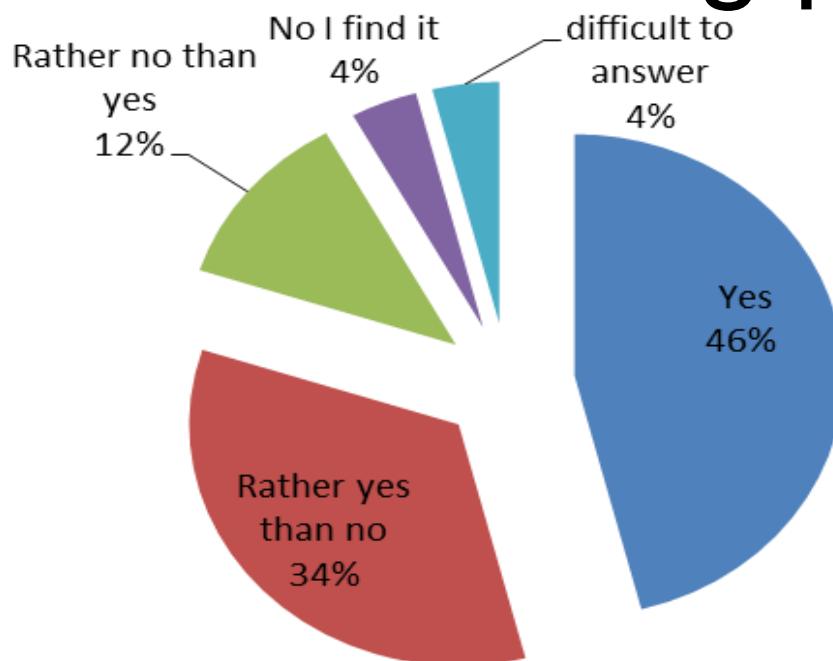
Is distant form of learning convenient for you?



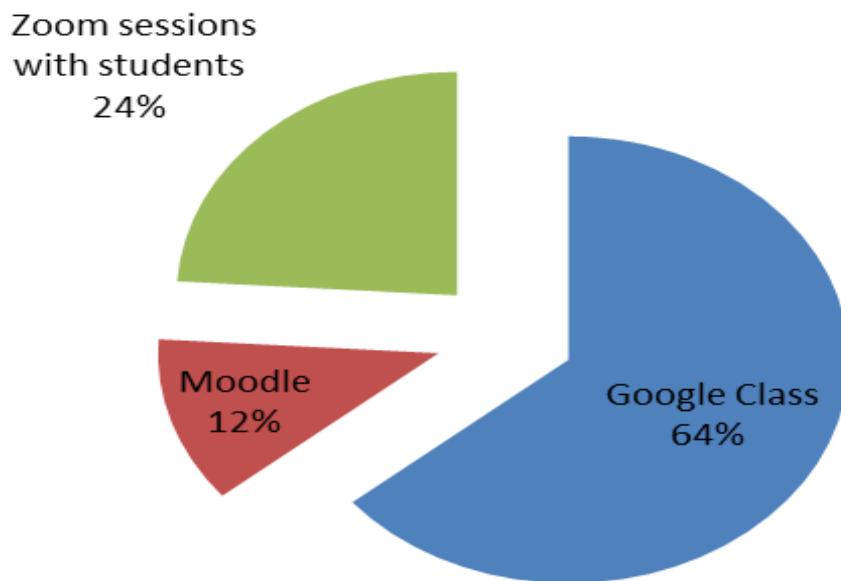
The level of motivation to learn in the distance form



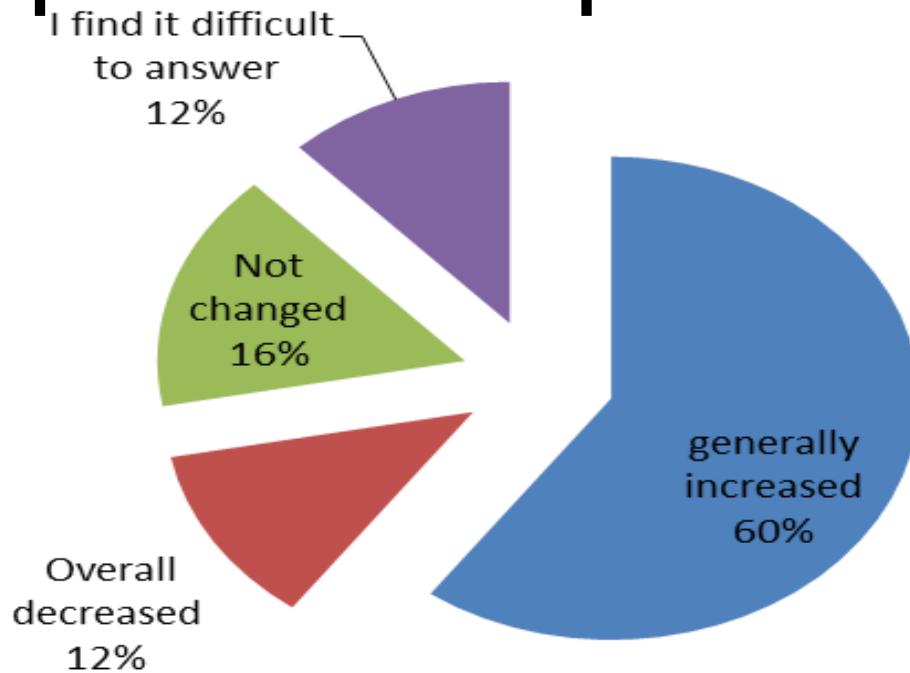
Are you satisfied with the distance learning process



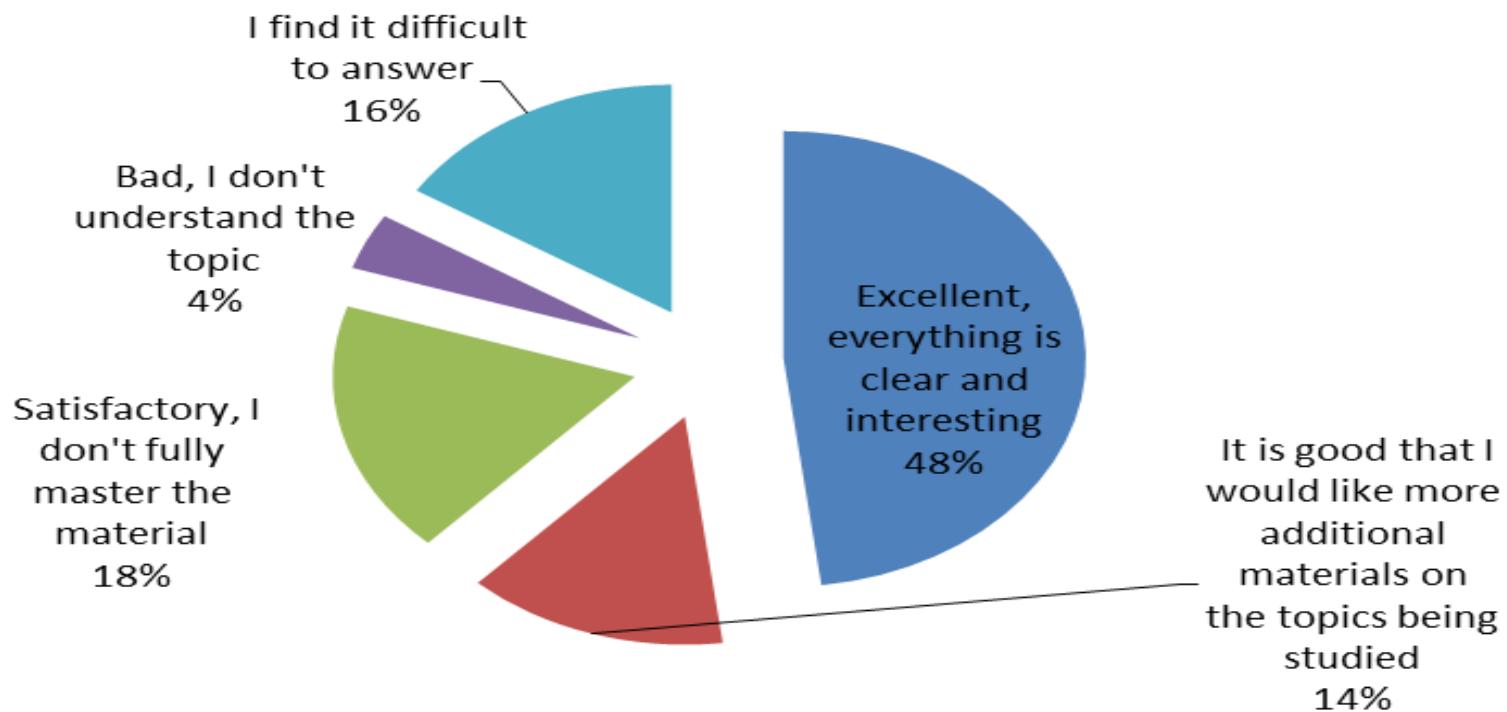
What distance learning tools are used in your learning process?



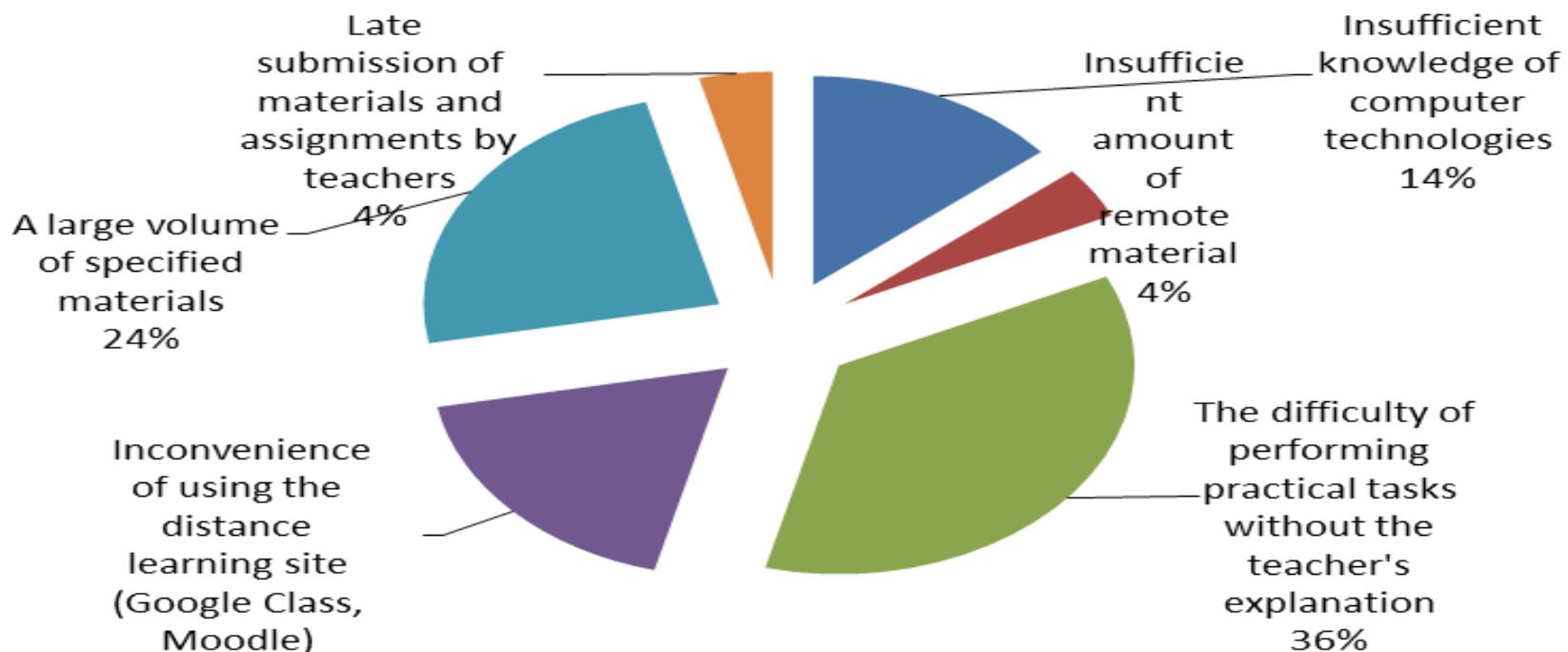
In your opinion, the academic load on students during the quarantine period has



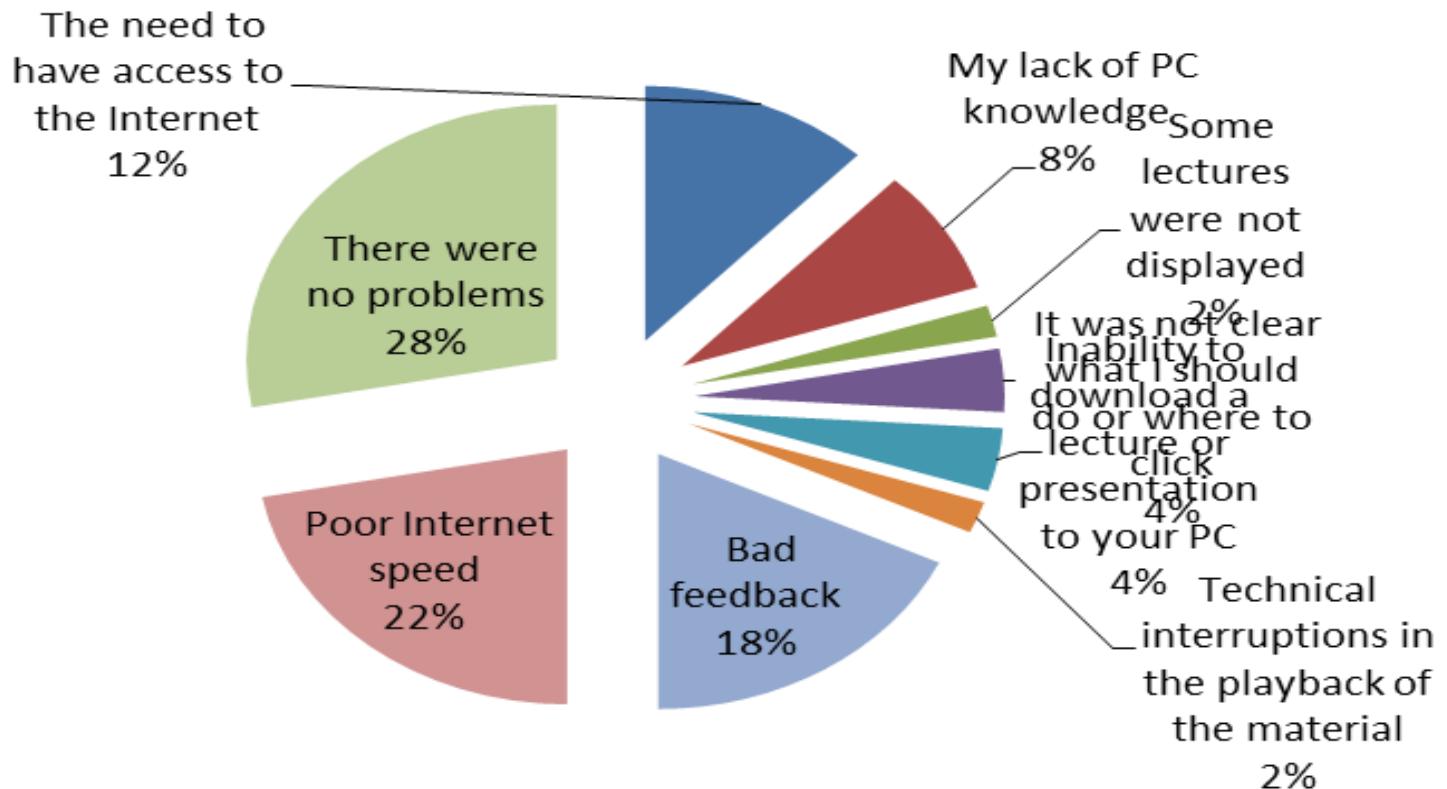
How do you assess the work of the teaching staff in the framework of distance learning?



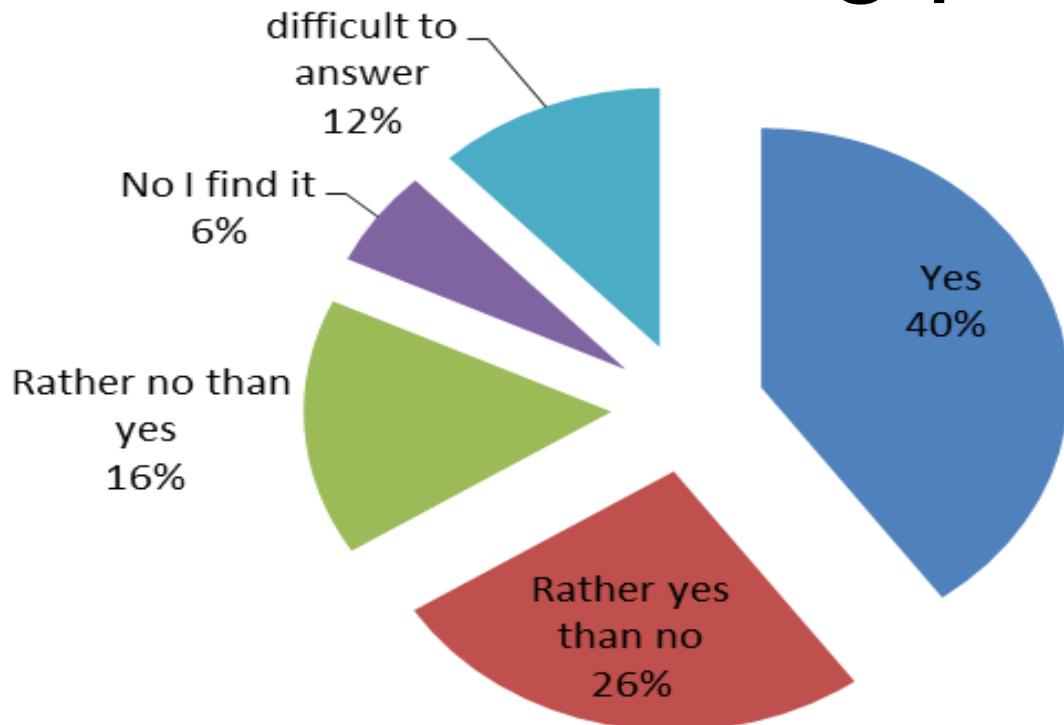
What difficulties have you faced in the process of distance learning?



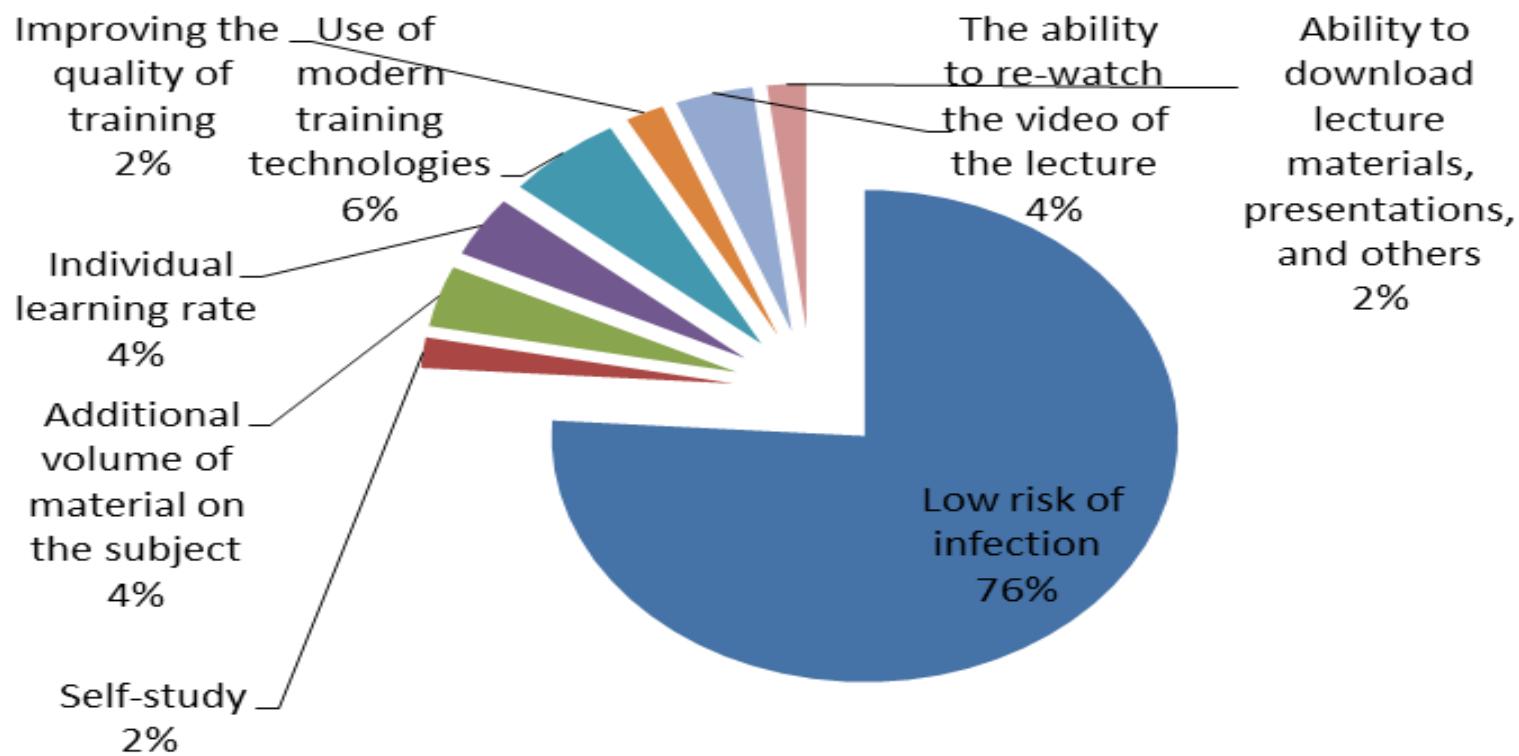
What technical problems did you encounter during the distance learning process?



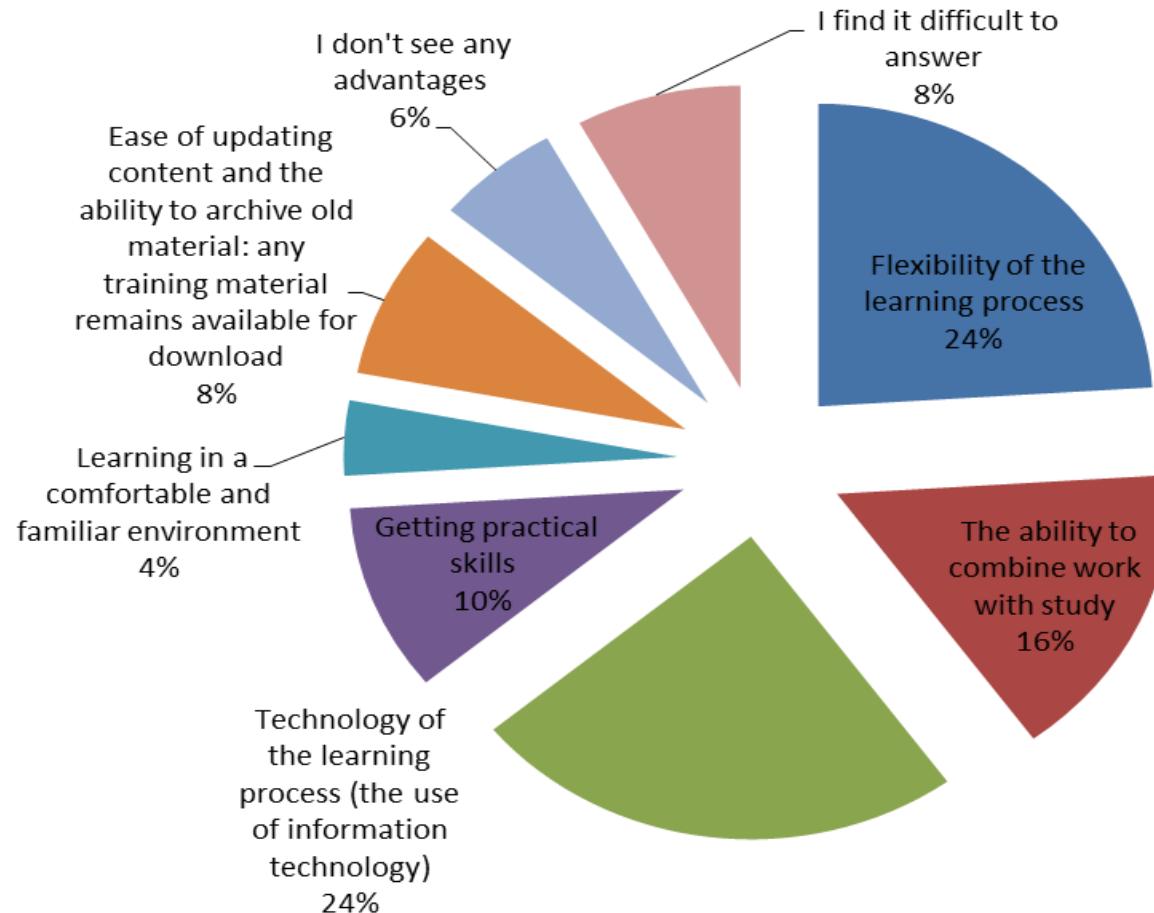
Are you satisfied with the distance learning process?



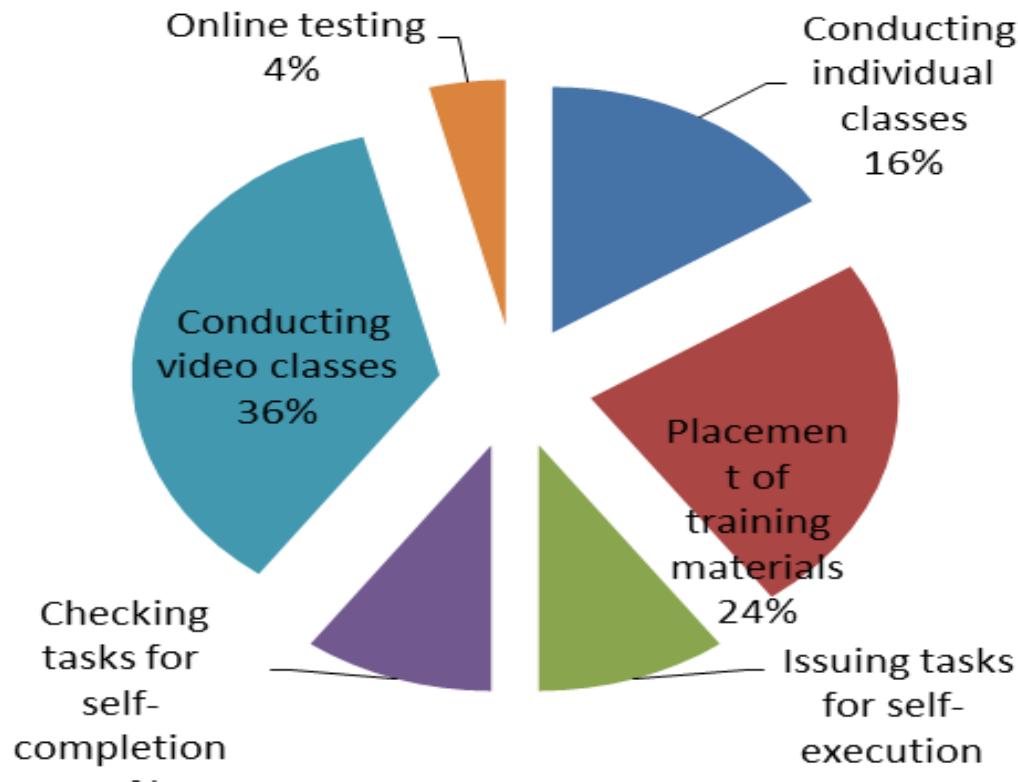
What did you like most in distance form of learning?



What are the benefits of e-learning that are most important to you at the moment?



What forms of work are most often used by teachers in e-learning?



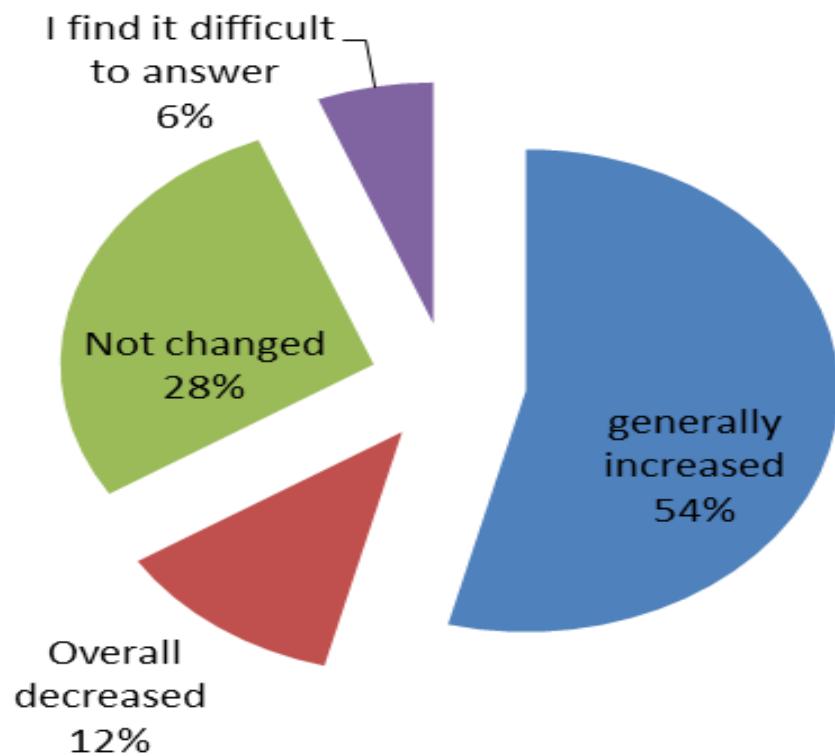


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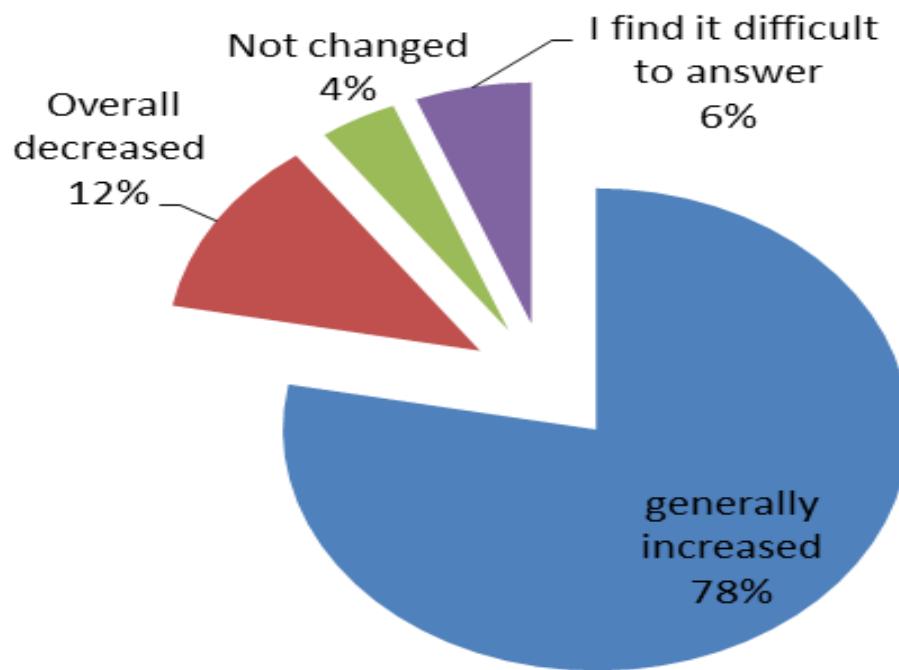


Survey of teachers

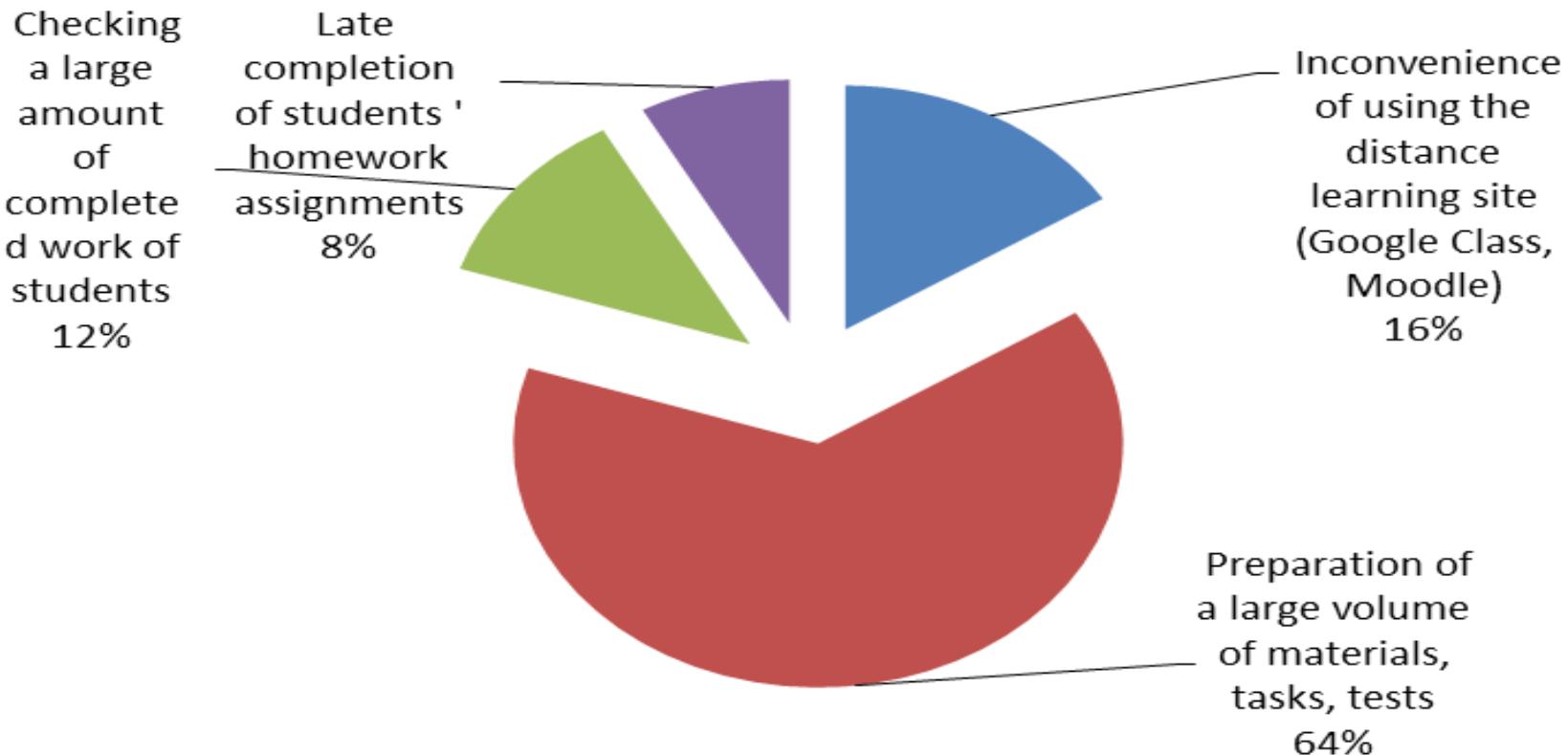
In your opinion, the academic load on students during the quarantine period... has



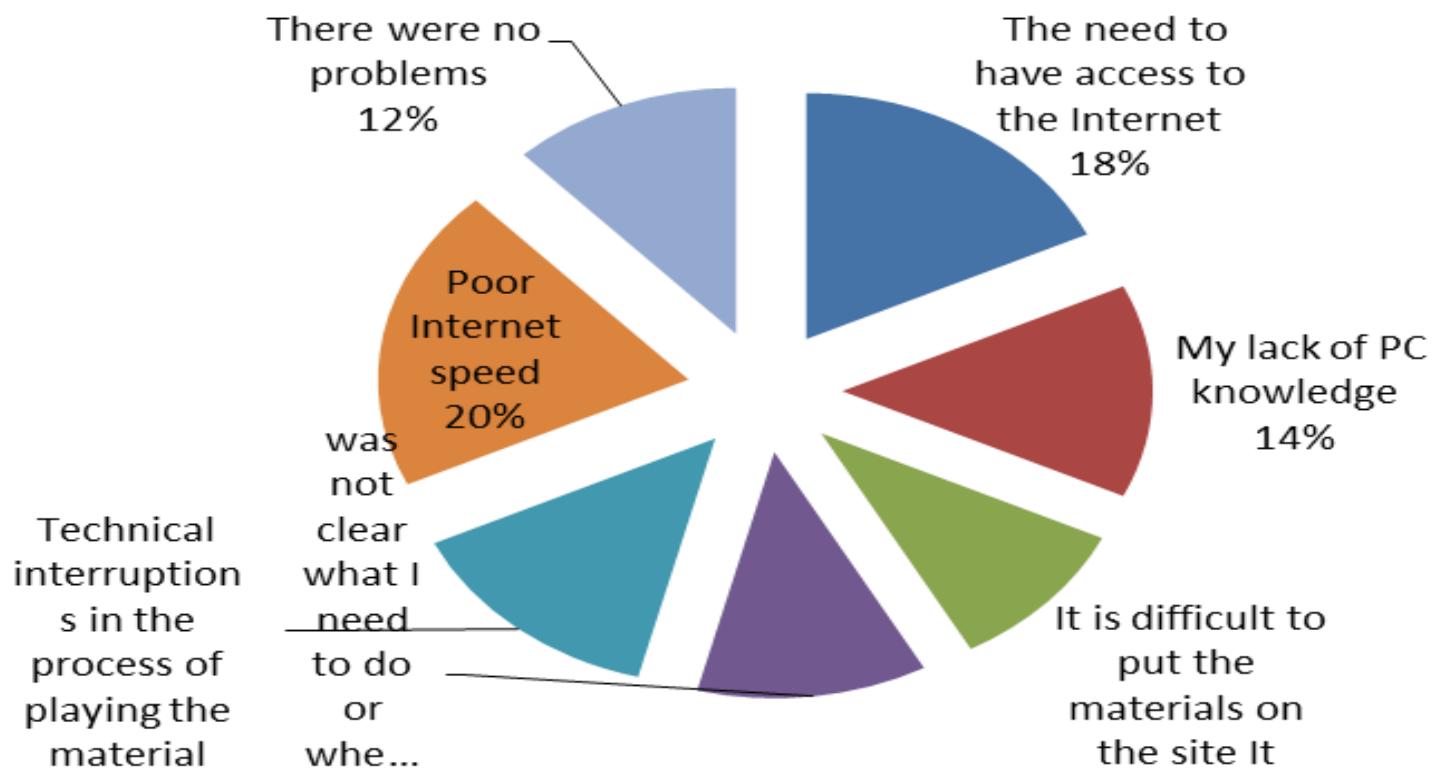
In your opinion, the load on teachers during the quarantine period... has



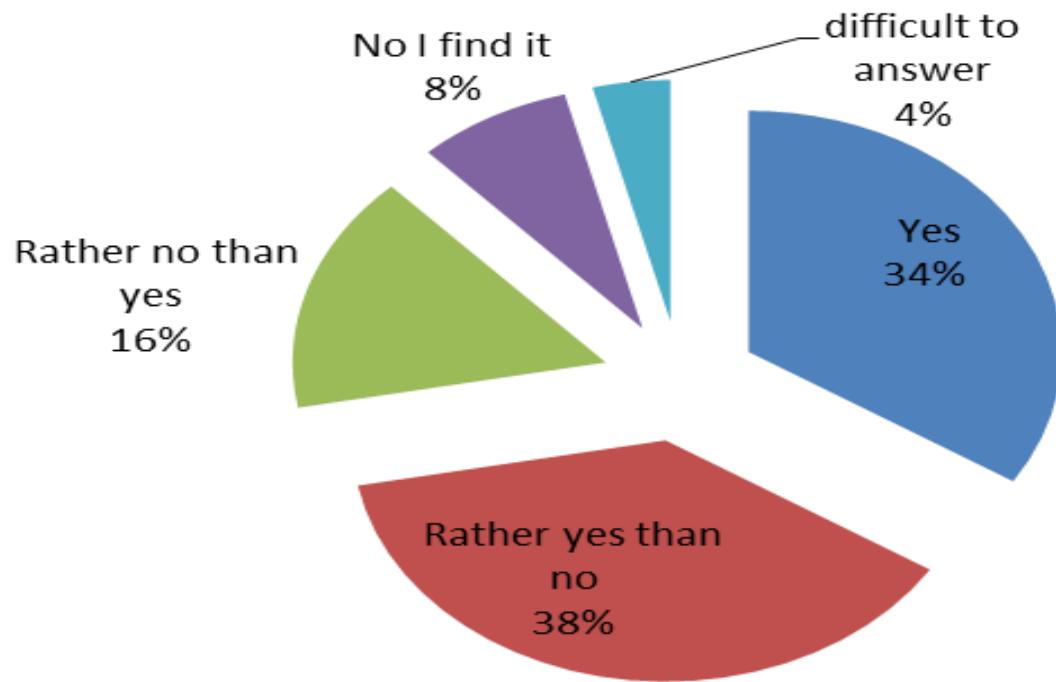
What difficulties have you encountered in the process of remote work?



What technical problems did you encounter during the distance learning process?



Are you satisfied with the process of online teaching?



The strategic plan for the development of the university for 2021 provides for the solution of a number of tasks, some of them are directly related to the intensification of the use of computer technologies in the educational process.:

- development and improvement of information educational technologies used in the educational process;
- increasing the role of information technology and improving the educational and methodological base;
- strengthening the role of students' independent work by creating conditions for independent access to educational resources and technologies of self-education



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Thanks for your attention!