IO3 – A4 Guidelines for teachers for conducting online-only courses

Certified Digital Accessibility Training Project

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1 Introduction

The COVID-19 pandemic has resulted in a physical shutdown of all types of educational institutes worldwide. The education delivery has now shifted to an "online-only" exclusivity model (Pal & Vanijja, 2020). Informal and non-formal education is also tremendously affected (Mishra, Gupta, & Shree, 2020).

It is a well-established assumption that no pedagogical approach can replace formal education's peak position due to having teacher-taught direct interaction. However, since the COVID-19 crisis, online education became a pedagogical shift from traditional methods to the modern teaching-learning approach from classroom to online classrooms, from personal to virtual, and from seminars to webinars (Mishra et al., 2020).

Before the onset of COVID-19, various online learning platforms and resources were mainly supplemental, over and above the regular classroom teaching imparted at the schools and universities. Therefore, the COVID-19 scenario has brought forward an unprecedented situation where there has been a radical change in the education delivery model to be strictly "online-only" (Pal & Vanijja, 2020).

Some of the most popular online communication platforms that would change the whole education system's destination and direction across the world in post-COVID-19 circumstances are, for example (Mishra et al., 2020): Start.me, Neo, Classtime, Classwize, Ted-Ed, Coursera, Google Classroom, Bakpax, Pronto, Skillshare, ClassDojo, Edmodo, Blackboard Learn, Parlay, Docebo, etc.

Online learning is characterized by a structured learning environment, to enhance and expand educational opportunities, providing instruction that is teacher-led and may be synchronous (communication in which participants interact in the same time space such as videoconferencing) or asynchronous (communication that is separated by time such as email or online discussion forums), and accessed from multiple settings (in school and/or out of school buildings) (Michigan Virtual™, 2020).

Many online learning experiences provide students with the same learning opportunity as face-to-face instruction, but with a different delivery method. In online instruction, students are given a chance to work one-on-one with their instructor. Both can focus on the individualized needs of that student. Students can work at their own pace, allowing them to have ownership in their learning. This is not always possible in a face-to-face classroom. (Michigan Virtual™, 2020)

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2 Guidelines for teachers for conducting online-only courses

2.1 Choosing a platform for conducting online-only classrooms

Platforms for online classroom environment implementation

In worldwide lockdown and remote working, video conferencing and remote collaboration have become essential tools in different domains, including online teaching and learning. The three most popular platforms being used right now are Zoom, Microsoft Teams, and Google Meet. All three platforms provide various capabilities that enable efficient online collaboration and interaction between a teacher and learners.

Zoom

https://zoom.us

Zoom is one of the most powerful video conferencing systems at the moment. It allows several users to participate in the video conferencing room simultaneously with the sound and image on. It allows conducting the lesson in such a way that you can see all the students in your class simultaneously through the camera.

This platform offers users an easy to use, high definition video and audio, chat functionality, recording function, and fun tools that allow you to customize your backgrounds and tweak audio controls.

These features have made Zoom a strong favorite, whether you use the free version or have a paid subscription. The free version of the app allows users to host up to 100 participants and host unlimited one-to-one meetings. However, video calls are capped at 40 minutes. A subscription-based version provides additional administrative functionality, allowing you to record and encrypt meetings, customize IDs, and tap into analytics and scheduling controls. There is also a business version of Zoom that offers user support for between 300 and 1,000 participants, plus dedicated phone support, single sign-on tools, as well as an admin dashboard, custom emails, and even vanity URLs (Johnson, 2020).

Microsoft Teams

https://www.microsoft.com/en-us/microsoft-365/microsoft-teams

Microsoft Teams can be used as part of a Microsoft 365 subscription. It allows seamless integration with Microsoft 365 and user's productivity tools such as Word, Excel, and PowerPoint. Teams allow users to easily set up meetings in calendars, host meetings with up to 250 members, screen sharing, and call recording. The aptly named solution is built with business collaboration at its core and offers much more than just a video conferencing solution. Alongside the video chat function, Teams allows users to share and collaborate on real-time documents using SharePoint and OneDrive. Synchronize files for your team across one consolidated platform, view automatic previews, and link your colleagues to key documents through the conversation function. These tools can be accessed in one place alongside Teams' core video and chat functionalities, making it a comprehensive, all-in-one collaboration suite for office teams. The Teams solution recently hit a record 44 million daily users and is used by thousands of businesses, universities, and schools, worldwide (Johnson, 2020).

Google Meet

https://meet.google.com/

Google Meet is suitable for business communication like webinars and video conferencing. Formerly known as Hangouts, Google Meet is a video conferencing solution built with integration to Gmail, YouTube, and Google Voice. The fast interface supports up to 250-person meetings and is offered through IOS, Android, and supported by most web browsers. The new and improved gallery view allows users to see 16 participants at one time, rivaling Zoom's advancements, and G suite organizers

can arrange calls via the Google Calendar or the usual methods of dial-in using phone numbers or meeting URLs. Users can enjoy enhanced security measures and smart restrictions, such as only allowing external participants to join meetings 15 minutes beforehand and free access for anyone with a Google account (Johnson, 2020).

Comparison of platforms for online classrooms

The following table (Table 1) provides an overview and comparison of individual capabilities supported by the three platforms.

Table 1: Comparison of platforms for implementing online classrooms (Reporter, 2020; Team, 2020)

Features	Zoom	MS Teams	Google Meet
File sharing	No	Yes	Yes
Screen sharing	Yes	Yes	Yes
Recording	Yes	Yes	Yes
Live captions	No	Yes	Yes
Meeting notes	No	Yes	Yes
Chat	Yes	Yes	Yes
Dividing learners in sub-groups	Yes	Yes	Yes
Interactivity	Yes	Yes	Yes
Interactive polls	Yes	Yes	Yes
Reports	Yes	Yes	Yes
Integration with Office	No	Yes	Yes
Integration with Canvas	Yes	No	Yes
Integration with blackboard	Yes	No	Yes
Whiteboard	Yes	Yes	Yes
Assignments	Yes	Yes	Yes
Virtual raising of hands	Yes	Yes	Yes
Accessibility	Yes	Yes	Yes
Integration with other tools	Yes	Yes	Yes
Insights into students' engagement	Yes	Yes	Yes
Custom background	Yes	Yes	Yes
Generating participants report	Yes	Yes	Yes
Time limit for meeting	Yes	No	Yes

Practical experience with a platform for online classroom

In Slovenia, Microsoft Teams is one of the most often used platforms because all personnel (faculty and staff) and students have access to the software through the Office 365 Education plan. There is instant support available from the university's IT infrastructure teams in case of any service-related issues.

During the first lock-down, the MS Teams software was successfully used to conduct online courses for all study programs at the University of Maribor. MS Teams provides a well-integrated teaching-learning space, which offers many features comparable to the Moodle online learning platform's features. However, the Moodle online learning platform, which was used before the MS Teams, can be used in conjunction with the MS Teams platform. The Moodle platform can be used for asynchronous teaching and learning activities. Course instructors can upload learning materials (documents, videos, etc.). However, such online learning platforms lack support for real-time teacher-student interaction. This is where a platform such

as MS Teams can help since it supports both synchronous and asynchronous teaching and learning activities. The MS Teams provides several features based on which an online-only course can be implemented, such as:

- taking live online classes for multiple students at a pre-scheduled time,
- recording of online courses and uploading the videos of the courses to the platform providing students with video resources for learning,
- course instructors and participants can upload any files (e.g., MS PowerPoint, Word, PDF, video lectures, etc.)
- dividing the group of participants into sub-groups for conducting group tasks
- separate group video calls during the online course, which enables for a sub-group of students to meet using an extra video conference
- designing quizzes and tests (both objective and subjective types)
- group chat

For the pilot training of Digital Accessibility Tester, which was carried out in Poland the Google Meet application has been used. Google platforms have been selected due to integration with other services, mainly e-mail, which enables sending automatic notifications, with forms, e.g. application forms, questionnaires before and after training. Platforms enable:

- taking live online classes for multiple students at a pre-scheduled time,
- recording of online courses and uploading the videos of the courses to the platform providing students with video resources for learning,
- course instructors and participants can upload any files (e.g., MS PowerPoint, Word, PDF, video lectures, etc.)
- group chat

In Spain, the most popular platform for implementing the online classroom has been MS Teams software, which was also used for the pilot training. The MS Teams software was successfully used to conduct online courses for all study programs at the University of Zaragoza. At the University of Zaragoza, as part of the activities, Microsoft programs are implemented and some training in this kind of program inside organizations is provided. The staff at the University of Zaragoza are very familiar with Microsoft tools since they have a lot of experience with using them for many years. The staff of the University of Zaragoza finds it really useful for their work.

For the pilot training of Digital Accessibility Manager which was carried out in Slovenia by INUK Institute, the Zoom platform has been used. Zoom was used due to the affordable price and due to its popularity among our target group – business users. The INUK Institute found the Zoom platform very useful since it provides everything you need to perform the online training, and at the same time, the tool is very user-friendly. It allows scheduling a meeting and sending invitations to the participants with just a few clicks. Also, the tool enables complete control over everything that happens in a meeting (who can join the meeting, who can share the screen, who can speak at the moment, etc.). It allows defining multiple hosts, to divide the participants automatically or manually in different rooms to work in groups, to record the meeting, to create pools, etc.

For the pilot training of Web Designer with expertise in Digital Accessibility, Best Cybernetics implemented the sessions through the Zoom platform as well. The Zoom platform has been chosen, because it is easy to set up, use and manage platform. It can provide an entire group together on video or have a one-to-one meeting. It is really important that participants can connect via desktop computers, tablets, and mobile devices.

In addition, Zoom provides all the interactive tools required for organizing an online training course (e.g. chat, raising a hand, video webinar, recording, workspaces, and much more). It is a simple, user-friendly, intuitive tool for participants. Finally, Zoom was selected also, because it is a very popular tool among learners and trainers, they are familiar with this web application.

2.2 Tools for online knowledge assessment and evaluation tools

This section provides a list of tools that can be used for online knowledge assessment and evaluation. Some of these tools can be integrated with online meeting platforms (e.g., MS Teams), some of them can be integrated with e-learning management systems (e.g., Moodle), or they can be used as standalone tools. The final choice will be based on the individual teacher's or instructor's needs.

Moodle

https://moodle.com/

Moodle is an open-source Learning Management System. It enables the creation of interactive content, monitoring the activities of participants (students), communication and cooperation, downloading study materials, obtaining feedback, assessing knowledge, and submitting homework.

Moodle is used for developing e-learning platforms. Moodle is preferable as it is very popular with the educational community, it is user-friendly, and it is an open-source Learning and Course Management System that enables developers to customize, even the graphical layout through Lambda theme. It is a collaborative learning platform used worldwide by schools, universities, vocational training centers, and even businesses. Moodle provides full control of the learning process to teachers and trainers who can communicate via messaging, forums with learners; they get reports and can follow up learner's progress.

Sony Virtuoso in Soloist

http://www.sansinc.com/about-us/

The Virtuoso and Soloist software platforms enable effective communication between teachers and students, preparing interactive lessons and activities to promote communication skills. Virtuoso offers the lecturer all the tools he can use to guide students - supervising students' work, assigning tasks to individual students, managing files, programs, activities, and websites.

Articulate

https://articulate.com/company

Articulate 360 is a set of tools that enable the creation of online courses. These tools are Storyline 360, Studio 360, Replay 360, Peek, Preso, Content Library, Articulate Review, Articulate Live, and Rise. These tools allow you to create and view interactive online products, collaborate with participants, and offer access to libraries of materials.

Articulate Storyline

https://articulate.com/360/storyline

Articulate Storyline can be used for creating interactive courses. It is a simple enough software for beginners but also for high qualified professionals. Articulate storyline allows trainers to deliver mobile and accessible courses. It is software with slide-based lessons where instructors may add audio, video, interactive elements so as to create engaging training courses. The slides are functioning either as a blank canvas for organizing the learning raw material in scenes or they can be based on various graphic designed layouts provided by Articulate. Articulate is an authoring application for Learning Management Systems such as Moodle.

Articulate Quizzes is software for building quizzes and results in slides. Teacher / Trainer may create easily different types of online quizzes such as multiple-choice questions, true/false questions, drag and drop questions text entry questions, hotspot questions, and much more.

iSpring

http://www.ispringsolutions.com/

iSpring Suite is a tool for creating online courses for PowerPoint. We can create quizzes, questionnaires, and various interactive activities. Quizzes can be built into a PowerPoint presentation or separate from the presentation. The program is compatible

with the main LMS standards (SCORM / AICC). There is also the option of publishing courses specifically for the BlackBoard LMS. The product can be in the form of an SWF file, EXE file, HTML page, or ZIP archive.

Turning Point

https://www.turningtechnologies.com/

Turning Point is a tool for preparing and conducting surveys that allows integration with the PowerPoint tool.

Kahoot

https://kahoot.com/company/

Kahoot is an online tool designed for interactive collaboration. It allows you to create quizzes, discussions, questionnaires and sort the answers in the correct order.

ClassMarker

https://www.classmarker.com/

ClassMarker allows you to create and run online tests. The free version of the app offers the creation of an unlimited number of quizzes and questions, random selection of questions, building a database of questions for later use, embedding images, audio and video in the test, creating groups, and more.

LearningApps

https://learningapps.org/

LearningApps is a web application that offers interactive modules in the form of blocks with which we can enrich the learning process. The blocks can be used directly in learning materials or independently. We can create blocks for editing pairs, sorting elements into corresponding groups, sorting elements into a ribbon, inserting text, a quiz, discovering thumbnails, and more.

Edpuzzle

https://edpuzzle.com

EDpuzzle is a video processing tool that allows you to add interactive elements (different types of questions, quizzes) and include an audio clip with direct recording in the tool.

Educaplay

https://www.educaplay.com/

Educaplay is a free website that allows you to create a wide range of different educational resources (puzzles, crossword puzzles, additions, collections, dialogues, dictations, matches, word searches, quizzes, presentations, etc.).

H5P

https://h5p.org/

H5P allows you to create, share, and use interactive content. The content is prepared on the basis of HTML5, so support is provided for operation on various types of (mobile) devices and also in the form of a plug-in in Moodle. The use of tools is very intuitive and supported by a clear graphical interface, so in-depth programming knowledge is not required.

Microsoft Forms

https://support.microsoft.com/sl-si/forms

Microsoft Forms is a simple Office 365 application for preparing survey questionnaires and gathering information from participants. There are several types of questions available to users (eg selection, text, rating, date, classification, Likert), access restriction based on ID and registration of the registered person, the possibility of branching questions based on previous answers, at the same time, however, the questionnaire can be designed as an online test to test knowledge.

Nearpod

https://nearpod.com/

Nearpod is a freely accessible online tool that enables the active involvement of participants and monitoring of their work. It is basically intended for a modern interactive presentation of content, and with various intermediate tasks, it enables active involvement.

Safe Exam Browser

https://safeexambrowser.org/

Web browser environment for secure remote knowledge testing. Restrict the user's access to resources, system functions, use of other tools or websites, etc.

CANVA

https://www.canva.com/

Canva is a free design tool, but it can also be used as an alternative to PowerPoint to make more visually appealing presentations. This drag and drop tool offers dozens of fresh and beautifully designed layouts you and your students can use to make presentations, infographics, or images for your classroom blog.

Canva is used mainly for elaborating presentations instead of Powerpoint, basically due to the fact that it is a free graphic design platform where the user can create social media graphics, presentations, posters, and other visual content. In addition, this application provides templates for users to use and with Canva's intuitive drag-and-drop design tools, both teachers and students can create and communicate their learning visually through posters, worksheets, and animated presentations.

2.3 Tools for online collaboration, communication, and interaction

Google Docs, Sheets, Slides, Forms

https://www.google.com/intl/en/about/

Google Docs, Sheets, Slides, and Forms is a suite of office tools that lets you edit documents, including word documents, presentations, spreadsheets, and forms. You can save documents to Google Drive.

Padlet

https://padlet.com/about

Padlet is an online tool that allows synchronous and asynchronous remote collaboration between users via t. i. online information boards (padlets). This is a commonplace where those involved can post various items (images, photos, videos, links to external websites, text, etc.). The virtual information board is like a bulletin board, which represents a connecting place for providers of pedagogical activities with students. Users can use pre-prepared templates in the Padlet.

Slack

https://slack.com/

Slack is a collection of cloud-based tools and services. It offers many options: chat rooms (channels), organized by topic, creating private groups, and sending instant messages. The tool is suitable for organizing project work.

Mindmeister

https://www.mindmeister.com/

MindMeister is a cloud-based application, which allows users to visualize, share, and present their ideas. MindMeister offers options for visualizing mind maps, for real-time collaboration, and for creating presentations.

Xmind

http://www.xmind.net/

XMind enables creating and representing ideas, recording thoughts, managing complex information, and encouraging group collaboration.

Microsoft Whiteboard

https://www.microsoft.com/sl-si/microsoft-365/microsoft-whiteboard/digital-whiteboard-app

Microsoft Whiteboard is a digital canvas that replaces the real whiteboard in online learning environments. It connects well with other Microsoft family tools (e.g., Microsoft Teams) or content digitization devices (e.g., graphics tablets, Surface line).

Mentimeter

https://www.mentimeter.com/

Mentimeter is an online tool that allows us to ask questions and get answers by voting of the learners and the results' immediate projecting. It can be used for presentations, seminars, conference presentations, lectures, etc. There is a need for online interaction with participants. There are a free version and a paid version, which provided more advanced options. The free version does not limit the number of participants. It allows the use of almost all types of questions (but with a limit on the number of questions). To use the Mentimeter, you need to create a user account, and participants need a smart device with a web connection, as they participate with it in voting or answering questions. The Mentimeter can be used for:

- introductory activity for activating prior knowledge,
- collection of keys, new or unknown concepts,
- simple testing of knowledge or understanding,
- obtaining opinions, starting points for interviews with students,
- self-evaluation of knowledge,
- evaluation of teaching,
- collection of unresolved issues, comments,
- implementation of a gamified competition,
- anonymous voting
- etc.

Yammer tool

https://www.microsoft.com/en-us/microsoft-365/yammer/yammer-overview

Social media continues to be a powerful tool for collaboration. But in a school setting, the open-source platform of Facebook, Twitter, and Instagram can be distracting for students. With its familiar and interactive design, Yammer allows custom groups to share ideas, information, and feedback, making it an ideal communication tool for teachers, students, and parents.

Synchronous communication services

One of the most popular instant messaging services today are:

- WhatsApp,
- Telegram,
- Facebook Messenger

- etc.

These instant messaging services are available not only for smartphones but also for PCs. Here are the links to access these services:

- Whatsapp: To access via the web, go to web.whatsapp.com, open the Whatsapp app on a smartphone, click Settings, then "WhatsApp Web" and finally scan the QR code that appears on the WhatsApp web page. A useful thing to know about Whatsapp is that it is not always necessary to create a group to communicate with several people. A possible alternative is a Broadcast that works like a blind carbon copy email (BCC). However, the message will only reach those who have the sender's number saved in their contacts.
- Telegram will ask for verification when accessed by sending to users an SMS with the code to be used to connect to Telegram. To access Telegram the link is web.telegram.org. Telegram groups are useful for classic multi-voice chats and can hold 200,000 people. Then there are the secret chats, for those who prefer this model. There are also channels, public or private, that have no limits of participants. Each public Telegram channel has a username that you can share to search for subscribers; if the user creates a private channel he will have to add the interested people or send an invitation link to the interested parties.
- Facebook Messenger connects automatically to the Facebook profile linked on the browser. If the user is not logged in to Facebook, he/she will need to enter an email or phone number and password. The link to access Messenger is www.messenger.com. Useful functionalities of Messenger: Sharing a geographic location; Integrating Messenger with other apps; Setting reminders; Turning off notifications

Many tutorials are available on the Internet to provide valuable help in case of doubts or problems in accessing.

3 Preparing online teaching materials for online-only interactive teaching and learning

This section provides guidelines on preparing appropriate teaching materials that can be used for efficient teaching delivery in an online classroom.

In order to prepare online materials for effective teaching and learning of students, it is important that the materials contain activating elements such as questions, quizzes, polls, inquiries, hints, and so on. The biggest problem in the online course is the low level of interaction with participants and the above elements are necessary to overcome this barrier.

It is also a good idea to create a website to communicate with teachers, students, and parents about curriculum goals, strategies and suggested activities, and additional resources.

If an online education strategy is not feasible, develop alternative means of delivery, they could include TV programs, if a partnership with television stations is feasible, podcasts, radio broadcasts, and learning packets either in digital form or on paper.

Explore partnerships with community organizations and the private sector to deliver those.

Ensure adequate support for the most vulnerable students and families during the implementation of the alternative education plan.

Enhance the communication and collaboration among students to foster mutual learning and well-being.

When the teacher/trainer decides to create digital content, he cannot ignore the careful planning of the entire process that will lead to the final output. The trainer should consider the following six steps for planning course digital content:

1. Clarify the message he wants the digital content to communicate and who the final recipients of this work will be: the more he knows his audience, the better the success will be.
2. Outline the contents: to do this the trainer can build mind maps in order to explore his thoughts, bring out information, structure and organize his ideas.
3. Define course goals. The course goals should be specific, realistic, and measurable.

4. Choose the most suitable digital format for the message he wants to communicate and for the final recipients. To make sure he chooses the right format, he may consider the following questions: How easy is it to use? Which online platform do the final recipients spend the most time on? Is the format chosen suitable for these platforms? Am I able to develop quality content?
5. Prepare an assessment test for the final recipients in order to acquire suggestions for improvement.
6. Plan follow-up to get continuous feedback on his work.

4 Conducting online-only courses

In an online delivery of courses, students' performance, students' learning performance, and habits must be considered. Individual students may work at a different pace than the instructor and at a different pace than other students. For an instructor, giving and receiving timely feedback is often a challenge in an online classroom environment. Instructors don't easily find evidence of students' learning, struggle, and understanding of the learning content. Because in an asynchronous learning environment, the students control their time and attention. The instructors must put a lot of effort into helping students stay engaged in their learning and become successful thinkers and learners.

In this section, we provide guidelines on how to:

- deliver online lessons
- successfully interact with students (how to find and integrate appropriate tools in the selected online classroom platform), and
- engage students to learn and collaborate in the online classroom.

4.1 Guidelines on efficient delivery of online lessons

For efficient delivery of online lessons, it is important for learners to know what is expected from them. It is important to provide learners with very detailed guidelines on how the learning will be organized in advance. This is especially important by blended or flipped learning. Learners need to know in advance what, where, and when they need to learn remotely and what, where, and when they will learn with the trainer in a "live" online session.

For example, for the pilot training of Digital Accessible Manager, a special information book was prepared in advance for the trainees with a detailed agenda of the training with all dates and links for the live training and information about pre-class and post-class activities that should be carried out before/after each live training. The information books for the trainees included also information about the organization of the lessons and lessons content on the online learning platform as well as the information about the registration and the use of the platform and trainers contacts.

For efficient delivery of online lessons, it is also important to know your learners, their prior knowledge, and also their limitations/disabilities if they exist. Differentiation strategies can help you by overcoming the differences between your students.

If in your classroom there are also learners with different disabilities (visual, hearing, physical or cognitive) it is important to understand their limitations and also the limitation of the technologies you are using for delivering the online lessons and try to provide the content in different formats. For example, as the screen sharing option in video conferencing tools may not be accessible for the participants with visual disabilities, you can send the participants the presentation from the online training at least one day in advance in an accessible format. For the group assignment, you should use some tool that enables participation of all subjects. For example, you can use Google documents, which enables all group participants to collaborate in editing the same document without the need to use the screen sharing option to work together on the document.

You should also consider using an appropriate platform (e.g. Zoom) for online live training with which provides different accessibility features, such as the possibility to be used with the screen reader, and others.

It is also advised if it is technically possible, to set a rule that all participants of online classes have cameras turned on.

The efficient delivery of online lessons also depends on the quality of the designed content. For example, images can convey meaning better than words. When the learning environment is varied rather than text communication only, students feel more satisfied with their learning. Helpful components for the efficient delivery among others include: comfort with online technologies, time management, and motivation of the learner.

4.2 Guidelines on efficient online interaction with learners

The digital or online classroom brings with it a range of unknown territory, mostly in part to its relative newness when compared to traditional teaching methods.

For efficient delivery of online lessons apply as many activating elements as possible and support active participation. It may include posting questions, quizzes, polls, inquiries, hints, asking for comments on a classmate's paper on a discussion board, and so on. When giving tasks to learners, set precise time and monitor the progress in completing the assigned tasks

The elements that can activate students' attention and willingness to collaborate in online interaction can also include work in group projects, group case studies, peer instruction, role-playing, synchronous or asynchronous discussions or debates, collaborative brainstorming peer review of selected work.

The online teacher should establish and follow the following simple but at the same time effective practices to achieve an efficient online interaction with learners.

- Be as present as possible by utilizing a range of different communication methods and ensuring that you check in on the learners constantly. Discussion boards, emails, announcements, forums are just some of the online means to use to be present each day in the online classroom. From the beginning of the course, set clear guidelines for the learners on when you will be present.
- Learners should be aware of teachers' expectations before starting the online courses. The expectations can include due dates for assignments, assessments, frequency of the online communication, online participation required, etc.
- Engage the learners in the content as much as possible by asking them for example to find and discuss topics, resources or by holding discussions in the online forums.
- Use a variety of online discussion formats to ensure that the coursework caters to all learning types and allows learners to flourish. Learners should be encouraged to use a general forum for discussion so as to keep them engaged in providing feedback and support to their classmates.
- Ask feedback from the learners on the content, on the teaching methods, on how things are going.
- Use a blend of different communication methods, including personalized responses to learners' discussion board posts or emails addressed to only one student to foster personal relationships with each learner.

4.3 Guidelines on creating an engaging online classroom environment

For creating engaging online classroom environments, it is from our experiences important to start the online live sessions with short informal small-talk to relax a little bit the participants and after that to continue with the repetition of prior learning. It is also important to divide the learners into groups for different assignments on a random basis so that the training participants from the same organizations (or the ones that know each other from before) do not work together.

For efficient delivery of online lessons apply as many activating elements as possible and support active participation. It may include posing questions, quizzes, polls, inquiries, hints, asking for comments on a classmate's paper on a discussion board, and so on. When giving tasks to learners, set precise time and monitor the progress in completing the assigned tasks

Some tips for creating an engaging and thriving online education environment (O'Malley, 2017):

- Focus on 'Active' Learning - To engage students who are not in the room during a lesson, the course should mix spurts of discussions, collaboration, video and audio clips, and hands-on exercises with text and possibly brief video lectures.

- 'Chunk' the Lessons - Long lectures probably aren't the best way to engage a face-to-face class – and are even more ineffective online. It is recommended to present information in 10-minute "chunks" through various learning material formats. Lessons content should be designed by breaking up text with photographs, so students can see examples of what is in the text.

- Keep Group Sizes Small - In a traditional classroom or lecture hall, some students never participate in discussions or ask questions, usually because they are either shy or are not engaged. Online participation can be equally intimidating if students are expected to engage with dozens of classmates. A cap of 20 to 30 students in online classes is recommended. It is advised to trainers to break students into groups of no more than 10 for purposes of discussions, collaboration, peer critiques, and group activities.

- Be Present - No matter where teaching and learning take place, the importance of the trainer being there and being mentally present with the students is the most important thing they can do. That doesn't mean simply responding to questions that students post online. Instructors should have a "social presence" in their online classrooms and encourage students to do the same.

- Parse Your Time – Instructor's presence is critical to student success in a virtual class, however, instructors need to manage their time in a reasonable way. Instructors can't be available 24/7. Online courses can really be exhausting and responding to every discussion board post by every student online is not possible. Online discussions should be between students. The instructor should be in the online classroom as much as in a regular classroom and choose where to insert his voice.

- Embrace Multi-media Assignments – Instructors should allow students to use digital tools for their assignments since students who enroll in virtual courses usually are at least somewhat facile with technology. A lot of students can express themselves better through producing PowerPoint presentations or videos than through writing papers.

5 Preparing and conducting online exams

When there are online exams, they should be real-time. The recommended form of on-line exams is oral exams, which enable interaction with the student. The student should have the camera turned on

It is important to provide the learners the detailed information about the assignment in advance and offer them help if they would need it. They may need additional instruction on the use of technology to perform required tasks as well.

Following are some good practices when conducting online exams:

1. If possible, ask students to point their webcam at their face or at their exam answers.
2. 2Set up appointments on the learning platform (e.g. Moodle) using the Scheduler feature. This way you only need to indicate the available times and students can sign up themselves.
3. Use a waiting room so students join the meeting only when invited in.
4. If more than one teacher is interviewing, one should start the meeting and make the other a co-host.

For conducting Learning sessions and interaction using Zoom or Moodle, the following guidelines should be considered:

5. Inform learners on the digital tools to be used during the virtual learning experience
6. It is recommended that trainers shall perform a trial evaluation. The purpose of this trial evaluation should be to familiarize trainers with the course of the exam, the digital tools used, and the type of exam questions. The trial evaluation can be integrated into the initiatives taken by the teacher prior to or during the week the exam is taking place.

7. Provide any technical support the learners will require before or during the exam. During the exam, there is always a possibility for errors in connection or server-side processing when the students send their answers. You must provide an alternative way for the students for sending the answers in order to complete the exam.

6 Online instructor performance expectations

The online instructor performance expectations are (Bart, 2011):

- Technology Access. The instructor is responsible for meeting the same technology requirements as required for students. The instructor is expected to (1) secure access to a high-speed bandwidth connection for class activities, and (2) test all course-related technology prior to the start of the course.

- Course Management and Instruction. The instructor is responsible for managing and teaching the class from start to finish. The instructor is expected to: (1) follow the established and published course schedule, (2) conduct (that is, "teach") the course within the scheduled time frame, (3) make and communicate schedule adjustments as necessary, (4) provide each student equal opportunity to succeed.

- Preparation. The instructor is responsible for assuring that they possess the required skills and competencies for teaching online. The instructor is expected to (1) be operationally proficient in the course technology, (2) be prepared with the skills to teach online, (3) be able to complete the required administrative tasks necessary to complete the course

- Course Familiarity. The instructor is responsible for being adequately familiar with the online course. The instructor is expected to (1) be familiar with the syllabus including course milestones, due dates, and critical course activities, (2) make changes to the syllabus as necessary and communicate the changes to the students, (3) review and be familiar with the course content, (4) identify and report inaccurate course content, confusing information and/or instructions, broken links, and other course design issues, (5) review the course teaching guide to gain an understanding of the intent/context of the course such as the author's teaching philosophy, content, learning activities, and assessments.

- Availability. The instructor is required to be available to the online learner for the duration of the course. The instructor is expected to (1) regularly access the online course, (2) notify students and appropriate administrative units if unable to log in to the course.

- Communication. The online instructor is responsible for managing course–related communications. The instructor is expected to (1) clearly communicate student expectations, (2) communicate instructor class schedule and access, (3) actively participate in course-related discussions and activities where appropriate.

- Feedback. The online instructor is responsible for communicating with and providing feedback to students. The instructor is expected to (1) provide prompt feedback, (2) inform the learner of when they can expect a response if the instructor cannot provide a detailed response within 12 hours, (3) provide clear and concise feedback to explain the degree to which the student is achieving the course/lesson outcomes, (4) communicate to students when they can expect to receive graded feedback on assignments and exams.

- Documentation & Record Keeping. The online instructor is responsible for maintaining records of course transactions and communications. The instructor is expected to (1) keep a record of communications with students including when other modes of communications are used, (2) record and communicate student progress information such as assignment and quiz grades, (3) post the final course grade promptly.

7 Conclusion

STPEUROPA has found that many students reported that it was difficult to get clarification on assignments, etc. due to lack of communication between student and instructor. The general impression of communication between students was also negative. The message board was the main communication gateway between students and instructor. Each student was required to make a posting on the message board each week. The students often reported that the message board posting was ineffective, and they were disappointed in the level and quality of communication. Learners' perspectives on web-based learning also reported that some participants felt a lack of immediacy in responses in the online context in comparison to what could typically occur in a structured face-to-face class discussion. This appears to be especially obvious in asynchronous online discussions when students have to wait for others to read and respond back to their postings or e-mail messages. Lack of a sense of online community and feelings of isolation were other weaknesses that learners have reported in their online learning experiences.

The INUK's experience with conducting online-only training was very good. The participants were very eager to learn, and they did not have any problems with the technology. They quickly adapted to the way the training was organized. The decision to use the Zoom application together with Google documents for groups and individual assignments was also a proper one. Even the participants of the training with different disabilities did not have any difficulties participating in the training. However, we adapted the lessons a little bit as some original training activities would be difficult and time-consuming to conduct in live online training. So, we transferred such activities to the pre-class activities and asked students to do them at home (f.e. to try the screen readers for preliminary evaluation of the accessibility of the webpage).

Best Cybernetic's experience from conducting online training has been only but positive. The participants were very enthusiastic and enjoyed the online courses both through the Zoom platform and Moodle LMS as courses were well planned and easy to follow. Participants liked the flexibility of this course as it worked well with their busy scheduling and appreciated that the expectations were clear and upfront. Google Docs and other elements of the Google Apps suite allowed us to share materials with the learners and work on them together in real-time, or asynchronously. This enabled us to strengthen the teacher-learner online relationship, which is particularly valuable in online courses. Interaction with learners has been vital during the online sessions through Zoom as we adapted lessons by focusing on proactive feedback, answering questions, or guiding students through a particular activity. The only challenging part of the experience has been to keep learners motivated and attentive all the time. We managed to overcome this through a well-structured set of tasks in the opening stages of the course. This enabled us to see which learners are completing the tasks on schedule and which required an individual follow-up to provide advice on how they should approach the tasks and their online learning experience.

The University of Maribor also had a very positive and pleasant experience with the online-only training, which was delivered during the pilot testing. Overall, participants were very satisfied with the content as well as the implementation of the online training. The course could be improved in terms of pace. The course delivered contained a lot of learning materials that the participants need to study prior to the training. Moreover, the course was also heavily loaded in terms of the number of learning materials for processing during the training and the number of activities such as tasks that need to be completed by the participants. Accordingly, some participants expressed that they would need more time for completing all these learning activities and to carry out the assignments. When conducting an online course, the speed of implementation can be adjusted according to the abilities of individual participants more easily when compared to the implementation of the course in a real classroom environment.

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