



Final Report of Intellectual Output 4

EVALUATION OF SECURITY ASPECTS OF DIGIMATES METHOD FOR ONLINE GAME-BASED LEARNING

Development of the Security Protocol and Code of Conduct

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INTRODUCTION

Online learning is generally becoming a norm for everyone to become a life-long learner. Therefore, how to protect personal data and privacy in online learning is becoming an important issue for students, academic, and administrative staff. To protect personal data and privacy, students and staff should understand how personal data is produced when they are learning online, and how to preserve their privacy. In 2018, European Union issued the world's strictest personal information protection law, known as General Data Protection Regulation (GDPR). HEIs face several challenges related to the implementation of GDPR legislation when conducting studies online. The DigiMates method for online game-based learning in an international environment also raises several security challenges. For example, to enable implementation of the DigiMates method in an international digital environment, academic teachers need to identify students (e-mail, name, student number, university) accessing the course and afterward being assessed or examined. Thus, we have developed the instruction for teachers on how to implement the method in the international environment. In addition, to successfully implement the method, we will have to establish the protocol for the elaboration of national and local rules and objectives to collaborate with new digital tools in the international environment. Thereby, we analyzed the needs of the teachers and students during e-teaching and e-learning, potential barriers, and methods of overcoming them. The protocol of good practices for amplification of fair use of presentations and visual materials to join forces in the international environment has also been developed.

1. THE SPECIFIC OBJECTIVES OF THE INTELLECTUAL OUTPUT 4 AND APPLIED METHODOLOGY

The aim of the IO4 has thus been to establish the security protocols and codes of conduct for the successful implementation of the DigiMates method for online game-based learning in an international environment.

The main objective of IO4 consists of three specific objectives (three tasks).

IO4.1: Preparation of learning objectives and outcomes in the syllabuses in line with the DigiMates method.

The applied methodology:

- identifying the key elements of the method that must be included in syllabuses in accordance with applicable standards in Slovenia, Germany, Spain, Turkey, and Poland,
- identifying key elements that must be described in syllabuses in accordance with applicable standards of the National Agencies,





- learning objectives as a part of a syllabus/syllabuses will be prepared with special regard to the competencies being a consequence of the use of digital methods,
- defining the competencies according to digital society and digital academia development,
- identifying barriers and opportunities for e-teaching and e-learning outcomes and code of conduct for international e-courses, using the DigiMates method.

IO4.2: Development of security protocol for identifying and access of the students and teachers to the e-courses using the DigiMates method in an international environment.

The applied methodology:

- defining data that are necessary to share to provide the didactic process with reference to the e-teaching platform requirements, security of data, limited access, and internal rules in partner universities,
- describing the identification procedure path for each participating university,
- preparing the instruction for teachers including these issues for the lectures and workshops with international students.

IO4.3: Code of conduct in digital e-courses, using the DigiMates method.

The applied methodology:

- describing the set of rules for online e-courses attendance with privacy respect and understanding of cultural differences, with the emphasis on digital gender equality, sustainability, and respect for any other differences at the digital level of communication,
- visual material concerning the above issues,
- digital presentation boards (PowerPoint presentation mode) with the rules to be followed designed for common use by international teachers while teaching international students involved in a project from different countries. They consist of all universities and project graphic elements.





2. THE SCOPE OF EMPIRICAL RESEARCH CARRIED OUT IN INTELLECTUAL OUTPUT 4

Reviewing the EU regulations, knowledge, and experience of partner Universities:

- identification of the didactic process concerning the e-teaching platform requirements, security of data, limited access, and internal rules in partner universities,
- general structure for syllabuses in the system of the European universities,
- definitions of gamification and game-based learning,
- security protocol,
- describing the set of rules for online e-courses attendance with privacy respect and understanding of cultural differences, with an emphasis on digital gender equality, sustainability, and respect for any other differences at the digital level of communication,
- recommendations on the Code of Conduct.

3. RESEARCH METHODS APPLIED IN 104

3.1. Survey 1 related to IO4.1: Preparation of learning objectives and outcomes in the syllabuses in line with the DigiMates method

Duration of study: 23.06.2021-31.07.2021

Number of respondents: 5

Description: Survey #1 was conducted between 23.06.2021 and 31.07.2021. The questionnaire was built in MS Forms. A link was sent to representatives of the five universities participating in the DigiMates project (University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk).

The purpose of this research was to collect information about the differences in the structure of syllabuses in partner universities. The questionnaire consisted of 21 questions (13 multiple-choice questions and 8 open questions). It was a technical survey, hence we asked one representative from each partner university to respond. Respondents were asked if syllabuses are freely accessible online (open access) or only available after registration and who has access to them. Moreover, we have asked what the required elements in the syllabuses at every university are, how to complete the syllabus form and how often lecturers are able to modify the syllabuses and study program, is it necessary to indicate the teaching methods in the syllabus, how many teaching methods can you specify in the syllabus in one course and what classification of learning outcomes is used at particular university.





3.2. Survey 2 related to IO4.2: Development of security protocol for identifying and access of the students and teachers to the e-courses using the DigiMates method in an international environment

Duration of study: 25.01.2022-08.02.2022

Number of respondents: 5

Description: Survey #2 was conducted between 25.01.2022 and 08.02.2022. The questionnaire was built in MS Forms. A link was sent to representatives of the five universities participating in the DigiMates project (University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk).

The aim of the survey was to obtain information on how universities approach the topic of data security in online learning and which learning management systems they use. The questionnaire consisted of 20 questions (16 multiple-choice questions and 4 open questions). It was a technical survey, hence we asked one representative from each partner university to respond. Respondents were asked how the universities adopted a policy for data security in online learning, whether they provided any training for teachers related to data security in online learning, or adopted e-learning platforms that are used as learning management systems (e.g., Moodle). In addition, we asked how students get access to e-learning platforms (learning management systems), how to log in to e-learning platforms, do all students have a personal university email account, and whether teachers are allowed to use their private email addresses to contact students regarding course-related matters. Based on recent experience we also asked if students are allowed to record online classes and for how long are teachers required to keep documentation related to online courses (archived students' discussions, workings, results, etc.).

3.3. Survey 3 related both to IO4.1: Preparation of learning objectives and outcomes in the syllabuses in line with the DigiMates method and IO4.2: Development of security protocol for identifying and access of the students and teachers to the e-courses using the DigiMates method in an international environment

Duration of study: 20.04.2022-13.07.2022

Number of respondents: 132

Description: Survey #3 was conducted between 20.04.2022 and 13.07.2022. The questionnaire in English was built in MS Forms. A link was sent to representatives of the five universities





participating in the DigiMates project (University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk).

The aim of the survey was to collect information about the possibility of incorporating gamification/game-based learning elements into the structure of syllabuses and security behaviour. The questionnaire consisted of 32 questions (23 multiple-choice questions, 5 open questions, and 4 questions with a five-grade Likert scale). The questionnaire was divided into three sections: Gamification and Game-based learning, Security behaviour, and demographic questions. It was a generic survey, hence we asked all lecturers from each partner university to respond. At the beginning of the survey respondents were asked if they know the difference between gamification and game-based learning and if they have ever used gamification or game-based learning methods in the teaching process. Moreover, we have asked respondents if they have ever attended any training on gamification/game-based learning and if gamification/game-based learning are available options among teaching methods in syllabuses at their university. Subsequently, participants of the survey were asked if in their opinion gamification/game-based learning may be combined with other teaching methods and if gamification/game-based learning should be included in the course content in a syllabus (e.g. when the course or its part is gamified). We also asked if it would be beneficial to include words related to gamification/game-based learning in the title of the course (if the course or its part is gamified). We also asked if lecturers have experience with combining gamification/game-based learning with other teaching methods (e.g. case study, students' debate) and what kind of methods can be combined with a game. In addition, we asked if the completion of tasks related to the gamified course replaces the exam as a way of verifying theoretical knowledge. In the second section survey participants were asked if they have ever taken part in any training for teachers related to data security in online learning and if they used e-learning platforms (learning management systems, e.g. Moodle) to provide courses at their Universities. We have also collected data on what e-learning platforms and online learning tools are used for teaching. Moreover, we have asked about the possibility of using Universityowned portable computers, tablets, or mobile devices to provide online courses from outside their Universities and on the other hand, how often they use private devices to provide online courses. Participants of the study were also asked if they use protected Wi-Fi networks when they provide online courses and where they share files regarding courses provided for their students. We finish the survey with a question about the possibility of recording the online classes.





3.4. Survey 4 related to IO4.3: Code of conduct in digital e-courses using the DigiMates method

Duration of study: 17.07.2022-30.09.2022 (prolonged till 16.11.2022)

Number of respondents: the number of groups of students and academic teachers was different in each partner university: University of Ljubljana - 1 group of teachers, Heilbronn University of Applied Sciences – in total 6 groups of teachers and students, Dukz Eylul University – 7 teachers and 8 students, University of Leon – 6 teachers and 10 students, and University of Gdańsk – 6 teachers and 12 students.

Description: Survey #4 was conducted between 17.07.2022 and 16.11.2022 in form of workshops. The aim of the study was to collect information about teachers' and students' experiences with the code of conduct. Based on this, recommendations and instructions have been developed on how distance learning process can be friendly, smooth, and respectful. Students and academic teachers were asked about the same aspects, which included issues of external experiences, behavior during online lessons, formalities and etiquette, and technical and security issues. The instructions sent by e-mail to people conducting workshops specified making a list of do's and don'ts as part of good practices for online lectures. It has been divided into two categories: student – teacher. When sharing experiences and top-down rules applicable at the university, it was necessary to take into account personal experiences and good practices at one's university or known from other universities, which should be implemented due to specific problems and needs. Individual workshops were conducted in national languages and results translated to English.





4. DETAILED PRESENTATION OF INTELLECTUAL OUTPUTS

4.1. IO4.1 Preparation of learning objectives and outcomes in the syllabuses in line with the DigiMates method

4.1.1. Identification of national and local rules, learning objectives, and outcomes in syllabuses for international e-courses)

The objective of Intellectual Output 4.1 within the DigiMates project was the evaluation of syllabuses, especially for online game-based learning purposes. For this aim, the team from the University of Gdansk conducted a survey on the required elements of syllabuses in all five DigiMates partner universities. Syllabuses at universities can vary depending on the country and the specific institution, but some general similarities and differences can be observed. Syllabuses across all partner universities often provide a course description that includes the course title, number, and a brief overview of the course content. What's more, Syllabuses typically outline the learning objectives of the course and what students are expected to achieve by the end of the course. Syllabuses often provide a list of required readings and materials that students must obtain to complete the course. What's important, gamification and game-based learning are available options among teaching methods in syllabuses only for 63% of the respondents. It would be extremely valuable if gamification entered permanently into the catalog of teaching methods at the universities, especially if it was one of the options of choice in the syllabuses. In most of the universities surveyed, the list of teaching methods was editable, more than 5 teaching methods could be assigned to a course, and you can freely define teaching methods in a free text field. There was no clear recommendation if it is valuable to include words related to gamification/game-based learning in the title of the course (if the course or its part is gamified). Syllabuses typically outline the types of assignments and assessments that students will be expected to complete throughout the course and the weighting of each assignment or assessment towards the final grade. Respondents rather see gamification as one of the available methods and believe that it should be combined with other teaching methods. The game itself should not be a 100% substitute for the final exam either. Most of the respondents opt for a traditional form of the exam, game should be treated as one of the activities but can't replace the exam. In addition, not every university can provide courses exclusively online. The game prepared will therefore have to meet the requirements for courses that will be held face-to-face, in university buildings, as well as should be adapted to courses held entirely remotely. In summary, syllabuses at all universities share some common elements such as course descriptions, learning objectives and outcomes, required readings and materials, and assessments, but they can also vary in terms of course structure, credit and grading systems, and course prerequisites. Sometimes access to the syllabus is limited to logged-in participants.





The syllabuses toolkit consists of 11 recommendations, each of which has been provided with an appropriate commentary.

1. Prepare a clear and as short as possible definition of gamification and game-based learning

Most of the responders do not see a clear difference between gamification and game-based learning. 57% of respondents don't know the difference between those two concepts but on the other hand, we have noticed that 45% of respondents declared that they have used gamification methods and 52% have used game-based learning methods in the teaching process.

2. Training needs

53% of respondents have never attended any training on gamification/game-based learning. It seems that there is a considerable training need in this area.

Have you ever attended any training on gamification/game based learning? (0 punkt)

Wiecej szczegółów

Yes, once 38

Yes, more than once 33

No 81

3. Recommendation about the syllabuses – Both gamification and game-based learning could be available options among teaching methods in syllabuses

Gamification and game-based learning are available options among teaching methods in syllabuses only for 63% of the respondents. It would be extremely valuable if gamification entered permanently into the catalog of teaching methods at the universities, especially if it was one of the options of choice in the syllabuses. There was no clear recommendation if it is valuable to include words related to gamification/game-based learning in the title of the course (if the course or its part is gamified).

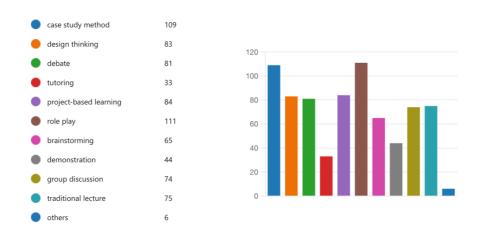
4. Gamification/game-based learning should be combined with other teaching methods

Respondents rather see gamification as one of the available methods and believe that it should be combined with other teaching methods. The game itself should not be a 100% substitute for





the final exam either. Most of the respondents opt for a traditional form of the exam game should be treated as one of the activities but can't replace the exam. Below is presented a list of methods that can be combined with a game.



5. Courses based on distance learning only are not allowed at every university

Not every university can provide courses exclusively online. The game prepared will therefore have to meet the requirements for courses that will be held face-to-face (in campus), in university buildings, as well as should be adapted to courses held entirely remotely.

6. Keep in mind that Syllabuses are not everywhere freely accessible online (open access)

When you plan to launch a course remember that not everywhere Syllabuses are available to everyone before the launch of the course. Sometimes access to the syllabus is limited to logged-in participants or only some parts of the syllabuses are freely available. It was clearly shown in our research as well.

Are syllabuses at your university freely accessible online (open access) or only available after registration?







7. Syllabus should be available before the start of the semester

Check deadlines and dates to be able to add the game to the Syllabus as one of the teaching methods. In most universities, Syllabuses can be changed once a year.

How often during the academic year can you make changes in the study program? (0 punkt)

Więcej szczegółów



8. Think ahead before you want to introduce the game to a new course

Check deadlines and dates to propose new classes, which include a game. In most universities, you can propose new classes once a year. Please keep in mind that sometimes the course list is a mandatory part of the program accreditation and can be changed when a program is reaccredited or updated. The changes apply to the students that enroll in the program in the next academic year.

. How often can the new courses be proposed and introduced at your university? (0 punkt)

Więcej szczegółów



9. Decide if you want to add 'gamification', 'game', or 'game-based learning' as a teaching method in the Syllabuses

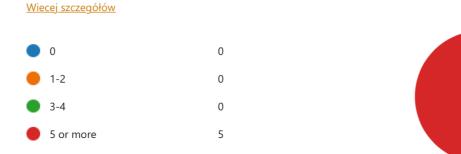
In most of the universities surveyed, the list of teaching methods was editable, more than 5 teaching methods could be assigned to a course, and you can freely define teaching methods





in a free text field. There are no specific requirements for teaching methods at your university that are described in the syllabuses.

. How many teaching methods can you specify in the syllabus in one course? (0 punkt)

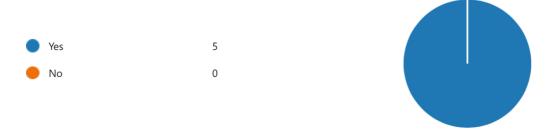


10. Decide where to place your course

Remember that for some platforms students are automatically enrolled, for others, they will probably have to enroll themselves. All surveyed universities have adopted e-learning platforms that are used as learning management systems. Students are automatically enrolled in all of these systems.

Has your University adopted e-learning platforms that are used as learning management systems (e.g. Moodle)?





11. Prepare a list of learning outcomes, about the introduced course

The teacher is obliged to develop and make available to all students an accurate description of the assumed learning outcomes and methods of their verification. But please remember that in some of the universities, no classification is required. Lecturers may use any classification because they fill in the rubric as free text. However, they could have two mandatory rubrics: Objectives and competences and Intended learning outcomes. There are no further specific



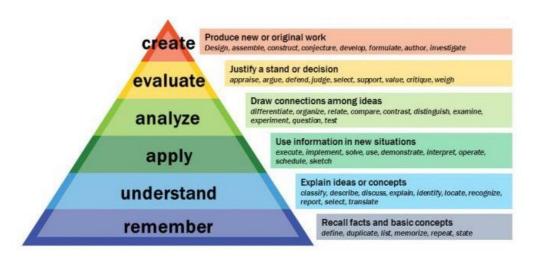


requirements regarding classification within each rubric. Lecturers may use any classification because they fill in the rubric as free text. Others can use for example Bloom Taxonomy.

4.1.2. Learning objectives and outcomes concerning competencies achieved with the use of the DigiMates method for online game-based learning

Bloom's Taxonomy should be used to define the learning objectives and learning outcomes related to student competencies achieved in an online game. This taxonomy has a version for digital taxonomy.

Fig. 1. Bloom's Taxonomy



Source: Bloom's Taxonomy, https://bloomstaxonomy.net/

The detailed structure of the Syllabuses is presented in Appendix 1





4.2. IO4.2 Development of security protocol for identifying and access of the students and teachers to the e-courses using the DigiMates method in an international environment

The second objective of Intellectual Output 4.2 within the DigiMates project was the evaluation of security aspects of the DigiMates method for online game-based learning. For this purpose, the team from the University of Gdansk conducted a survey on safety aspects in online courses in all five DigiMates partner universities. The survey took into account both issues related to the rules applicable at universities affecting the safety of online courses and the behaviour of teachers. Responses from 152 academic teachers who answered a list of questions were used to develop the security toolkit: the list of recommendations for teachers for online courses, especially with game elements. The toolkit addresses issues such as tools and platforms for delivering online courses, sharing the game materials with students, contacting students on matters related to courses, logging in to the game platform, protecting private portable computers or other mobile devices used to provide online courses, keeping documentation related to online courses, etc. The results of the survey showed significant similarities between partner universities in many areas related to safety in online courses. For example, each or almost each of the surveyed universities has adopted a policy for data security in online learning, supports or recommends an e-learning platform to be used as a learning management system, or recommends using a specific online learning tool for lecture delivery. To a greater extent, DigiMates partner universities differ in matters related to the possibility of teachers using their private email addresses while contacting students, providing teachers with antivirus software for private computers, rules regarding recording online classes, etc. The survey showed that although most teachers apply measures aimed at minimizing the security risks in online courses, there is still room for improvement. For example, not all academic teachers protect a private device that is used to provide online courses with a password or up-to-date antivirus software, update the operating system, or use protected Wi-Fi networks when they provide their online courses.

The security toolkit consists of 13 recommendations, each of which has been provided with an appropriate commentary.

1. Check whether your University has adopted a policy for data security in online learning. Read and follow your University's policies if they have been adopted

University policies for data security in online learning may help teachers to conduct online courses more safely and securely. Probably many higher education institutions have adopted policies for data security. According to a survey of five universities participating in the DigiMates project, four out of them have adopted policies for data security in online learning.



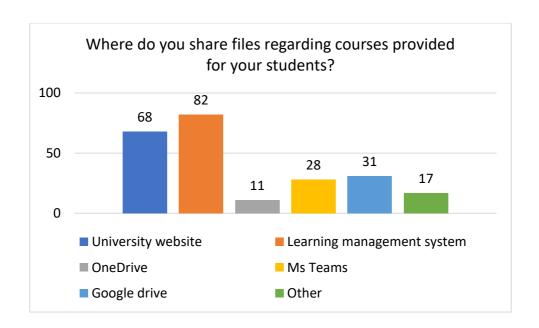


2. If your University supports or recommends an e-learning platform to be used as a learning management system, use it as a game platform

Learning management systems have become a popular tool for delivering online courses. Most universities support or recommend e-learning platforms to be used as a learning management system. There is no unification in this regard. According to a survey of five universities participating in the DigiMates project, all of them adopted e-learning platforms that are used as learning management systems. Among the most popular platforms are: Moodle, Canvas, Sakai, and Ilias.

3. If your University recommends an e-learning platform to be used as a learning management system, you can also use it to provide students with the game materials

When sharing the game materials with students, it is important to store them safely. When considering where to store game materials for students, it is worth starting with password-protected, university-approved platforms, including learning management systems. According to a survey of five universities participating in the DigiMates project, 152 surveyed academic teachers share files regarding courses provided for students mainly in learning management system platforms and the university website. Some teachers share files in Google Drive, MS Teams, and OneDrive or share the files with students using other methods.







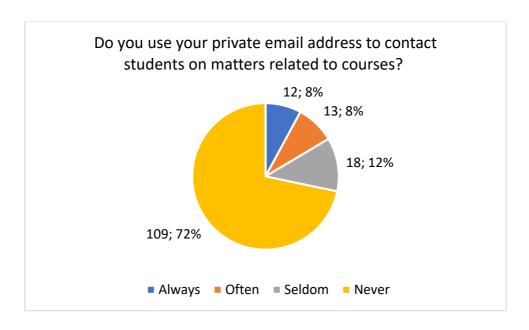
4. If your University recommends a specific online learning tool for lecture delivery (live, synchronous teaching platforms), use that system

There are a lot of online learning tools for lecture delivery. These tools may differ in terms of functionality but also have different security features. According to a survey of five universities participating in the DigiMates project, four of them recommend a specific online learning tool for lecture delivery. Among 152 surveyed academic teachers from five DigiMates partner universities, the most used tools are Zoom, Microsoft Teams, and Google Meet. The most popular online learning tools for lecture delivery have been presented on the picture below.



5. Use your University email address to contact students on matters related to courses

E-mail can be an effective tool to communicate with students in online courses. However, for security reasons, it may be important to avoid contacting students with private e-mail addresses. According to a survey of five universities participating in the DigiMates project, in two universities teachers are allowed to use their private email addresses to contact students regarding course-related matters. Out of 152 surveyed academic teachers from 5 universities, 28% use private email addresses to contact students.







6. Students log in to the game platform with University account credentials (University online username/email and password)

Access or authentication to the game platform should be associated with a high level of security. Unauthorized people cannot gain access to content or download materials reserved for authorized users. According to a survey of five universities participating in the DigiMates project, in all surveyed universities students are automatically enrolled by the university in elearning platforms and they use their university username/university email and password to log in. These methods of enrolment and logging in can be considered desirable for security reasons. Nevertheless, careful consideration should be given to other methods of enrolment and logging in, for example, when students create their own accounts by email-based self-registration or their accounts are created manually by teachers responsible for courses.

7. If you use a private portable computer or other mobile devices to provide online courses, use a strong password to unlock your device. Do not share your password with others. You should never use the save-password option in your browser

Using a strong password is crucial for keeping a device and data safe. According to a survey of five universities participating in the DigiMates project, 113 out of 152 surveyed academic teachers use private devices to provide online courses. As many as 15% of the teachers who use private devices to provide online courses do not protect their devices with a password. Although most of the survey respondents have the password, there is still an area for improvement. It should be never assumed that a password established once will be unbreakable. In the 21st century, computers, along with available software, make it possible to make infinite attempts to log in with different password combinations, in rapid succession. An additional safeguard is to change the password regularly, at certain intervals. Thus, even being unaware that the password has been stolen or read by others, the user will effectively protect his data from theft. If IT administrators of the university can set the security options so that users must change passwords, they should do so. Tips listed below will help increase the "strength" of the password:

- password must consist of a minimum of 8 characters,
- password must not contain the name of the user service,
- password should contain both lowercase and uppercase letters,
- password should contain digits,
- special characters (e.g. &, @, !) should also be used.





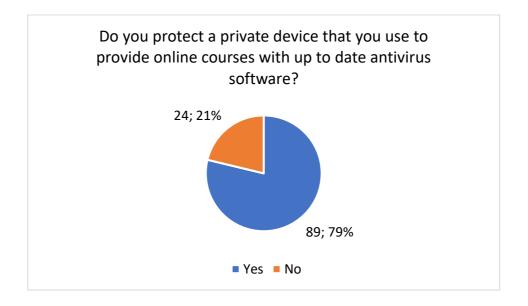


8. If you use a private device to provide online courses, protect it with up-to-date antivirus software

Installing and keeping up-to-date antivirus, firewall, and malware software is one of the fundamental security requirements. Respondents in a survey of five universities participating in the DigiMates project used to use both University-owned portable computers, tablets, or mobile devices to provide online courses and private devices. That's why the antivirus is crucial. Monitoring the device's performance is the basic and most important function of an antivirus program. A good antivirus continuously analyzes user activities and verifies visited websites, files downloaded from the web, and running applications. In addition, students' personal information can be stolen from a teacher's computer. According to a survey of five universities participating in the DigiMates project, more than every fifth out of 113 surveyed academic teachers who use their private devices to provide online courses do not protect these devices with up-to-date antivirus software. It is worth adding that some higher education institutions provide teachers with antivirus software for private computers. Out of five universities participating in the DigiMates project, three institutions provide teachers with antivirus software for private computers.

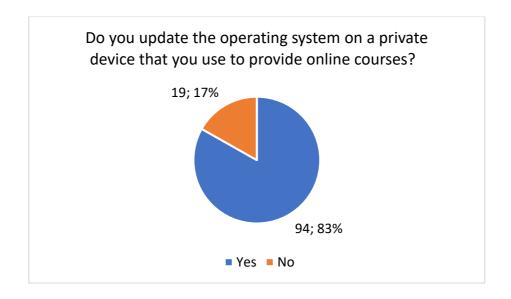






9. If you use a private device to provide online courses, keep your operating system up to date

Operating system developers usually release operating system updates regularly until they decide their product is unsupported. These updates often contain security patches and new security features, both of which it is important to install. According to a survey of five universities participating in the DigiMates project, out of 113 surveyed academic teachers who use private devices to provide online courses one in six does not update the operating system on a private device that is used to provide online courses.

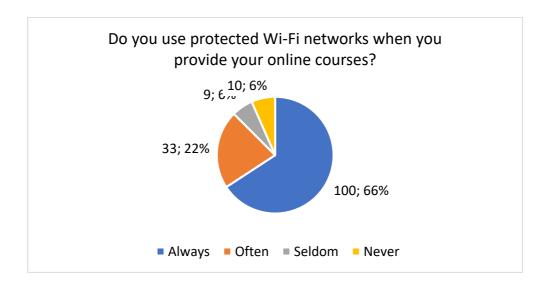






10. If you provide online courses from home or other places outside your University, ensure your Wi-Fi network is secure

Wireless network security is vital because it helps protect data from unauthorized access. Through unsecured networks, hackers can get to data much easier. An unsecured Wi-Fi network can be used by anyone. The only thing that protects such a network is distance - so owners of single-family houses are in a slightly better situation (which does not mean that such networks should not be protected!). In a block of apartments, many apartments are located close to each other, and usually, a user's computer will be able to search for several or even a dozen networks. An unprotected network in the first place will be used by a clever neighbor who wants to save money on bills. A user may not even notice that someone is using his network - a few years ago, an additional user significantly reduced the download speed, but nowadays the links are tens of megabytes each and are usually not fully used. By leaving the network unsecured, a user has to expect that anyone, even a completely random person standing near his house, can use it. A burglar, using user IP, can illegally download movies on the user's behalf, distribute malware, use file-sharing (P2P) systems, or otherwise break the law. The consequences for a user can be lamentable - including a visit from the police and confiscation of equipment or financial penalties. A user could find himself in an even worse situation if a hacker sneaking into his network obtains his vital data. A cybercriminal can, for example, substitute a fake bank account login page (known as phishing) and thereby obtain user login data. User personal data or important passwords can also be targeted. A wireless network, depending on the power of the router, can have a range to several meters. A burglar can therefore sit unnoticed with a laptop in front of the user's home or company building. According to a survey of five universities participating in the DigiMates project, no more than two-thirds of 152 surveyed academic teachers always use protected Wi-Fi networks when they provide their online courses.







11. Read and follow your University's regulations on keeping documentation related to online courses

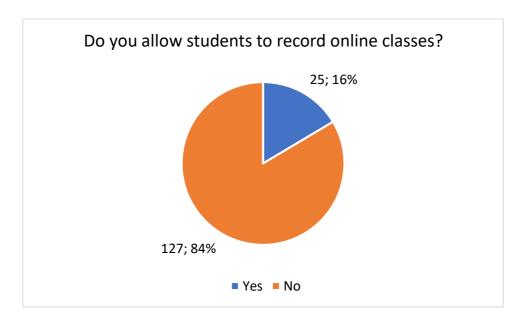
Following the institution's regulations on keeping documentation related to online courses is a very important aspect of security and privacy protection. The university regulations can define for how long and where to store documentation related to online courses. Rules may vary depending on the university. For example, according to a survey of five universities participating in the DigiMates project, in one university documentation can be removed immediately after the end of the course, and in four universities documentation needs to be kept longer than one year.

12. Inform your students about the rules regarding taking screenshots of, or recording any of the material or communication used during online classes

Due to privacy, security, and general data protection aspects, it is important to inform students about the rules regarding taking screenshots of or recording any of the material or communication used during online classes. It should be noticed that both a university lecture and the presentation displayed during it, provided they meet the prerequisites for being considered a work under copyright law, are protected, and for the lawful use of them, it is necessary to obtain permission from the creator – the author of the lecture and presentation. However, there are some exceptions to this general rule, which include the so-called permitted personal use, which allows free use, without the author's permission, of already distributed works for one's own purposes. From the point of view of copyright, a lecture can be recorded and then, for example, listened to alone, or in the company of people with whom someone has a personal relationship - such as family or friends. On the other hand, its further dissemination, e.g. by posting it on the Internet, so that it would be available to an unlimited number of people, does not fall within the limits of permitted personal use, and therefore such action may result in copyright infringement and, consequently, sanctions provided by law for its violation. Analogous rights and restrictions apply to the use of images in the lecture presentation. In the context of recording a lecture, it is also worth noting the risk of violating the personal rights of the lecturer and attending students associated with the recording and subsequent use of his voice. There are also differences here between national regulations. The information on whether students are allowed to record online classes or take screenshots should be provided to students before the first classes or during the first meeting. Rules regarding taking screenshots of or recording any of the material or communication used during online classes may vary considerably depending on the university. According to a survey of five universities participating in the DigiMates project, in three universities students are not allowed to record online classes. In two surveyed universities students are allowed to record online classes with the consent of the teacher. Out of 152 surveyed academic teachers, 25 teachers allow recording online classes.







13. Inform your students about the other rules regarding security and privacy protection during online classes

The other rules regarding security and privacy protection may apply to various aspects such as sharing documents or other materials (including meeting links) provided in the course with external parties, using the camera, the methods of communication with a teacher, etc.





4.3. IO4.3 Code of conduct in digital e-courses using the DigiMates method

Online learning and teaching require a better understanding of the cultural, security, and technical issues in the didactic process, which may be analyzed from different layers and perspectives. The specific objective of the DigiMates project in Intellectual Output 4.3 was to plan and develop a workshop to recognize the main issues toward better online teaching and learning processes. The task was perceived as connecting the perspective of a "student-teacher" and a "student-student."

Our intentions covered establishing clear rules towards communication during an online lesson and clever use of digital tools, like MS Teams, Zoom, or other platforms recommended officially by the universities. At the same time, the aim was to help teachers to prepare fluent and varied online lessons, including group and individual activities with recommendations for self-behavior and better being together.

DigiMates' approach included the perspective of both parties in the teaching process. Therefore, we prepared the instruction for the workshops on the code of conduct and milestones to be discussed and thought about at the partner universities.

We asked the students and the lecturers about the same aspects, which covered the issues of external experience, behavior during online lessons, formalities and etiquette, and technical and security problems on the feedback and experience of many students and teachers from five participating universities (University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk), some challenges during online lessons were discovered, including the mentioned below:

- technical issues such as poor internet connection, software glitches, and hardware malfunctions, which can disrupt the flow of the lesson and cause frustration for both teachers and students;
- lack of engagement during online lessons, which can sometimes be less interactive and engaging than in-person lessons, which can lead to a lack of participation and focus among students;
- distractions due to being at home, which can create many distractions for students, such as noise from family members, pets, or household chores that can interfere with the ability to concentrate during lessons;
- limited interaction: the lack of face-to-face interaction can make it challenging for teachers to gauge student understanding and provide individualized feedback and support. At the same time, students and teachers feel overwhelmed by exposure to the public of their homes, habits, which during online lessons are seen by the participants;





- social isolation: online learning can be a lonely experience for some students, especially those who rely on social interactions to stay motivated and engaged in their learning; this is why providing a friendly and well-known code of conduct may help to engage people who will know what are the tools and on-line lessons etiquette rules;
- motivation and self-discipline, along with the applied requirements towards external experience and behavior, may help in learning from home; this process requires a lot of self-discipline and motivation, which can be challenging for students who are used to the structure and routine of a physical classroom.

Overall, it was important for educators and students to see and be aware of these challenges and try to create an engaging and supportive learning environment for the students and themselves to establish a well-being perspective during online lessons.

Two perspectives: of a teacher and a student

Our method was based on two perspectives: a teacher and a student. In each of the five partner universities, the students and teachers worked in small seminars (groups of 5-7 people), sharing their experiences on online lessons, comparing them to the classroom experience, and sometimes with hybrid lectures. These workshops aimed to work out the code of conduct recommendations following the exact instructions.

The groups had brainstorming discussions in which the result was a list of "what to do" and "what not to do" during online lectures. Within this very interactive and intercultural approach, we divided the set of good practices into two categories. "Do's" and "Don't 's" were created for each target group: Students and Teachers.

All the aspects were widely discussed in the groups mentioned above and then by the DigiMates partners at the Multiplier Event. When preparing and sharing experiences, all the participants considered experiences and good practices of a different kind. Firstly, the top-down rules apply at the university they worked or studied in, then personally. Also, the experience is known to them from other universities, possibly good to be implemented due to specific problems and needs.

All university students and academic professors mentioned that they went through some semesters of online teaching due to Covid-19, which applied to lectures and examinations. They suffered a lack of social contact and student life and interaction. However, they also indicated how difficult it was to concentrate when they needed communication at the level of student-professor, student-student, and professor-professor, besides the online lectures.

The professors added that it costs more work to involve students to make them concentrate and focus on the topic. They suggested that they want to include students more in the lectures and find creative ways to excite students, to make them more focused and at the same time, students



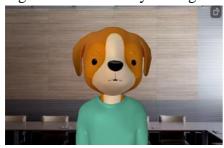


addressed their wish that teachers, like the masters of the process, should have good knowledge about online tools, so they can solve technical issues if they appear. Both students and professors also recommended shorter lectures in smaller groups to have a better connection and better contact.

The workshops on the code of conduct were held in all the partner universities between July and November 2022.

For example, the discussion at the University of Ljubljana in Slovenia was held online on September 29, and the organizers started the Zoom meeting using Zoom avatars (see the figure).

Fig. 2. Avatar used by the organizers at the beginning of the Zoom meeting



The avatars stimulated discussion about Zoom's capabilities, and the participants spent a few minutes admiring those capabilities. They concluded that this part of the discussion was fun but then focused on the debate regarding the Code of Conduct. Participants raised questions about whether they should give answers corresponding to knowledge about the code of conduct in the online environment or whether they should answer the questions according to their personal opinion. Some participants emphasized that they had read several rules about the online environment but needed to agree.

The advantage of this approach was creating the opportunity to express personal opinions and share experiences on each issue by participants of the workshops.

The participants of the workshops on the Code of Conduct were students and academic teachers from five partner universities.

Summary of the key findings

The summary consists of the results of the workshops and covers the participants' opinions from five countries and their recommendations. Sometimes we use cited ideas and a descriptive format of the described experience.





4.3.1. External appearance

The aspects raised for discussion were performed in the fields: of **external appearance** and **behavior**, including opening and finishing the lecture at the beginning of the online courses: using formulas, preparing the content, and form of welcome and farewell greetings. We suggested that it makes a difference to make it well online. Another aspect was punctuality, being before the meeting, and keeping an eye or voice contact. The frequent question was what to do when students still stay at the meeting what is the sign that they probably did not notice the lecture ended. Another issue was connected with dress code and etiquette. In both on-site and online classes, it is essential to be appropriately dressed and elegant enough not to offend anybody by disrespect. We agreed that our values are associated with respect for political, cultural, gender, and age differences, religious and disability issues. The interconnection was then the topic of the reactions to inappropriate behavior. One of the issues raised during a pandemic, when long hours of lectures were highly demanding for participants, was the problem of consumption of food (eating and drinking during the meeting).

We asked if the online lessons are different in this context than regular onsite meetings.

Participants generally noted that rules for hairstyle, clothing, or makeup are not mandated for in-person meetings/classes, so the teachers should not mandate such practices for an online environment. Participants also stated that we generally never discuss or comment on appearance based on religious or medical reasons. In addition, participants emphasized that in their experience, they have always seen students' faces in face-to-face or online classes (i.e., they have not witnessed students wearing a niqab or burqa during class).

Students	Teachers	
University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk	University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk	
External appearance		
Tidy and clean appearance, haircut, make-up, headgear, dress code.		
Do:	Do:	
Prepare for an online meeting as you would prepare for a meeting in person.	Prepare for an online meeting as you would prepare for a meeting in person.	





Don't:

It's generally acceptable when students wear hats or caps during online classes as they do not attract too much attention (e.g., flashing lights).

Do:

Be reflective towards external appearance as it matters.

Students and professors don't mind how other students dress, either remotely or in their presence, but it is important to look neat.

Dress appropriately, and try to look decent.

Don't:

Don't discriminate against anyone because of external behavior.

Don't dress like someone who just woke up (famous pandemic pajamas).

Don't wear hats or caps if not being obliged by your tradition.

Don't:

Don't wear clothes that could be associated with racism, sexism, or others that may offend other people.

Do:

Motivation is essential for both the lecturers and the students.

Do:

Participants held different views on the external appearance of professors. Some felt that the larger the number of students in online courses, the more formally teachers should dress. Haircuts must also be neat and clean, but makeup is a personal choice.

Do:

Physical appearance is part of academic freedom; a more informal appearance can make students feel more comfortable in class.

Don't:

Refrain from dressing too shabbily if you are an invited speaker or do not know your audience. If you are unsure, it is better to be overdressed.

Do:

Prepare for an online meeting as you would prepare for a meeting in person.

Physical appearance sends a message to students, and teachers should be aware of this and balance it with expectations.

Don't:

Even if you work from home, don't dress like someone who just woke up.

Do:

Unless you attend in pajamas, how you dress as a lecturer or learner does make a big difference. However, it also prepares you emotionally for how you dress up for the online lecture.





If a student is prepared, then the lecturer is motivated. If the lecturer is motivated, the student is motivated.

Do:

The other party will be inspired when we participate based on a dress code.

Don't:

How the lecturer dresses make a difference in the motivation. The dress of the students and the lecturers is a sign of respect.

As gen Z, we have a problem with attention span. In an online environment, factors affecting motivation become more critical. When the students whose cameras are turned on are not appropriately dressed, or yawn, it distracts attention. These make both the lecturer and the other students unhappy. Sometimes, even the lecturers acted in this way. In this case, participation in these lectures could have been higher.

Do:

An online lecture should have a code of conduct or a dress code. It's different from the in-person lecture environment. You must dress like you are coming to the faculty for an in-person course. Rules should be the same.

Don't:

In online education, there was a disregardful environment. When there was no mandatory attendance or obligation to turn on cameras, many attended the class in pajamas. We

Don't:

It's okay how you dress. However, you may face awkward situations if you have freedom of choice. Hence it might be better to have a code of conduct for both lecturers and students that states you should dress in a way acceptable in regular social gatherings that does not deviate attention. This would be a plus.

Do:

The background is more important than the dress. The background should have warmth, depth, and sincerity. A flower may be an example. There should not be a library in the background.

Do:

The light is essential. These factors are more important than the dress. Showing your personal space to the learner provides a sincere atmosphere. The lecturer should state her expectations at the beginning. If there is a Code of conduct, these should be included. The student should come prepared. I have a Youtuber friend who says the background's depth is essential. The blurry background could be better.

Don't:

Physical appearance is important because online education should be done with cameras on. We cannot always have our hair done, but we should not sit in front of the computer as we have just come out of bed. Light makeup may help. The cameras should be on if the student has willingly enrolled in an online course. A suit is unnecessary, but a proper shirt should be required, like in a standard face-to-face environment. Nothing distracts attention.





should take action to avoid this type of behavior.

You need to prepare for the online class. However, it would be best to consider that a student's resources are limited. You need to check your internet connection.

Do:

Prepare for an online meeting as you would prepare for a meeting in person.

Have a tidy and clean appearance.

Take care of your haircut and make-up, headgear, and dress code may be informal.

Do:

Students think that teachers should maintain the same appearance as presenting when lecturing in class.

Don't:

It is inappropriate to cover the head with hats.

There is no need, however, to wear a white coat or a tie.

Do not wear sportswear or be unshaven.

Don't:

I don't find it important. The students may wear whatever they want. In my earlier years, I used the dress to distance myself and the students since our ages were close. Since the student attitude towards young professors may be different. That's why using the skirt to create a perception of yourself as a professor was important. Now, as a mature person, I am more comfortable. Of course, as professors, we should dress appropriately and have an appropriate hairstyle.

Do:

In online education, background is a lot critical. You should have a properly organized house.

The positioning of the camera is essential. If only your head is visible, everyone sees a head that constantly moves. This distracts attention. At least our shoulders should be visible.

Do:

Light plays a vital role in understanding the one who is talking. The dress code should be the same as we have in in-person education. It is important for the lecturer. Also, if the student has chosen to enroll in an online class, it should apply to him. I expect the student to organize the background properly.

Do:

Every service is a play. Hence, the details in the background are important to me. If everyone turns off their camera, that is not respectful. The lecturer needs to learn whom they teach. Whoever has the camera on puts effort into presenting himself properly to the class. The ones who turn off their cameras may turn them off because the home environment is unsuitable for a lecture.





Do:

Teachers are requested to include institutional or at least serious backgrounds. Be very careful with the background of the broadcasts (private photos, environments full of stuff. animals or very personal, bathrooms, and other people in the house). Regarding physical appearance, it is required to follow the exact requirements, clothing, and style that the person would have in face-to-face teaching to make online connections.

Don't:

Maintain the style that each one has, with decorum and respect for others, but without forcing others to be in a suit or make-up. The head covering is allowed if it is discreet and does not disturb or distract others. Typically, when doing it online, habits are relaxed, and that is not good.

4.3.2. Behavior

We analyzed the opening phase, time management, eye contact, and voice contact during online lectures and classes, such as finishing the studies. Regarding behavior in online (and face-to-face) lectures, participants agreed that the most important thing is respectful behavior from teachers and students. They emphasized that academic freedom must apply in this regard, in terms of the form and length of opening and closing statements, and that these things should be informal. Participants also said that teachers should open and end each lesson in their way. All participants also stated that they appreciate and expect reactions from students (e.g., greeting the professor at the beginning/end of the lecture, answering any open questions, ...).





Students

University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk

Teachers

University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk

Opening

Formula, content, and form of welcome greeting. How to make it well online?

Do:

Respond to the teacher's questions to show that you are present.

Do:

Students could respond or say hello via chat, unmute themselves, and communicate hello verbally. It is easier to get nonverbal feedback when students sit in the room. However, in an online environment, it is challenging to receive nonverbal feedback. Therefore, it is desirable for students should have cameras on so that teachers can receive nonverbal feedback.

Don't:

Do not ignore the request to provide feedback.

Do:

Greet the professor.

Participate in the class, bring in ideas, and ask questions.

Pay attention – don't sleep or don't behave like you are not present at the lecture.

Do:

Greet students, introduce yourself when meeting a new group of students, or expect new students to have joined the group.

Do:

Teachers can ask students how they are doing, but not if they meet the same group too often. Please take a minute to do this, but when you ask a question, allow time for students to respond so they believe you are genuinely interested in them.

Teachers feel that opening words and questions are even more important in online lectures - this was especially true during the lockdowns when we were all isolated. However, it has been the participants' experience that students rarely respond to such questions. Teachers should therefore encourage students to provide verbal/nonverbal feedback.

Don't:

Only start the course material after greeting the students.

Only spend a bit of time opening the lecture if the time for the course is short, and you may need to





Raise your hand or give a signal before speaking.

Be motivated and prepared.

Be attentive and sit upright.

Be respectful.

Don't:

Use proper vocabulary, and don't swear

Don't eat during a lecture

Do:

The classes started, and we got connected. If the lecturer read from the slides, we opened new windows and did other things as students. However, one of the lecturers started the lecture by chatting with us. He would then begin the class and make jokes occasionally to get our attention, which prevented us from getting tired. That was very good.

Do:

Energy is vital. The lecturer should stay connected and in a happy mood. For example, one of our lecturers started every class with music and smiles. This motivated us for the course, and our motivation level was high. Another one did the opposite, and her lack of enthusiasm was transferred to us. Hence the beginning of class must be motivating with lively activities and smiles.

Do:

Some professors sometimes started the class by reading from the slides. However, the students learn better if there are visuals. Even though the professors know about this, they speed up the lecture later or even extend it by a few minutes.

Do:

Students prefer punctuality and efficiency to greetings. However, explain to them why you are skipping the greetings.

One participant experienced a complaint from a student who said that his feelings were his business and that teachers should not ask too many such questions because they invade students' privacy.

Do:

Be friendly.

Speak loud and clear.

Respond to the questions/ ask students the questions.

Interact with the students.

Don't:

Even if you are tired, try not to show it.

Talk boring and monotonous tone.

Talk too quiet.

Do:

I always start the class with questions such as "do you have any questions from last week's class?" "I have provided these resources. Do you have any feedback?"

Through my questions, I determined who existed (were present even though their cameras were off) during my class.





prepare slides full of writing, and we need more focus. You lose interactivity. It is easier to follow if the slides have visuals and keywords. Colors also help. Eye contact and having an active role for the students is essential. The presenter's camera should be on, and the lecturer should also check if the audience is on the same line as she is.

Don't:

The voice should be varied. Otherwise the lecturer loses the student.

When the topics are abstract, the lecturer explains that it is insufficient. Then the workload rests on the student to understand it, and the student has to study a lot more after the lecture should be learner-centered and more interactive. We should have more applications rather than much theory. Discussions and project ideas are more important.

Do:

One of our lecturers would chat with us at the beginning of the lecture and then continue with small talk between lecturing and at the end. The lecturers should use the poll system in the LMS more often. Check through polls between lecturing and at the end if the students are on track.

Do:

I focus on punctuality. I start the online meeting early, taking any possible internet connection problems.

Do:

Since the lecturer needs more time to upload the presentation, adopt the intelligent pen, etc., to avoid compromising punctuality, the lecturer should get connected earlier than class time. This increases efficiency.

Students

University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk

Teachers

University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk





Punctuality and time management during online lectures and classes

Be before the meeting, be before the students, be before the teacher.

J	•
Do:	Do:
Be on time.	Open the Zoom meeting a few minutes before the official start time so that students know they are in the right place and have the opportunity to test their
Don't:	equipment. Start the informal talk on time and the
Don't be late.	formal lecture a minute later.
Don't: Being late to a lecture room disturbs the other students who were there on time. Other students find this unproductive. Being late in	Do: Ensure you have all programs and files ready and open on your computer before the online lecture. Students should immediately find the file before you share it. However, be flexible if students can find and
an online session is less disruptive but can inconvenience other students if you miss something and things need to be repeated for you, or you cannot start group work.	open the file to begin working. Give them time to do this.
Teachers and other students may perceive	Do:
tardiness as disrespectful to them. Do:	Explain your expectations for student punctuality. You can require students to be on time and enable the waiting room feature in Zoom to keep students who are late out of the session.
If you are late, make your arrival as discreet as possible. Refrain from greeting other students if a course discussion is already in	Don't:
progress. Do:	One participant had a bad experience with a waiting room because the management of the waiting room bothered the lectures more than the students who needed to arrive on time.
Be on time.	
Sign up for the course.	Do:
Be prepared with course material.	If punctuality is a value, be a role model.
Don't:	





Don't address IT technical issues with a teacher.

Be flexible if you have a large class and be very strict if you have a smaller class, and intensive group work is expected.

Do:

It is vital to start 5 minutes after the time to begin the class. And start with the summary of the previous lesson. And that the teachers stay there for those 5 minutes, talking, making time, and not leaving. Closer treatment because being online is much more cold teaching.

Do:

Remain in the lectures until the end.

Don't:

Don't leave the lectures before the end.

Do:

Be on time. Students may have been waiting for you in the lecture room, but if the Zoom meeting is not open, they will not wait for it. Students may be worried about using the wrong link or missing the schedule. Even if they are admitted to the meeting but the meeting is quiet, they might need clarification. Posting a chat message that the meeting will start in a few minutes is not very helpful because those who were a minute late will not see that message. It may be beneficial to share the front page of your slides that notes the start time.

Do:

If it is a live connection, try to be there a few minutes early to ensure the start is on time due to connection problems. Punctuality is even more critical than in the classroom.

Do:

The lecturer should be punctual. Students should be punctual unless they face internet connection problems. It's essential to follow the time for beginning and ending.

Do:

Finish lectures on time or ask permission to extend classes. Check if students are available (i.e. if they have the time for the extended talks). However, extend your lectures sparingly.

Don't:





Do:	Do:
Eye contact and voice contact during online	lectures and classes
Students University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk	Teachers University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk
	Another participant reported that students misunderstood the additional breaks. Students were okay with more breaks, but they needed to be okay with the fact that it made the overall length of the lecture longer (which was still in line with the schedule).
	Don't: Be aware that breaks in the online environment are meant to refresh, not just to move to another link. Shorter but frequent breaks are necessary for an online environment.
	Do: One participant faced difficulties because another teacher who had lectures before her did not start on time and ended her speech late. Therefore, the students asked for a break-even before the new lesson started. It was because they did not have time to have a break before class. After all, the teacher also extended his lecture. Therefore, keep your lectures on schedule and show that you respect the time of the students and your colleagues.
	Don't pretend you did not realize your time was up





Ask or answer a question, and comment on the content promptly and according to the rules established in the course. Voice contact is the easiest way to participate, but you can also use nonverbal signals (raise your hand, type a short note in chat) to get a word in without interrupting the teacher or other students.

Having your camera on during the discussion is recommended to facilitate eye contact with teachers and other students.

Don't:

Only use the chat if the teacher has asked you not to use it. You will not get a response because the teacher may need help reading the conversation when they share the slides.

Refrain from using the chat to discuss noncourse topics with your friends or to make irrelevant/inappropriate comments.

Don't use your microphone in a noisy environment where other people cannot hear you.

Do:

Ask all students and teachers present to turn on the camera. And to make groups with streaming students.

Teachers should be better trained in digital competencies if there are connection problems. They like the idea of complementing the classes partly on video

Look at the content/slide you are teaching/sharing and not directly at the camera. You also do not stare at the individual students in the lecture room).

Do:

Use a large screen or two screens to see the content you are sharing, the list of participants (to see their nonverbal feedback, raised hands, etc.), and the chat window so you can read questions and answers as they appear.

Don't:

If you cannot manage the chat during your lecture, disable it. Unanswered questions or comments could be unpleasant for everyone, the teacher appears ignorant, and students feel unheard.

Do:

Explain in detail how communication should work in your class.

Give students the time during class to ask questions. Be aware that it takes more time than in face-to-face lectures. Be cautious about chat activities. Consider whether allowing students to send private messages to each other is appropriate.

However, a public chat lends itself well to peer support. One participant noted that students could answer typed questions from other students without teacher intervention.

Do:

When encouraging the chat feature, be aware that it may be difficult for students to listen to the lecture





and then consultations and exercises in streaming (flipped classroom, but be sure that the students have been the exercises) or recorded classes to watch later.

Do:

The presenter (student or lecturer) should have their camera on. This is important for efficiency. The lecturers should check with the students whether they are following, primarily if they are lecturing using articles. The student's attention span is 20 minutes.

Don't:

Eye contact is significant. The lecturer should apply teaching methods that involve the student actively. If the student is actively engaged, then the focus is preserved.

and keep up with messages in the chat simultaneously.

One participant needed help managing chat in large classes and noted that students who unmuted themselves and spoke were heard more than those who only typed their comments/questions in the conversation.

We should have a dedicated moderator for chat, primarily to address technical issues in classes.

Don't:

Don't be too close to the camera; students should see your whole face. Keep your distance in the lecture room as well.

Do:

At least the teacher must have a camera since contact is required. It would be desirable that the students also have it and thus be able to facilitate the interaction.

Don't:

If synchronous, up to 25 students can be meaningful teaching because keeping students' attention is even more challenging. If it is asynchronous, always write a script first because it is necessary to explain everything in a more concrete and organized form and shorter time.

Do:

Eye contact is essential (looking straight into the camera). It is possible to greet everyone one by one in an in-person class. However, it takes a lot more





time to an online for everyone. It takes time away from class time.

The optimal number of students for online education should be discussed. During the pandemic, I would end up with 30 students at the end of class even though I started with 90. People do not talk because they are afraid they will interfere with someone else.

Don't:

The relationship should be respectful. Asking how they attract attention. If the hardware is appropriate, eye and voice contact is significant.

These should be put into the syllabus. The cameras should be on for everyone. However, if the student has internet connection problems, punctuality may be expected from the student. Names must be correctly written. I am trying to remember the names of 80 students. However, the student needs to bear names when talking. Online education gives us the advantage of managing all students by their names.

Do:

Eye and voice contact is essential to keep the student's attention alive. The student may say their camera and microphone are broken. This should have little continuity. If the student and the instructor choose to be part of an online education, they should have the proper hardware. It can be written as a code of conduct.

Do:

Co-creation of experiences is important. The rules should be in place to improve the experience of both the service provider and the service taker. The institution should be able to back these rules. If the code says cameras should be on, the institution should provide cameras.





Do:

For eye and voice contact, you should have the proper hardware. The rest should be the same as inperson education. It's important to set expectations. What do you expect from me as a professor, and what do I expect from the students?

Students

University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk

Teachers

University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk

Finishing the lecture/meeting

Formula, content, and form of farewell greeting. – How to make it well online?

Do:

Say goodbye or type a message into the chat because teachers want to see that you were present for the entire class. Or leave when the session ends so teachers can see you have been active.

Do:

Emphasize the moment when the formal lecture is over. Say goodbye, and wish them something nice. Let them know that you care about them and that they have other things to do in life than just your course.

Don't:

Don't stay in Zoom when the lecture ends because teachers will see you were absent.

Do:

The last formal part of the lecture can be an announcement of the future topic or lecture or a reminder of students' obligations for your course.

Do:

Leave a period for asking questions always at the end because there is no possibility of interrupting or approaching the teacher. Suggestion: the teacher should ask if someone wants to ask a question in





private to stay until the end. Students usually ask orally, but some shy people prefer to ask on the chat.

Do:

The lecturers should collect feedback at the beginning and the end of the lectures using the survey system in the LMS regarding the class. They can ask how the lecture was, how much they have learned, etc.

Don't:

Don't tell jokes if you are not good at them.

Do:

The teachers ask questions during all the lectures, using tools for Zoom or Google meet surveys. Also, it is possible to add some questioning through Moodle and open it only for a few minutes to allow only students in the class to access that on time.

Do:

At the end of the class, I give the big picture by informing the students about what we have covered and will cover next week. Hence, if the student watches the recordings, they can connect the topics and see the big picture since their attention may be distracted during the class.

Students

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Teachers

University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk

What to do when students still stay at the meeting?





Do:

Ask questions and clarify course-related problems, but be careful not to reveal personal issues when other students are still present.

Don't:

Stay short. Remember that teachers have other obligations and need a break, too.

Do:

Keep Zoom running until it becomes almost empty and silent.

Do:

Allow students to have an informal discussion, but give a time limit, as you may need to start another Zoom meeting, and the old one will automatically close. Encourage students to switch to other communication channels for private chats.

One participant set the Zoom meeting so that students could join at any time, and students could even have a Zoom meeting on the teacher's account without the teacher being present.

Do:

Answer any questions after class, but ensure students know this is no longer part of the regular class, as they may feel that you've extended the lectures.

Don't:

If students have administrative issues (grades, etc.), use a breakout room for such discussions.

Do:

Just ask and later switch off (they are probably recording, so it will be good to take the names).

Do:

We explain that the class has finished and shut off the meeting.



Students



4.3.3. Formality and etiquette

During online lessons, we should be highly aware of the perception and comfort of all participants. In this part of our interviews, we concentrated on cultural awareness and respect for political, cultural, gender, and age differences and religious and disability issues.

Participants also discussed such behaviors, which may result from loosening etiquette when spending more time online without an audience or company. It includes eating during an online lecture and reactions to inappropriate behavior.

Teachers

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Culture awareness. Respect for political, c disability issues	ultural, gender and age differences, religious and
How to be elegant, how not to offend anybody	? Which aspects should you take into consideration?
Do:	Do:
Conduct yourself in the online environment as you would in the physical classroom.	Behave as you would be in the classroom. Always remember that although you are at home, you are not really at home but in a virtual lecture room where you are giving a public lecture.
If your camera is on, be aware that other students may be watching you. Be careful not	
to convey disrespectful messages with your	Do:
facial expressions.	When students use their cameras without a virtual background (background does not work with weak
Don't:	computers and bad cameras, it is also not allowed during exams), you will see their circumstances
Don't write disrespectful comments.	more than you would in the lecture room. Avoid any prejudices.
Do:	Don't:





Be polite.

Don't:

Don't express political messages or religious messages in T-shirts; It is not necessary to dress in a suit in a suit or lab coat, but clean and similar to the presential dress code.

Do:

Behave as you would in the physical classroom.

Don't make inappropriate jokes because you cannot see students' reactions and can only resolve issues if someone gets the joke right. You cannot apologize if you have unintentionally offended someone.

Be aware that you may be recorded. Only a portion of your speech or comment may be made public. Such actions by students are illegal but can damage your reputation.

Eliminating all funny content from the classroom (online and in person) dulls the class. Making fun of yourself or the teaching course is usually a safe bet.

Do:

No political messages or religious messages in T-shirts, It is not necessary to dress in a suit in a suit or lab coat, but clean and similar to the daily dress code.

Do:

Behave as you would in the physical classroom.

The attitude towards sensitive issues should be the same as in an in-person environment. We have to show respect. However, the more we do not talk about these issues, they seem to grow. We should be able to talk about them and normalize them.

Usually, we do not talk about sensitive issues (race, religion, gender). I think it should be the reverse. We should speak of them to normalize them. We should take steps.

Don't:

Interrupt with the external voices, and mute your camera.





Students	Teachers

University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk

Reactions for inappropriate behavior

Do:

Behave as you would in the physical classroom.

Treat all participants (e.g., teachers and other students) with respect.

Do:

Warn other students if they misbehave or bother you. Be polite if it is a minor issue, but be strict if it is a significant issue and you feel offended.

Don't:

Don't misbehave.

Do:

Don't use swear words.

Do:

Give a signal before speaking.

Answer questions.

Do:

If it is just a strange remark made by a student in the chat or the questionnaire, try to present it funnily, even ignore it. However, students should always feel that you disapprove of such behavior. If a particular behavior or action is inappropriate, you must respond and condemn the behavior. If you do not reply, it will look like you approve of such behavior.

If it is more inappropriate severe behavior and you know who the perpetrator is, you should remove the perpetrator from the meeting and explain why you are doing so.

Do:

Advise students that serious offenses may be reported to the police and that a criminal investigation could reveal their identity. However, be careful about making threats you know will never come true.

Do:

You should be stricter at the beginning of the semester but loosen up toward the end.





Don't:

Don't randomly leave the online session / when you're expected to do tasks or group assignments.

Don't:

Don't talk when others do. Respect each other: stay silent while the others speak to show respect for each opinion and the diversity of comments.

Do:

It is not allowed to say swear words in any case for teachers or students. But we understand that using swear words is more severe in some careers than others. For example, in a law degree, it would be inadmissible. In engineering, it would be inadvisable but less severe since the communication with your future clients will be different. Even Sometimes, using polemic expressions can be helpful to wake up students in difficult hours (15:00, for example), but always from respect.

Do:

It is more important how the lecturer behaves :).

One participant pointed out that he had an example of disrespectful comments in public streams, but the author's identity was fake; the author's first and last name did not exist. It would be highly problematic if the author of such a comment used the identity of another student. If left unchecked, Zoom participants can change their names to anything.

Another participant experienced students cursing during class. Students should be warned that this is not appropriate.

Do:

If a student is acting strangely, they may just be seeking attention. Try to use their need for attention for something positive. Show them that they are being heard and can become very positive examples.

Be aware that problematic students can be involved in all courses, and their classmates may be tired of them.

Do:

Treat students equally as you treat yourself. If you make jokes during lectures, students may do the same.

Don't

Avoid punishing the whole group of students for the misbehavior of one.

Don't close communication channels (close chats, disable unmuting) because of one individual's misbehavior. Using technology to hinder students is a sign of weakness, just like leaving the classroom.

Do:





Do:	Do:
Eating and drinking during the meeting	
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Students	Teachers
	Don't: Generally, there is no need to kick a student out. However, if things get out of control, it is important to have the authority to do so.
	Voice is essential. Using earphones can be part of the code of conduct. Once, a friend of mine started singing when I was in an online meeting. The cat may jump on the computer. The student's mother may shout, saying the dinner is ready. To avoid these, earphones are necessary.
	The jokes in class can be formal or informal based on the class dynamics. If students can be insulted, more attention should be given to what is said. The colloquial jokes should become insults.
	what we need to follow in an in-person class as well as to and differences in style. Do:
	If I face any misbehavior, I can kick (block) the student online as in an in-person setting. This reflects





Avoid eating and drinking during class. It is essential that you do not disrupt classes by eating and drinking. However, if this is impossible, eat and drink discreetly during online or face-to-face lectures.

Students have irregular schedules, and some teachers extend their lectures. Sometimes students have no choice but to eat during class; the alternative would be to miss the lecture.

Don't:

Don't eat or drink in a way that disturbs other students and teachers (noise, smell).

Don't:

Don't eat during class.

Do:

Do:

Eating should not be done during classes, but drinking is allowed.

Only tell the student eating to turn off his camera if you want them to use it during the lecture, especially if only a few students have their cameras on.

Don't:

Most people advise against it. Still, they do not mind if students eat during online classes as long as students' behavior does not bother other participants in the meeting.

Do:

Eating and drinking should not be the generality because when people eat, they divide their attention between activities. But if they need to do it because of their timetable, they must do it with the microphone closed. And for eating, the camera should also be off, but for drinking, the camera could be open.

Don't:

Even if eating does not bother the teacher, it can bother other students in a way that distracts them. Even if the microphone is off in such cases, it can be interesting for others to see what they are eating. Such distractions interfere with the teaching process without the teacher noticing.

Since I have diabetes, I sometimes need to drink or eat during class. Hence it should be allowed for both instructors and students.

Students are old enough to focus on what is essential and valuable and ignore distractions.

I agree that sometimes it can be a necessity to eat or drink. It can be finger food or toast.

Unless it is not distracting others, you can eat or drink.





	As an instructor, I need to drink when I have a dry throat. The student and instructor can eat and drink unless it is too noisy.
--	--

4.3.4. Technical issues

Technical issues mainly concern safety and security, which may be connected to using the online platform and logging in. These aspects also cover contact details and identification, but also protection against deception during online tests or online games and communication with others during online tests.

Another issue directs copyright of teacher presentations, student presentations, and generally, the materials uploaded on the website platforms. Most of the respondents also indicated the problem of stable connection, background selection, space for online meetings as an environment, and possibly avatars.

Students	Teachers
University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk	Applied Sciences, Dokuz Eylul University,
Logging in	
What e-mail address? Is there a name and sur	name?
Do:	Do:
Use the official email you received as a student from the university.	Log in to Zoom with your full first and last name.
student from the university.	
student from the university.	Do:





Do:	Don't:
Log in to Zoom with your full first and last name.	Only post a Zoom link on a public web page. Publish it so that only students in the course can see it (e.g., via the learning management system).
Don't:	
Don't use nicknames or false identities in	Do:
class.	Better set the name and the surname to allow communication.
Do:	
Better set the name and the surname to allow	Do:
communication.	It is recommended that a teacher makes sure they have the students' consent for uploads of the presentations or recordings.
Do:	
Be aware of your surroundings, mainly when the lesson is recorded.	Don't:
Stick to the rules.	Do not show the students' faces when recording/uploading lectures, if possible.
Don't:	
Don't get distracted by mobile devices.	
Students	Teachers
University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk	University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk
Material sharing, screen sharing	
Do:	Do:
Prepare the files you want to share in advance. If you're sharing the screen and not a single	





application, consider what other students and teachers will see (all open applications, browser tabs, etc.).

Disable students' screen sharing when you lecture, but allow them to share their screens when you hold a seminar or discussion.

Don't:

Don't share anything unless asked to do so.

Do:

Some teachers asked to share the screen with him to avoid copying. One participant mentioned that he has all options, including screen sharing, enabled in Zoom for students all the time but has had no negative experiences. He suggested that it would be good to define the actions that can be taken if something terrible happens (e.g., someone disrupts the lecture by intentionally sharing inappropriate content).

Don't:

Don't share anything personal. Pay attention to what applications are open when you start sharing. Don't share a screen with your email.

Don't:

If students have questions and you advise them to share their screen, do so in a polite way so they can decline. Don't insist that students share their screens if they are not ready.

Do:

If they are students from the university, they have a course in Moodle to share the Documents.

Don't:

Sometimes when the lecturer shares a screen, personal stuff on the desktop can be inappropriate for the student to see. Instead, the lecturer may log in to the computer with class materials and share the screen. Then such situations can be avoided.





Students

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Teachers

University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk

Background

Should be virtual background used? Blurred / official of the university/others...

Do:

Use a virtual background for privacy.

If available, use the official background provided by your faculty/university.

Don't:

Don't use a background distracting to other students (e.g., a background with animations or other special effects).

Do:

Better to blur the background or the official of the university.

Do:

Everyone may have the necessary setting. So they can blur the background. If they have the opportunity, they can use other backgrounds. Otherwise, you can have a blurry background.

A background or blur may be problematic for some lecturers who use a board at the back while lecturing online. However, it can be compulsory for the students. The lecturer can

Do:

If you want to protect your privacy, use a virtual background. However, the background should be a personal choice.

Do:

A uniform background can promote equality among students and increase their emotional attachment to the university.

The institution should provide official backgrounds and make them available (but optional) to students and staff.

Don't:

Don't use a distracting or distracting background.

Don't:

Only use a background if your camera is good enough. It's better to have the camera off than half of your face replaced by the background.

Do:





put the rules in class, which the student can blur.	Better to blur the background or the official of the university.
Do:	Do:
Usually, we know the time of the lecture, and we can arrange the environment accordingly before the class and solve the background problem.	In a traditional classroom, you can go around and get attention; however, I sometimes need help in online meetings because I need more time. That's why every 15 minutes, it helps to plan your materials to have a question to ask and open the floor for discussion to increase involvement.
Students	Teachers
University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk	University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk
Workplace	
What about the room from which the person is	connecting?
	Do:
What about the room from which the person is	
What about the room from which the person is Do:	Do: If your room is visible through the camera, it should look professional. Use your office if your space at
What about the room from which the person is Do: Be alone in a quiet room.	Do: If your room is visible through the camera, it should look professional. Use your office if your space at
What about the room from which the person is Do: Be alone in a quiet room. Don't:	Do: If your room is visible through the camera, it should look professional. Use your office if your space at home needs to be more suitable. Do:
What about the room from which the person is Do: Be alone in a quiet room. Don't: Don't be in a noisy room.	Do: If your room is visible through the camera, it should look professional. Use your office if your space at home needs to be more suitable.
What about the room from which the person is Do: Be alone in a quiet room. Don't: Don't be in a noisy room. Do: If you don't use a background, make sure your workspace is tidy and that there are no distracting visual/audio factors that would	Do: If your room is visible through the camera, it should look professional. Use your office if your space at home needs to be more suitable. Do: Be alone in a quiet room.
What about the room from which the person is Do: Be alone in a quiet room. Don't: Don't be in a noisy room. Do: If you don't use a background, make sure your workspace is tidy and that there are no	Do: If your room is visible through the camera, it should look professional. Use your office if your space at home needs to be more suitable. Do: Be alone in a quiet room.
What about the room from which the person is Do: Be alone in a quiet room. Don't: Don't be in a noisy room. Do: If you don't use a background, make sure your workspace is tidy and that there are no distracting visual/audio factors that would	Do: If your room is visible through the camera, it should look professional. Use your office if your space at home needs to be more suitable. Do: Be alone in a quiet room. Don't: Please don't talk about students' private rooms unless





Refrain from showing a messy room. Don't stay in a noisy room.

Do:

Better a white neutral room, do not show personal items.

Do:

In some systems, there is a lock-down browser setting during exams. Exam security depends totally on the student's conscience in an online exam.

Don't:

We had online education during the pandemic. It was 100% online. Then we needed the necessary hardware. So we could not have exams with cameras on.

Do:

Third parties may do the exams. To avoid that, interactive assessments may be developed.

The courses with many visuals can be online. However, the others where lecturing by the instructor is essential should be in person.

Do:

We had chat rooms as an activity in our student activities. We had places such as the coffee room, canteen, etc. The students could get involved in the chat in that room. We need such interactive methods.

Some participants believe that students prefer to see the teacher teach from the office (or a study room at home). Another teacher added that this is irrelevant when professors use virtual backgrounds.

If you don't use a background, make sure your workspace is tidy and that there are no distracting visual/audio factors that would affect the quality of the lecture.

Don't:

Refrain from showing a messy room. Don't stay in a noisy room.

Do:

Better a white neutral room. Don't show personal items. Students must have classes on this because sometimes they show their houses, roommates, and families.

Do:

When there is an online course, the faculty should provide room for it no matter the time. It is fine if the faculty closes at six and I must teach later. My home environment needs to be more appropriate for teaching. The support of management is important in online education.

Do:

Stable internet is a must.

Do:





Do:

Stable internet is a must.

If the internet is not stable, look for another place, and disconnect the camera until you are in a better internet connection place.

Do:

If the internet is not stable, look for another place, and disconnect the camera until you are in a better internet connection place.

Do:

The physical and the online environment are the same. These issues should be regulated by the rules accepted by the university/faculty and not by the code of conduct.

Do:

It will be different if you have online education with all the necessary hardware. Exam security may be possible if you limit what the student can do with other windows.

Students

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Teachers

University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk

Protection against cheating during online tests or online games

There is always a deadline for completing tasks, but students don't have to meet them at the same time:

communication with other messengers during online tests is also an issue

Do:

Carefully read and follow the rules for online exams.

Do:

They were allowed to record the images of the students in the exams and understood to put

Do:

Participants agree that these issues should be addressed by something other than the Code of Conduct but rather by the formal examination regulations accepted by the university/faculty. Clear rules and consequences for violations of the laws should be established.





several cameras to show that students were not copying. And even to share the screen.

Don't:

The idea of brief questionnaires to avoid copying between students affects the situation that sometimes students need more time to answer. They don't like the systems like proctoring to record some images each time students look to the side or the top.

Do:

The assessment security entirely depends on the student and his conscience. It is tough to avoid cheating in an online environment. Even if the camera is on, the student can put a tablet on his lap and cheat.

Do:

The focus of online education is technology. There are many brands where you can create your virtual copy, like the textile sector. If such technological infrastructures are available, then more interactive methods in in-person education may be possible in online education.

Do:

Instead of trying to achieve exam security, the assessment method should be changed. The exam format should change in an online assessment. Third parties can do the takehome exams or write the assigned papers. The estimates should include student participation and add up to a course grade. There can be

Do:

Rules for online exams at the university/faculty level should be as consistent as possible so students understand. Requests should be tested in advance to avoid technical problems during the exam.

Do:

The school should have the appropriate software to prevent cheating on online exams.

Do:

The protection law on page 35 says that it is allowed to record students doing exams if the purpose is to add some marks. So during the exams or exercises, recordings are done and are permitted. During regular classes, it is more problematic.

Do:

In the enrollment, the students should be asked to give permission to be recorded. We use some proctoring programs for online exams that measure when students open a new page or look to both sides.

Do:

It would be best if you made online assessments correctly. There should be other methods. Online exams need to serve the purpose properly. Online and traditional education is the same in terms of efficiency. If we look at the opportunities created by online education, people from different geographical areas can come together. The online materials and resources must be prepared early and very carefully. There can be problems with the situation at home and hardware. These problems can be overcome with the quality of the materials prepared, so students'





weekly assessments, which can be added to the course grade.	attention can be drawn to the materials. Hence preparation is essential.
	Do:
	The assessment method should differ from the exam system we are used to. There are problems and limitations with the traditional approach. Having a grade from an activity motivates a student.
	Teaching in a foreign language online to the 1st and 2nd year students intensifies the hardship faced in an in-person education in a foreign language. I try to include jokes. It would be best if you shared visuals. The new generation has a short attention span. To improve the quality of education, these are needed. I have the most problems with these.
	Don't:
	It is not possible to avoid cheating in an online exam. There are unbelievable cheating mechanisms. I have experienced it. The GPAs of the students went up all of a sudden during the pandemic. Even if the education is online, the exam should not be.
	Do:
	I agree that if the institution requires online education, the environment should be set for it. Unfortunately, we are a state university. We have our limitations. We put rules such as the camera should be on, you cannot wear a hat, etc., but more is needed. At least the library is open 24/7, and there are rooms that one can use for teaching professors in the evening.

Teachers

Students





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University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk

Copyright

Teacher presentations, student presentations – materials on the website platforms.

Do:

Respect copyright rules.

Don't:

Don't violate the copyright rules (e.g., illegal recording and distribution of lecture recordings).

Do:

Students know sharing the material and resources and recording teachers in their classes is forbidden. Still, they do these things—more education about the rights of teachers not to be documented and the consequences.

Don't:

Don't record online classes (only the teacher is allowed to).

Don't publish lectures and scripts.

This problem also addresses checking student essays, as the use of materials should be protected against plagiarism. The reasonable solutions are password-protected materials shared after logging in (the question was

Do:

The copyright rules are set by law, not by a code of conduct. The rules are the same as in the classroom.

Do:

A message must say that sharing the material on Moodle and recording the teachers or classes without permission is forbidden. The students can be reported if they use the material without permission.

Do:

If we prepare our slides, we can share them as we wish.

We have the copyright. However, if we take things from other sources, we need to cite the source. However, the copyright protocol requiring more transparency is a big issue. For example, if you use slides from Pearson, you can use them in a live class but cannot share them with the students. Or we cannot share copyrighted articles or books. The students can take photos of the slides, and you may not know it.

Do:

Sharing the sources used in online education is problematic from the copyright perspective. You





	T	
whether all or only the specific ones and how to protect them).	may share as "visible but not downloadable," but the student can take a screenshot. You can't avoid it.	
	Don't:	
	For patented information copyright such as Harvard Business Study, I provide the link to the source library for the students to download. However, some students need to download and expect me to offer them.	
	This is more of a problem for patented information, such as in medicine or engineering.	
Students	Teachers	
University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk	University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk	
Student essays The use of materials and protection against pl	agiarism.	
Do:	Do:	
Read the citation rules carefully and adhere to them strictly.	Use plagiarism-checking software (e.g., Turnitin) for all written work (e.g., essays, term papers, theses, etc.).	
Don't:		
Do not attempt to submit written work that is not your own or without properly citing the content of others.	Do: Take any possible violations or attempts at plagiarism very seriously.	
Do:	Do:	





Students understand and support plagiarism checking; the program measures the level of literal text from resources from the internet and to know from which places are being taken.

We use plagiarism checking software, the program to measure the level of literal text from resources from Internet and to know from which places are being taken.

Students

University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk

Teachers

University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk

Password-protected materials, shared after logging in

Whether all or specific ones, how to protect?

Do:

Respect copyright rules.

Don't:

Don't violate the copyright rules.

Do:

Only a little is used because some students know how to open them, while others need help. And sometimes, time is spent in the lecture when full of people asking for passwords.

Do:

In some systems, there is a lock-down browser setting during exams. Exam security depends totally on the student's conscience in an online exam.

Do:

All materials published within a course are the institution's intellectual property and should not be distributed further without explicit permission. These issues should be regulated by the rules accepted by the university/faculty and not by the code of conduct.

Do:

Educate the students about the copyright.

Do:

This problem also addresses checking student essays, as the use of materials should be protected against plagiarism. The reasonable solutions are password-protected materials shared after logging in (the question was whether all or only the specific ones and how to protect them).





4.3.5. Additional insights

In the conducted survey, students and teachers paid attention to other additional aspects, such as time management, scheduling meetings, and office hours.

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University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk

Teachers

University of Ljubljana, Heilbronn University of Applied Sciences, Dokuz Eylul University, University of Leon, and University of Gdansk

Time management, scheduling meetings, and office hours

Do:

If you have a problem/question that you would like to address with the teacher during office hours (i.e., alone or not in front of other students), be cooperative in arranging such a meeting.

Do:

When writing to a teacher to sign up for office hours, clearly state what problem/question you want to discuss at that meeting.

Don't:

Only request a meeting with the teacher at a specific (unusual) time (e.g., late in the day, on the weekend, during vacations,...).

Only expect answers within working hours.

Do:

Do:

Set office hours when you will be available to students for any questions they do not wish to discuss in front of other students and make this information public.

Do:

Also, set and make public the rules for students to sign up for office hours.

Do:

Consider that students/co-workers/other stakeholders have other schools/job-related and personal commitments and, if possible, be flexible in setting time for Zoom meetings.

Do:

Decline online meetings with students/coworkers/other stakeholders if the time is inconvenient.





Some classes will not be able to be online (practices with material, sports, veterinary lab practices with instruments instead of simulators).

Do:

Online classes are a barrier for shy people, and it encourages the systems to put marks on students who do not work in groups because it is easier to say *I have not done my duty* when it is not presential.

Do:

Setting the correct times for each duty in online courses is more important. It is much more challenging to adapt to different rhythms of students in the group and difficult to attend to diversities of learning.

Don't:

Only ask questions during office hours (and via email) that could be resolved during scheduled interaction with the teacher (e.g., during/before/after lectures).

Do:

One participant said he prefers that co-workers/other stakeholders suggest a few possible time slots for the online meeting, and then you choose one, and the discussion is arranged. If you make suggestions, the requests must be reserved until the other person selects and confirms one.

Don't:

Don't schedule additional meetings at unusual times.

4.3.6. The summary of Code of Conduct in online learning both for students and teachers

The summary for the student. Code of Conduct in online learning:

- 1. **Be respectful**: Show respect towards your teacher, classmates, and the learning environment. Adjust your appearance and voice activity. Avoid using inappropriate language and comments or engaging in discrimination or harassment.
- 2. **Be punctual**: Attend class on time and avoid being late or missing classes without a valid reason. If you need to miss a class, consider informing your teacher in advance.





- 3. **Be prepared**: Come to the class with all the necessary materials, such as textbooks and notebooks within the reach of your hands, and a positive attitude and a willingness to learn.
- 4. **Participate actively**: Engage actively in the learning process by asking, answering, and contributing to discussions. Share your thoughts and ideas with your classmates and teacher.
- 5. **Follow instructions**: Listen carefully and follow your teacher's instructions. If you need help understanding something, ask for clarification.
- 6. **Be responsible**: Take responsibility for your learning by completing assignments and homework and studying for tests. Avoid plagiarism and cheating.
- 7. **Be honest**: Be honest with your teacher and classmates. Do not make excuses or lie about your progress. If you are struggling with something or need extra help, ask for it.
- 8. A positive and respectful learning environment benefits everyone.

The summary for the teacher. Code of Conduct in online teaching:

- 1. **Be respectful**: Show respect towards your students by creating a welcoming and inclusive learning environment. Avoid using inappropriate language or critical comments.
- 2. **Be prepared**: Come to the class with a well-planned and organized lesson plan. Have all the necessary materials and resources ready for the course.
- 3. **Be punctual**: Start and end the class on time, and be available before and after class to answer questions and provide additional support if needed.
- 4. **Communicate effectively and clearly** with your students. Be sure you know and have prepared the digital tools properly. Use various teaching methods to cater to different learning styles and abilities.
- 5. **Encourage participation**: Encourage students to participate actively in the learning process by asking questions, answering questions, and contributing to discussions.
- 6. **Provide feedback**: Provide timely and constructive feedback to your students on their progress, assignments, and tests. Help them identify areas for improvement and provide guidance on how to improve.
- 7. **Treat students fairly**: Treat all students fairly and without bias. Avoid showing favoritism or discrimination based on race, gender, religion, or socioeconomic status.
- 8. **Follow ethical standards**: Adhere to ethical standards and professional codes of conduct. Respect your student's privacy and confidentiality and avoid any misconduct.

Following these guidelines can help create a supportive and productive online classroom community. The graphical presentation of the main rules is available in Appendix 2).





APPENDICES





APPENDIX 1. CONTENT OF SYLLABUS FOR DIGIMATES

Course title Course ID number According to a survey of five universities participating in the DigiMates project, it According to a survey of five universities participating is a required element of the syllabus in all in the DigiMates project, 52% of 152 surveyed academic surveyed universities. teachers believe that it would be beneficial to include words related to gamification/game-based learning in the title of the course. 48% of respondents are of the opposite opinion. Name of unit administrating study* Studies* Faculty* Field of study* Cycle Form, specialty, specialization* E.g. short/first/second According to a survey of five universities participating in the DigiMates project, it is a required element of the syllabus in all surveyed universities. **Teaching Staff** According to a survey of five universities participating in the DigiMates project, the name of the lecturer(s) responsible for the course is a required element of the syllabus in all surveyed universities. Forms of classes, the realization, and number of hours* Number of ECTS credits allocated A. Forms of classes* According to a survey of five E.g. classes, lectures, etc. universities participating in**B.** Mode of delivery DigiMates project, it is a required





E.g. face to face/distance learning etc.

According to a survey of five universities participating in the DigiMates project, it is a required element of the syllabus in three surveyed universities. element of the syllabus in all surveyed universities.

B. Number of hours*

Year/semester of study when the component is delivered

According to a survey of five universities participating in the DigiMates project, the year of study is a required element of the syllabus in all surveyed universities. Semester/trimester is a required element of the syllabus in four universities.

Type of course

E.g. compulsory/elective/optional

According to a survey of five universities participating in the DigiMates project, it is a required element of the syllabus in all surveyed universities.

Language of instruction

E.g. English, German, Polish, Slovenian, Spanish, Turkish

According to a survey of five universities participating in the DigiMates project, it is a required element of the syllabus in all surveyed universities.





Teaching methods

E.g. game-based learning, didactic games, Assessment methods gamification

According to a survey of five universities participating in the DigiMates project, in four of them, it is necessary to indicate the teaching methods in the syllabus. In all these universities 5 or more teaching methods can be specified in the syllabus in one course.

Additionally, in all universities lecturers can define teaching methods in a syllabus in a free text field. Lecturers do not have to describe the details of a teaching method if they introduce it manually.

94% of 152 surveyed academic teachers gamification/game-based learning may be combined with other teaching methods, and 6% of respondents consider it impossible. According to the respondents, a game can be combined especially with: a role-play (111 indications of respondents), a case study method (109), project-based learning (84), design thinking (83), debate (81), traditional lecture (75), group discussion (74) and many more.

However, 71 out of 152 surveyed academic teachers do not have experience with combining gamification/game-based learning with other teaching methods.

Assessment methods and criteria

According to a survey of five universities participating in the DigiMates project, in four of them assessment method is a required element of the syllabus.

As many as 45% of surveyed academic teachers believe that the completion of tasks related to the gamified course can replace the exam as a way of verifying theoretical knowledge. As many as 55% are of the opposite opinion.

Assessment criteria

According to a survey of five universities participating in the DigiMates project, it is a required element of the syllabus in all surveyed universities.

Prerequisites and co-requisites

According to a survey of five universities participating in the DigiMates project, it is a required element of the syllabus in all surveyed universities.





Course contents
According to a survey of five universities participating in the DigiMates project, it is a required element of the syllabus in all surveyed universities.
As many as 84% of 152 surveyed academic teachers believe that gamification/game-based learning should be included in the course content in a syllabus. 16% of respondents are of the opposite opinion.
Recommended or required readings
According to a survey of five universities participating in the DigiMates project, it is a required element of the syllabus in all surveyed universities.
The learning outcomes
According to a survey of five universities participating in the DigiMates project, it is a required element of the syllabus in all surveyed universities.
In some universities learning outcomes can be classified (sometimes it may depend on the country). In two out of five surveyed universities learning outcomes are classified into three categories: knowledge, skills, and competences. In one university Bloom's Taxonomy is used (remembering, understanding, applying, analyzing, evaluating, creating). In the two universities, no classification is required. In one of them, lecturers may use any classification because they fill in the rubric as free text.
Contact*

*this field may vary according to the university rules and recommendations.





APPENDIX 2. THE CODE OF CONDUCT FOR DIGIMATES

Be on time	Find a place with stable internet. Check connection and tools before the meeting	Mute yourself	Turn on the camera, especially in smaller groups
Sit in a comfortable place, like at the meeting on-site	Be prepared to ask/answer the questions. Participate	Use the chat to interact	Raise your hand to talk on the microphone
Show emotions if you react	Show respect to others	If you have more questions, write the email	Eat and drink before and after the lesson
Make sure everybody allows for recordings	Use a picture rather than an avatar	Use your university email address/login for online classes	Be responsible and fair

Source: own preparation.