Judicial Training Methods

Distance Learning Handbook

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Purpose and objective of the Handbook

The growing importance of distance learning is undeniable. It has been around for decades but progressive technological developments have completely changed the paradigm in distance learning. The boundaries between concepts that were easy to distinguish not so long ago are increasingly blurred. Concepts such as online training and distance training are consequently more frequently confused. Likewise, it is difficult to rank the tools that are – or could be – currently available to training centres in a reasonable and systematic way.

We can define distance learning as the situation where trainer and trainee are physically separated during training delivery. Distance learning encompasses many concepts, and was traditionally associated with students in remote regions or full-time workers, and lessons mailed through the post. However, technology has revolutionised distance learning by making it available, easy and accessible with just a click. Materials and content can be produced in so many formats that creativity is practically the only limit to providing high quality training material. Almost everyone in Europe has a mobile device and online connectivity, and we need to develop training accordingly.

The Judicial Training Methods Working Group of the European Judicial Training Network (EJTN-JTM) has over recent years made an effort to meet the increasing demand for knowledge of judicial training methodology. A clear example is the EJTN Handbook on Judicial Training Methodology in Europe developed by the JTM, which included relevant information on e-learning, blended learning and the use of modern technology. Past events organized by EJTN-JTM in this area include a seminar on E-courses and E-tools and a webinar on Training in Interactive ways. The very tools and structure of the EJTN itself meet that demand. It is, therefore, and always has been, a subject of utmost importance and as a result, we have - once again – joined forces to present this document.

After examining several approaches to the subject and acquiring tools and making sufficient progress, this Handbook on Distance Learning arranged by the EJTN-JTM constitutes an eminently useful guide to help both Institutions and trainers to fully implement the potential of distance learning.

This Handbook seeks to answer in a simple yet practical way the questions that must be answered to provide quality distance training. To begin, we will try to determine when distance training is an effective option. It should not be forgotten that the resources of the training centres for judges and prosecutors are limited and, therefore, must provide effective measures to reach the largest number of members bodies without reducing quality in training.

Likewise, fundamental guidelines will be given on how to introduce distance learning. These include an overview of technological resources, use of personal devices and motivation of participants in these forms of learning. A perfect recipe requires all the necessary ingredients, and the wide variety available makes it very important to have a clear picture before investing in distance learning. By examining requirements thoroughly in advance, institutions and trainers will act in a most effective way.

However, having the tools and the equipment is not enough if we do not know how to use both properly. A common concern in distance learning is to dis-

tinguish the different training methodologies that are applicable to online training. For this reason, the handbook will examine more closely the outline sketched in the EJTN Handbook on Judicial Training Methodology in Europe on distance learning. The appropriate methods should be carefully chosen on the basis of the training format, training content and target group, hence the development of guidelines to inform the choice of training methodology.

It is also necessary to conduct a brief analysis of the tools at our disposal for distance learning. This analysis will be carried out across different layers, distinguishing firstly, the most common tools used nowadays; secondly, synchronous and asynchronous tools; we will also look at different interactive tools and platforms, and so on.

In order to make full sense of all the information gathered through these pages, the last objective will be to learn how to design an e-course - the most common formats used nowadays by institutions, choosing the topics, picking the proper tool, drafting a roadmap of the course and evaluating its results.

When is distance learning an effective option?

There is no quick answer to that question. Whether distance learning is an effective option or not depends on many factors. To facilitate a proper answer to this question, we will be giving detailed answers to questions about the different components that constitute distance learning. Once each Institution is aware not only of the many benefits of distance learning, but also of the risks and difficulties that it entails, they will be ready to take decisions accordingly. Likewise, activity coordinators need to know all about these aspects in order to provide the best training option.

The reasons for choosing distance learning include flexibility, reduction of costs and the elimination of geographical boundaries. These benefits, properly used, can play an important role in training judges and prosecutors. Distance learning can help improve the training of judges and prosecutors, since they tend to have a great deal of work and lack the time to attend training sessions. Distance learning can provide the flexibility needed to help trainees to pace themselves properly through the sessions; or might avoid training-related travel that, although sometimes very motivating, might discourage trainees who do not have time to travel or to spend only on training. Distance learning can be very helpful when there is a need to train a large number of judges and/or prosecutors, and the institution is working on a tight budget. Avoiding travel means money can be spent on better tools, more trainers, etc., and distance learning usually allows more trainees to attend compared to face-to-face activities.

Distance learning, as noted before, can have a major impact and provide a clear EU added value. The distance barrier becomes insignificant when providing training through distance learning. The impact of the language barrier, which is a common obstacle at EU-level training, can be minimised when tools and content are provided with the language barrier in mind. For instance, allowing effective translation tools, developing easy access to glossaries, providing content in advance or enhancing the content to allow easier understanding, are just a few possibilities. Another added value at an EU level is the creation of a document and data repository from different distance learning training courses, which each institution can easily share within the network, thereby allowing a greater amount of trainees to benefit from best practices within all EU countries.

To realise the full potential of distance learning, it is crucial to provide an efficient evaluation of the training. Let us not forget that the EJTN has already developed an exemplary tool in Guidelines for Evaluation of Judicial Training Practices, which is as useful as ever, since the evaluation system is no different for face-to-face training or e-learning or blended learning, since the effects of training are evaluated, not the methods.

As was observed in the EJTN Handbook on Judicial Training Methodology in Europe, the challenges in implementing modern judicial training methodology are – independently of the different judicial and training structures and cultures in the EJTN member institutions – the same everywhere. At EU level, therefore the goal is to provide the necessary tools for the trainer to see his or her role above all as to facilitate practice-oriented exchanges between the participants and to promote learning by transferring experiences, to make trainees learn to improve their professional knowledge, capabilities and skills from their own incentive. This aim has not changed, the challenge is nonetheless a little different, and ambitious, since the proper use of good e-learning tools in suitable learning situations is another challenge where Europe is far from the starting line envisioned in 2016 in the EJTN Handbook on Judicial Training Methodology in Europe.

The 2020 pandemic has highlighted the need for a massive shift from face-to-face to online training; happily, the Judicial Training Methods Working Group, working constantly to improve judicial training growth in Europe, had planned this tool before it started, which now seems like a great success and anticipation, as well as showing this Working Group's commitment.

1. How to start distance learning

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1.1. Resources

E-learning implementation is a bold decision that requires time, money and, last but not least, energy. Moreover, many people are still wary of online training, so the right decisions have to be taken from the very beginning.

Three different areas have to be clarified at this first step: technical choices, human resources dedicated to the project, and the learning approach.

1.1.1 Learning Management system

Teachers and schools willing to start distance learning from scratch often ask if it is possible to offer e-learning courses without a learning management system (e-learning platform). The answer is yes, but it is definitely not the most efficient way. If you want to organise your content, deliver different curricula to different learners, boost training efficiency (by offering quizzes or online assignments, building a community, tracking tasks) or monitor learners, then you have to use a platform.

1.1.1.1 Characteristics of an e-learning platform

A platform is a set of interactive online services that provides learners with access to information, tools and resources. There is a wide variety of learning platforms with different associated services. But their most important features are:

• content storage (documents, videos, interactive resources) and usually, the possibility to create educational content (for example quizzes, pools, etc.) directly on the LMS. Most platforms allow and make the reuse of content easy,

• organisation of the content into curricula, also known as courses, and possibly scheduling assistance for resource use and learners' abilities,

• possible customisation of the LMS interface, to create different profiles, in order to enhance the user experience (LMS can be used not only to provide courses but also to communicate),

• monitoring and improvement tools targeting learner engagement (messaging system, group distribution, virtual rewards, portfolio, etc.),

• learner management tools (monitoring, assessment, direct communication with specific learners, etc.),

• increasingly: relatively easy use of the LMS for teachers, to give them more autonomy in their use of the platform

• typically, platforms are responsive and can be used on a mobile phone.

Platforms are modular: they consist of a core (the basics), and different plug-ins and add-ons that extend performance. Schools can choose between various available extensions to meet their specific needs. Thus a good platform should be able to match a school's needs perfectly, without being overly complicated to use for trainees and trainers alike, or indeed to maintain for administrators and IT experts.

How is this possible? It depends on a few choices made at the very beginning of the e-learning project.

1.1.1.2 Technical choices to be made

- Proprietary software or open-source platform

There are two kinds of platform, namely proprietary software or open-source.

• Proprietary platforms are closed-source with licence costs per user, or sometimes only an initial cost to purchase the platform. Modifications are impossible or very restricted, other than by paying extra for bespoke development. However, they are regularly updated by the software company, so security breaches are limited.

• For open-source platforms, users are allowed to:

• enrol as many students as needed free of charge

• customise the program and add new components free of charge. Developments proposed by the community can be reused by other institutions.

NB: some specific plug-ins or add-ons can also be developed upon payment and then excluded from the terms of the GNU General Public Licence

Choosing an open-source platform requires strong IT skills, and while the platform itself is free, human resources are required to install, set up, administrate, help users and update the system.

1. Deployment arrangements

Another issue concerns the deployment arrangements: the platform can be hosted by an external service provider or run internally by the school. The decision will be based on a number of factors:

• technical infrastructure and technical capacity of the school to handle a server and the platform (updates can be frequent and it is important to apply them given the risks of security breaches)

• institution strategy: does the school want to be fully autonomous?

• quality of the internal relationship between IT departments and trainers or e-learning teams. This point is often a real stumbling block for distance-learning implementation.

1.2.2 E-learning team

Developing distance learning requires skills that are not always useful in conventional training. We can identify different roles for a distance-learning project. Depending on the project's size, the number of courses to run, or the type of content that will be proposed to trainees, these different roles might be held by a single person or shared by different members of a team.

1.2.2.1. Roles involved in creating pedagogical material

• Subject-matter trainer

Commissioned as content authors to develop lessons in their area of expertise. They can for example write lessons, provide assessment tests, and provide any other resources needed for each lesson, such as a glossary, extra

content, etc.

If lessons are transformed into interactive content, the trainer will be asked to look over the new interactive resources, to correct any mistakes.

Who are they? They are trainers with a broad understanding of the subject, but are also open-minded and receptive to e-learning, and with sufficient availability, because anyone's first e-learning authoring experience is time-consuming.

NB: for a first experience, choose the right combination: an uncomplicated but very useful topic for trainees, and an enthusiastic trainer: in so doing you will maximise your chances of success.

- Course designer

The designer works together with the subject-matter trainer(s) to understand the training objectives, the target audience, and adapt the conventional face-to-face lessons to e-learning technologies and specificities. The designer proposes appropriate strategies and materials to add activities and interactivity to the course, in order to enhance engagement and achievement.

When the institution has decided to develop e-learning on a large scale, the course designer is also responsible for the overall instructional strategy.

Who are they? They are specialists in online educational techniques, with good interpersonal skills to exchange views with subject experts and explain to them why their lesson has to be adapted and how.

- Media creator/editor

This individual is responsible for developing online interactive resources, such as web pages, interactive content, videos and so on, based on guidance from the course designer. A media editor can also work on the platform, to adapt the interface, make the courses attractive, etc.

Who are they? They are specialists in design, comfortable with different authoring software to propose appropriate and pleasant interactive resources. The more creative they are, the most diversity they will bring to the course design, and this is important to keep trainees interested.

1.2.2.2 Roles involved in organising and facilitating training

- Course administrator

The administrator manages trainees' enrolments and can provide statistics to track their engagement.

Who are they? They are excellent administrators, fairly comfortable with office software applications.

- Technical support specialist and tutor

Also known as "facilitators", they assist teachers, trainers, and trainees alike in joining their course on the platform and following their online curricula at every stage of the process.

There are different kinds of facilitators:

• Technical tutor, helping users to solve their technical difficulties such as use of the computer used for online training, access to the course from the platform, etc.

Who are they? Computer and apps specialists, with good interpersonal skills to interact with users and respond appropriately.

• Pedagogical tutor, playing a key role keeping trainees motivated and helping them to organise their work. Depending on pedagogical choices linked with trainees' profiles and the curriculum concerned, pedagogical tutoring can be:

  • Proactive or reactive. In a proactive approach, the tutor will solicit learners before they have any difficulties or questions, by sending them messages, asking questions, pushing information throughout the course. In contrast, a reactive approach means tutors intervene only if trainees request help.

  • Synchronous or asynchronous. In synchronous tutoring, trainees and tutors are connected at the same time, using tools such as the phone, a chat session or a virtual class to meet and speak about trainees' difficulties or feelings. Asynchronous tutoring gives more freedom because the trainee and the tutor can ask questions and answer when they wish, and from anywhere, using tools like e-mail, forums, etc.

  • Individual tutoring or group tutoring. In some pedagogical approaches, such as social learning, the group space is just as important as the place of individuals. Tutoring can also take place in small groups. Each trainee can hear the views of classmates, thus feeling less isolated.

Who are they? Pedagogical tutors are able to answer questions about the course contents, but also about work organisation or motivation. At the same time, they can be a confidant, a subject expert, and also a supervisor. For small training groups, the teacher plays this role.

• Administrative tutor, helping trainees understand how online training slots into their global curricula, when the courses will be available, how to complete the course, etc.

Who are they? They are the contact with the school office, easy to reach. Occasionally also in charge of boosting trainees' motivation in all aspects of the course.

• Some training institutions also add a colleague tutor (a former student who succeeded in the curricula) who help trainees with any kind of question, without any issues arising in terms of hierarchy or evaluation.

1.1.2.3 What about the traditional face-to-face teacher?

Where does a conventional face-to-face trainer stand in regard to a distance-training curriculum? First of all, most of the time, teachers are also the subject-matter trainers. They are, naturally, in charge of setting the course objectives and they will assess online training activities and content proposed by the course designer. Some trainers, comfortable with the use of computers and apps, create their own online content, such as videos, interactive content and so on.

Subsequently, if the course includes virtual classes or webinars, the trainers will also be in charge of hosting virtual classes. The course designer can help them create the specific material because training in a virtual class requires specific methods. Activities must be shorter and interactivity works differently and occurs less often.

Finally, the trainer can also be in charge of the pedagogical tutoring. [1]

[1] See Section 3 to see the role of a teacher, also called mentor, depending on the training method chosen.

1.1.2.4 How large a team is needed to start online training from scratch?

There is no general rule. Sometimes, online distance training is initiated by a single teacher who is motivated and comfortable with it. But very soon, and as soon as a school wants to promote online training for all trainees, a real team has to be created, consisting at least of a course designer (who can also be in charge of creating simple interactive resources) and a platform administrator who can be in charge of technological tutoring. These two professionals will assist the first teachers in converting their face-to-face courses into blended or online courses.

NB: Acceptance from teachers (and their time) and buy-in from other departments such as IT and the school office are necessary for success.

1.1.3 Content

Regardless of the circumstances that push the institution into launching online courses, and regardless of its constraints, it is fundamental to keep in mind the main goal of training, namely to enable the maximum number of trainees to take the training session and sustainably achieve its pedagogical objectives.

1.1.3.1 Interactivity

Online training gives more flexibility to trainees. They can work anywhere, anytime, on any device. However, trainees can also suffer from loneliness, disorganisation or de-motivation. Human presence (for example educational support from tutors and teachers, but also group work) is one way to avoid de-motivation. But it is not in itself sufficient. Online courses have also to be specifically designed to maximise interactivity, and then enhance learning desire by creating a specific and customised learning environment, where trainees are invested emotionally as well as intellectually. Interactivity options include multiple choice quizzes, tests, interactive resources, e-Learning scenarios, simulations, animation, videos, etc. There are four interactivity levels in distance learning: the more interactive the content is, the more motivated trainees will be and the better they will learn.

Figure 1: 4 levels of interactivity

a. Passive e-learning interactivity level: refers to linear, text-based environments. It can include links to videos, podcasts, simple images and graphics, and also test questions, but these resources are not customised specifically for the course. There is no trainee-content interactivity. All participating students receive the same information as the others. The materials are predetermined by teachers and not adapted to the students' preferences. Also referred to as fixed learning.

b. Limited e-learning interactivity level: learners may be required to interact with the learning environment through clickable "hot spots", animations, drag and drop reinforcement exercises and multimedia. But interactivity is limited because trainees have no real influence on the learning environment.

c. Moderate e-learning interactivity level: learners have slightly more control over their learning experience. Contents and courses are more customised and sophisticated. This level might include animated video, customised audio, complex drag and drop interactions, simulations, stories and branching scenarios and multimedia. Trainees have to choose between resources. They are more involved in the course.

d. Full e-learning interactivity level: learners have full control over their learning environment. They are required to interact with the screen at each step of the concept presentation. They are provided with frequent feedback that helps them in decision making and guides them to the next step. Resources will adapt depending on their choices and results. Interactive resources include interactive games, simulated job performance exercises, customised audio or videos, stories and scenarios.

The more interactive the resources and courses are, the more complex they are to create, and the more complex they are to re-use in other courses. But interactivity has a lot of benefits in learning. It has been proven to enhance the sense of achievement in learners. It encourages reflection, boosts engagement and knowledge retention.

Appendix 1 offers a Decision Support Tool to help in the choice of interactivity level.

1.1.3.2. How to prepare

A specific section deals with the methodology of course and content creation. However, as regards interactivity, here are some common rules to bear in mind.

- Selecting the subject

According to Miller's prism, it is easier to manage knowledge and skills in an online course. Working on "attitudes" usually demands complex practical exercises and simulated work situations that are difficult to translate into a digital format. The conclusion is similar for the "does" level of skills that demands a learning experience as close as possible to the working experience to come.

Miller's Prism

Figure: Miller's Prism [2]

[2] based on work by Miller GE, The assessment of Clinical Skills / Competences / Performance; Acad. Med. 1990

When setting up a blended learning course, sequences that would be complex to implement online should thus remain campus-based, especially considering the added value offered by the teacher's presence in such situations.

- Offering "easy" resources

Distance learning is increasingly experienced on the move, and the participant's attention span is short! To optimise retention, short resources are preferable. The aim is not to oversimplify the topic, but to split it into a sequence of easily-digested chunks. It allows the participant to:

- quickly assess a learning item and thus keep motivation high;
- quickly find the resource needed at any given point in future.

This however does not mean that longer or denser resources should be avoided at all cost, as long as their length/size and learning goals are explicitly signposted, and provided participants have already started the learning topic.

1.2 Training the trainers, motivating the participants?

Some people remain reluctant to try distance learning, be they teachers or participants. Teachers might think it is convoluted, that the relationship with the participant gets lost on the way, or that the learning process is not as efficient or information is not retained, etc. Participants could fear isolation, getting lost, inadequate support from trainers and, eventually, failing…

Yet studies show that a well designed e-course (fulfilling learning needs with multiple tools and planning participants' support) is often as efficient as, or even more efficient than, a campus-based course. To succeed in the online training challenge, supporting teachers and participants before, during and even after the learning process is as crucial as the course content itself.

1.2.1 Train the trainers

For teachers, building a distance-learning course is:

• a new job: designing new courses or updating and adapting existing courses. This all requires time.

• a new way to teach:

1/ an online session is not hosted in the same way as a campus-based session: a new pace is to be found, with shorter sequences that maximize participants' attention.

2/ learning how to make participants interact from a distance, such as during a virtual class, forum, chat etc. and decipher their reactions to adapt the session if needed.

3/ studies show that we learn better through teamwork, collaborating with peers. Such collaborative training is quite easy to implement in a traditional campus-based format. When trainers and participants are working remotely, things could look more complicated; teachers might face a lack of technological skills or appetite and feel that participants' supervision is becoming needs to be tighter.

• a new relationship with students: the trainer can also act as a facilitator or a coach, so his/her positioning must constantly evolve.

It is crucial, then, to offer teachers specific learning sessions that address these issues and suggest tools to allow them to be resolved. This TOT session must cover the following areas:

• change management: promote online training through its many advantages;

• technical training: clearly explain technical challenges and offer practical solutions, support and train teachers on technical aspects, give access to a comprehensive toolbox with selected software, apps and comprehensive manuals;

• pedagogical training: reassure teachers about their learning engineering skills and provide the necessary top-ups to give them confidence for the transition to online formats.

• highlight first achievements: on a regular basis, and furthermore facilitate communication and discussion about all teachers' experiences.

NB: the success of a distance learning initiative relies on 3 points:

- training and supporting teachers

- strong management backing

- starting easy to trigger a reliable dynamic

1.2.2 Motivating participants

Supporting participants first entails listing the main difficulties they might face. Distance learning can be a great tool allowing more flexibility and more learning impact when it is well designed, but the remaining risks are not to be overlooked:

• technical difficulties: this is the main issue and the leading drop-out factor. It is therefore essential to support participants by means of a responsive technical hotline, able to handle a wide range of difficulties (connection issues, LMS browsing, log-in failures, etc.)

• social isolation feeling: this will be particularly strong if participants have not understood why and where they actually stand in relation the course, and what is specifically expected from them. It is thus crucial to work on the course's ease of use and announce clear guidelines. Use of tutoring then allows deeper topics to be addressed. It is essential too that trainers discuss with participants regularly, through feedback and specific meetings. Use of team work is also a really good means of breaking isolation. Participants can then talk with their peers and compare their user experiences, contributing further to their mutual motivation.

• personal organisation: some participants may feel lost when having to schedule their learning agenda on their own. This applies all the more to online learning. It is thus essential to offer support and tools allowing easy scheduling (detailed deadlines, work to hand in, advance notice of tasks yet to come, etc.)

The school must anticipate all these issues and do whatever is needed to avoid them. To do so, it is first of all necessary to know and understand participants. Here are some questions to be answered:

• Who are my participants? Are they captive? (The less captive the audience is, the more attractive course design must be, through short sequences, activities, quizzes, etc.)

• How comfortable are they with technology? Are they used to computers, smartphones, etc.? (Usually the younger the audience is, the more comfortable with technology it is, but this is no golden rule!)

• Are they sufficiently independent regarding their studies? (Usually in initial training, the more an audience has a high level education background, the more independent it is.)

• What are my participants' personal commitments? (For instance in continuous training, personal or professional obligations can be high and meetings with participants need to be scheduled at lunchtime or in the evening.)

• What is their previous experience with online training?

Once results are known, it is possible to adapt the curriculum to improve its efficiency and participants' motivation.

1.3 Conclusions

Implementing online learning is a time-consuming activity. Before thinking about pedagogy, two topics have to be considered:

1/ An LMS is an essential tool for distance learning. The choice of platform is very important and has to be thought about in advance, because switching platforms or changing the technology used for the LMS is no easy matter.

2/ Concerning e-learning teams - implementing distance learning entails new tasks for the school and new jobs. It is likely that some of those involved (trainers or trainees) will oppose change and criticise the implementation of distance learning.

Consequently, to ensure the success of distance learning, both trainers and participants have to be accepting of distance learning, to avoid de-motivation and the failure of the project. This acceptance-building exercise must be adapted to participants' and trainers' profiles as much as possible. Setting up a new team, specifically for distance learning, shows real willingness from the institution to implement distance learning, avoids work overload for trainers, and will improve the quality of the courses and ensure technical reliability.

2. E-learning training methods

2. E-learning training methods

The aim of this section is to present different training methods that can be used when delivering e-learning. Each training method has its advantages and disadvantages which have to be taken into consideration before opting for one.

The choice will depend on many factors, including but not limited to:

- Learning outcomes
- Available trainers
- Available e-learning management staff
- Available software for editing
- Training policy

2.1 Self-paced e-courses

Self-sustainable content.
Participants choose when to go over the content.
Self-evaluation
On demand.

A self-paced e-course is an e-course that does not require an active trainer.

The main attribute of self-paced e-learning is that participants do not follow a set schedule or deadlines as conditions to formally finish the e-course. The term 'self-paced' is somewhat self-explanatory in the sense that the participants have full control over when to study the materials and the tasks in an e-course. As the participants are also not usually guided by trainers (mentors), the structure of an e-course should be self-explanatory and easy to follow.

This type of e-course is fully digital, meaning that all the resources and activities are available on line. All of the content can be accessed as soon as you enrol on the e-course, assignments do not have a start date or deadlines, and the e-course can remain open indefinitely (with content updated when needed). Such e-courses are usually created for shorter segments of e-learning content and require self-evaluating interactive tasks (e.g. quizzes) in order to motivate participants to finish the e-course and to serve as a learning assess-

ment tool. As there is no trainer to guide and motivate participants, an e-course has to rely on interactive and visual tools such as quizzes and videos. However, even if participants are not communicating with trainers, a tool in a form of a forum is recommended for peer-to-peer contact. Also, some kind of support, such as e-mail-based technical support, is normally offered to participants.

Self-paced e-courses are a popular choice amongst training providers as they are self-sustainable and require little to no logistic effort after being uploaded. In this way the learning content is always available online for those that need it. European training institutions for judicial officials such as European Judicial Training Network (EJTN) and Academy of European Law (ERA) offer self-paced e-courses available on demand. There are also other training providers that often offer free self-paced e-courses for various target groups.

Examples of self-paced e-courses online[3]:

- Learning.ejtn.eu[4]
- help.elearning.ext.coe.int[5]
- era-comm.eu[6]
- coursera.org[7]

[3] Free registration needed

[4] E-learning portal of European Judicial Training Network (EJTN)

[5] E-learning portal for CoE European Programme for Human Rights for Education of Legal Proffesionals (HELP)

[6] E-learning portal of the Academy of European Law (ERA)

[7] E-learning portal providing free e-courses in collaboration with international universities

2.1.1. About the structure

The structure of a self-paced e-course can be linear, meaning that participants follow the e-course sequentially e.g. from simple to more complex content, or nonlinear, meaning that participants can skip lessons choosing the ones that most interest them.

Self-paced e-courses are usually constructed as e-lessons using available authoring tools (see section 4,) as is demonstrated here. This is because e-lessons compress the content in one place (e.g. one interface or window), from where the e-course can be easily followed and navigated by the participants. You do not necessarily have to open different web pages or download content take the full e-course. Everything is neatly packaged in one place.

However, a self-paced e-course can as easily be built as modules stacked as resources and activities on an LMS page (such as Moodle) as shown in this example of HELP e-courses and in an example[8] of EJTN e-courses. This can be a mixture of e-lessons and other resources (video files, documents etc.).

[8] Can be accessed with provided EJTN profile

Either choice is effective, and depends primarily on the availability of tools for e-learning. However, the structure should provide as much learning support as possible (through explanations, examples, interactivity, feedback, glossaries, etc.) in order to make participants self-sufficient.

Some advantages and disadvantages

2.2. Facilitated e-course

Facilitated i.e. instructor-led or mentored e-courses are courses that are guided by online trainers i.e. mentors. The role of a trainer here is crucial for the success of an e-learning course because he/she contributes greatly to the quality level of the e-learning course as a whole. The trainers play a similar role to that in face-to-face training, leading participants to achieve learning outcomes.

Mentored E-course

Online trainer available.

Trainer is guiding the participants.

Trainer is responsible for the e-course starting and finishing acording to the plan.

2.2.1. About the structure

A mentored e-course should have a clear linear structure with a timetable of activities. Usually the e-course is divided into weeks with set activities for each week. The e-course can also be divided into modules providing a clear indication of when each module starts and finishes. This is important as participants need to know what is expected from them in each module, and the deadline. In this way the trainer is facilitating the participants in each module and is guiding them towards achieving the learning outcomes, just as in face-to-face training.

Example of a mentored e-course structure

In the example above you can see that the e-course has been divided into modules or weeks with a set duration for each. This means that all the participants start and finish at the same time but the principle of flexibility remains in each module as the duration is set to give enough time for each participant to complete it at their preferred pace. If the module is stated to last one week, this does not and should not mean that the participants will have activities (reading and assignments) that take a full week to complete. The weekly content should be limited to 1.5-2 hours of actual work in order to give enough time for everyone to study the materials.

The timeline also serves as a guide to trainers who can steer the discussion on the topic at hand, and in this way trainers have a clear sense of participants' learning progress. Moreover, the content in a modular or weekly structure typically shifts from basic to advanced which provides the opportunity to even out the level of knowledge of participants with different experience, and also serves as tool in knowledge progression.

Example of activities/tools in a module

As you can see from the example above, each module (or week) is built with activities and resources. Participants usually have a resource to study (a document, a video etc.) and an activity to assess their progress in the module (a quiz, case study etc.).

2.2.2. Role of a trainer

Before the e-course starts, a trainer has to plan the e-course with the training provider outlining the purpose of the e-course, learning outcomes, e-course structure and the timetable.

During an e-course, a trainer has the highly responsible role of acting as a facilitator of self-study. Some of the tasks are:

- Moderate forum debates, answer questions and give feedback,
- Be available online at previously scheduled times for chat with participants,

The trainer should be engaged in three phases:

- Before e-learning course starts
- During e-learning course
- After e-learning course finishes

• Help participants to strengthen their communication and interaction, try to build friendly atmosphere (for group work),

• Help participants to dispel their doubts, solve their problems and troubleshoot crises during the learning process to prevent their leaving the course and to maintain participants' interest in the course,

• Help, encourage and motivate participants to study and facilitate the learning process (the need for motivation depends on the e-learning course content; if the course or part of the course is theoretical, then more motivation is needed than for a course which deals with issues which participants use in their day-to-day work),

• Monitor participants and make a constant evaluation/assessment through comments which serve as a feedback,

• If needed, upgrade, supplement or adapt content (especially if in the meantime relevant legislation or case law has changed) to participants' needs and inform participants about other relevant materials (for example, interesting and useful articles) on the internet by sending links.

After the e-course finishes the trainer reviews the evaluation of the e-course[9], its goals and outcomes and makes suggestions for improvement if needed.

[9] Hyperlink to the Judicial Training Methods "Guidelines for evaluation of judicial training practices" found on page 8 of the present Handbook

2.2.3 Some advantages and disadvantages

2.3. Blended learning

A general definition of blended learning is that it is a combination of online training and face-to-face training or a combination of digital and face-to-face training (e.g. if the trainers are using digital tools during their face-to-face training e.g. online quizzes, that is also considered blended learning).

Blended learning minimizes the gap between participants and trainers who are not in direct contact with each other in online training.

There are several formats of blended learning but the most complete is three-phase training. It starts with a face-to-face w orkshop, continues with the online part of the training and ends with a face-to-face workshop. Organising workshops before starting the online part of the training is especially useful for participants who are new to using the LMS.

A three-phase format of blended learning example[10]

[10] HELP programme opts for this model when organizing joint e-courses

Other examples of blended learning

2.4 Using e-tools in face to face training

European and international trends in training are increasingly focused on interactive training. This is especially important in legal education where learning on the job, learning from cases, mock trials and moot court simulations and other interactive methods, gives the best results.

To this end, more and more training uses e-tools to enhance the training experience. The most commonly used e-tool is an online quiz which trainers use either before the training to determine the knowledge base of the participants, or as a tool during training to break the sequence of presentations and to make the training more interesting, interactive and learner-based. The results of a quiz can motivate and improve further discussion on the topic.

There are several free quiz and poll applications available online (see section 3) and they are very user-friendly and easy to understand.

So how do they work and why use them? Usually, legal topics devote a lot of training time to legal theory and explanations of case law which can sometimes be tedious. Quizzes are a great tool to increase the interactivity of the

workshop and to document the learning curve of the participants. Besides, participants find it a challenging and fun way to break the sequence of workshops. Trainers frequently use one after a presentation when they want to see how the participants handled the topic, and to provide material for further discussions.

Interactivity is very important in e-learning, as it is in any training, and it has a direct impact on participants' motivation and knowledge retention. Reading 50 pages of dry text or watching a filmed conference without any interaction can quickly become boring. Under normal circumstances, the drop-out rate in e-learning is around 30%. This means that unless an e-course is obligatory, not all of the participants will finish it. This percentage is even higher for e-courses that provide no or little interactivity.

2.5 Conclusion

When choosing a method of training for e-learning, the same rules apply as with face-to-face training. You need to compare what you want to achieve with what you have at your disposal in terms of available resources (e.g. human resources, know-how, technology etc.).

One of the main challenges in choosing the method is the constant compromise between what you would like to achieve and the resources available to work with. Some e-courses are really advanced when it comes to design, software and methods used. Sometimes this can be disheartening if you are trying to create e-learning courses but are not able to achieve the same result owing to lack of resources. However, with e-learning it is always best to start small, choose the methods that you are confident in using and then build on that. In this way it is possible to pinpoint the exact methods that your target group responds to. It would be risky to invest in high-tech, state of the art e-learning solutions only to ultimately conclude that you are not achieving satisfactory results because your target group is unable to handle such e-courses.

With e-learning, best results seem to be achieved with a blended learning approach as you can use the most effective aspects of both methodologies. The negative aspects of e-learning, such as a lack of direct contact with the trainers, can be minimised by introducing face-to-face elements into the training, and face-to-face training can be enriched using digital tools and online resources that would otherwise not be available in any great depth.

In conclusion, a lot of time needs to be invested in exploring what works for you and your target group.

3. Distance Learning Tools

3. 1 Functionality, Interactivity and Types of Tools

A very wide range of e-learning tools is available nowadays, and it is not possible to cover all of them here. Since this handbook is designed to help any stakeholders, be they trainers, activity coordinators or national bodies, as a hands-on reference book with quick and easy tips, it seems fitting to look at e-learning tools in a structured way, based on the basic types of e-learning. The focus will be on the most common types and aspects of distance learning, and some of the most convenient and most commonly-used tools for individual types of e-learning will be recommended. However, before looking at the tools, the research indicating the role of LMS and IT solutions in the success and effectiveness of distance learning should be discussed. The picture below/ System‘s view of e-learning systems (Source: Eom & Ashill, 2016, p. 189).

Eom, Sean & Ashill, Nicholas. (2018). A System‘s View of E-Learning Success Model. Decision Sciences Journal of Innovative Education. 16. 42-76. 10.1111/dsji.12144.

The VLE model postulates that two antecedents (the human dimension and the design dimension) determine the effectiveness of e-learning systems.

The human dimension is concerned with two human entities (trainee and trainer) and their various attributes; and the design dimension includes learning management systems (LMS), self-regulated learning (SRL) and learner control, course design quality, and interaction among the human entities.

Based on the above and in connection with the section on e-learning tools, we need to emphasize that one aspect that sets e-learning apart from traditional face-to-face learning is the psychological and communication space (transactional distance) between the instructor and students (Moore, 1993).

Of the basic four types of interactions, the constructivist model of learning views the interaction and dialogue between students and between the instructor and students as being critical ingredients to the success of e-learning.

Therefore, the main criterion in choosing the tools when designing the course should be the level of interactivity and factors that enable promotion of learning through active participation.

To put it simply, research has confirmed on a number of occasions that as long as the tools you opt for are functional, interactive and enable learning through active participation, the technical details are not particularly relevant to the overall success and effectiveness of the learning and training process.

3.1.2 Asynchronous and synchronous learning and tools

As mentioned in the previous sections, the main emphasis, when it comes to tools, is interactivity, be it in synchronous or asynchronous learning.

Although there is no clear division when it comes to toolkits, since many tools can be used in both situations, as well as for blended learning, synchronous e-learning tools enable real-time communication and collaboration in a „same time-different place“ mode. Synchronous tools possess the advantage of being able to engage trainees instantly and at the same point in time. The main drawback of synchronous tools is that they require same-time participation and conflicting schedules can create communication challenges. In addition, they require significant bandwidth to be effective.

Asynchronous tools enable communication and collaboration over a period of time. They are useful for sustaining dialogue and collaboration over that period of time and providing trainees with resources and information that are instantly accessible. They are helpful in capturing the history of the interactions of a group, allowing collective knowledge to be more easily shared and distributed. The main drawback of asynchronous technologies is that they require discipline when used for ongoing practice and training (e.g. trainees typically must take the initiative to „log in“ to participate) and they may feel „impersonal“ to those who prefer the greater personal contact of synchronous technologies.

3.1.3. Computer-Managed Learning CML

In the case of CML (see also Section 1), also known as Computer-managed instruction (CMI), computers are used to manage and assess learning processes. Computer-Managed Learning systems operate through information databases. Educational institutions use computer-managed learning systems for storing and retrieving information which aids in educational management. This could mean information such as lecture information, training materials, grades, curriculum information and enrolment information, among others. The general CMI model consists of testing, prescribing instructions, record keeping, and reporting
(Day & Payne, 1987; Hedges, 1981; Leiblum, 1982; Park & Lee, 2003)

3.2 Tools for Learning Management Systems

Traditionally, Learning Management Systems (see section 1.1.1) worked hand in hand with e-learning authoring tools. The LMS would host the developed content and take care of tracking results, security, enrolment and other miscellaneous tasks. The current generation of LMS often offer the ability to develop content within the platform. The most common examples of the most frequently-used and most highly-appreciated learning management systems are included in this section. But before making a final commitment it is advisable to contact peer users and find peer institutions who might already be using the system you are considering. In other words, try to collect your data, match the data to your needs and peer experience, and make sure you train stakeholders before you start fully using the system.

- **Canvas**

An open, usable, cloud-based technology, it enables easy integration of the content, tools, and services that teachers need and students want. In addition to the Canvas learning management system (LMS), features include Canvas Commons, the learning object repository (LOR) the system uses; Canvas Catalog, the customizable, all-in-one course catalogue, registration system, and payment gateway; and Canvas Network, an index of open, online courses taught by educators everywhere.

See tutorials: https://community.canvaslms.com/t5/Video-Guide/tkb-p/videos

- **TalentLMS**

TalentLMS is a highly adaptable, hassle-free cloud-based Learning Management System. Feature-rich, fully customisable and mobile-ready, it enables institutions of any type or size to build tailor-made, online training platforms. Key features include building assessments, quizzes, games, polls and surveys; the creation of learning paths; customisation to any depth; integration with Wordpress, Zoom, BigBlueButton, GoToMeeting; Report generation, and the issuing of its own certification.

See tutorials: https://help.talentlms.com/hc/en-us/articles/360014658393-Getting-started-with-TalentLMS

• **Google Classroom**

Classroom is a tool in Google Apps for Education that helps trainers create and organise assignments quickly, provide feedback efficiently, and easily communicate with their classes. Features include the ability to create and manage classes, assignments, and grades online without paper; add materials to your assignments, such as YouTube videos, a Google Forms survey, and other items from Google Drive; direct, real-time feedback; use of the class stream to post announcements and engage students in question-driven discussions.

See tutorials: https://edu.google.com/products/classroom/

• **Moodle**

Moodle has been around since 2001 as an open source platform that enables the users to develop and manage courses online. Moodle is a modular system based on plug-ins, which are like Lego blocks that you put together to build whatever you want. There are plug-ins for different kinds of content, and plug-ins for all kinds of collaborative activities.

Features include: File sharing – gamification – collaborative learning – a library – assessment – grading – course authoring – video conferencing – dashboard analytics – and additional functionalities such as cloud mobility and messaging.

See tutorials: https://enhancingteaching.com/moodle-2-how-to-tutorial-guides/moodle-2-how-to-tutorial-guides-for-teachers/

• **Blackboard Learn**

A scalable, reliable foundation on which to build a professional learning experience. A flexible learning platform (see also Section 3.9.; pg 48) that enables extending online learning, increasing learner engagement and optimising learning outcomes. Features include: File sharing - gamification - collaborative learning content library - assessment - grading - authoring- mobility - messaging - content delivery - content storage and management.

3.2.1 Choosing the most suitable LMS

Comparison online: https://www.trustradius.com/

Many more tools could be mentioned such as Edmodo, D2L, Chamilo and a variety of others. There are indeed many efficient and advanced and yet user-friendly systems, and their suitability as well as their convenience and efficiency depend on your particular needs. It is advisable to try and use an efficient online tool that enables you to conduct a comparison of various systems and see how the individual features fare in relation to what you need and expect.

Use one of the available comprehensive real peer reviews:

https://www.g2.com/categories/learning-management-system-lms

https://elearningindustry.com/the-20-best-learning-management-systems

3.3 Authoring Tools

Fundamental tools for CML or CMI models include authoring tools. An authoring tool assists you in creating digital content. The tool could be something as simple as Google documents, or as complex as a video production suite. Most e-learning authoring tools should allow users to perform necessary actions in a few clicks.

e-Learning authoring tools usually offer the ability to develop slide-based content for e-learning with additional interactive elements. Generally such tools allow content designers to output the relevant content to multiple formats like HTML5, SCORM and ePub.

3.3.1 Video Capture and Editing

These tools enable fast and easy capture and editing of software simulations and other content into professional videos. You can add annotations and other attractive features, and even add internal assessments, knowledge checks, polls and quizzes. Videos can be created in these tools and then embedded in the relevant course, as developed in an e-Learning authoring tool.

3.3.2 Integrated Learning Platforms

Such platforms allow for a course to be authored very efficiently and quickly by creating a course structure and then building the course itself by adding images, slides, audio, PDF's, quizzes, and other content. These platforms usually enable various forms of collaboration and contribution and a host, a co-trainer or a participant. There are a large number of options in this market, depending on the core target group, the organisation's needs and the organisational level. Integrated platforms can be used with a wide range of the LMS mentioned above. Some examples have been chosen to provide an idea of the integration options. However, many software developers are trying to be flexible and increase the level of integration between learning platforms and authoring, micro learning and gamification tools, so it is possible that many of these platforms will sooner or later become fully compatible if not actually integrated. Last but not least, as mentioned in the previous section, any tool is only as good as the trainer or instructor using it, so it is strongly advisable that you include a "training the trainers" session or a CPD seminar for your trainers so that they can feel comfortable and professional when using the tools as well as maximise their potential.

3.4 Learning platforms with authoring tools

To name just the few at the top of the list with good architectural and structural possibilities:

- **WileyPLUS**

WileyPLUS is an online teaching and learning platform with a wide range of options. Key features: video tutorials, automated grading, homework, quizzes and exams. Integrated with CANVAS, D2L, Blackboard and Moodle.

See the tutorials: https://www.wileyplus.com/wileyplus-training-series/

• **McGrawHill Connect /Create**

(Check the grading: https://www.g2.com/products/mcgraw-hill-connect/reviews)

McGraw-Hill's „Connect" is a web-based assignment and assessment platform teamed up with backboard learning, a virtual learning environment and learning management system.

Features include:

Remote Computer Monitoring - Website & Application Blocking - Teacher/Student Screen sharing - Interactive Quizzes - Presentation Building - Students Assignment Distribution/ Assignment Collection - Progress Reporting - Shared Content Libraries - Grading and reporting: automated grading - Learning Content: Pre-made Content Aligned to Standards - Multimedia Content - Gamification - Reporting and Analytics

See tutorials: https://www.mheducation.com/highered/support/connect.html

• **Open eLearning**

Free software providing an e-Learning development tool, a very user friendly and popular open source e-learning authoring Tool. Intended for the design of e-learning courses for all Learning Management Systems. Features include SCORM compliance and mobile responsiveness for playback on all devices, and ease of use along with a number of advanced features.

A very wide range of features for easy editing of courses and educational games, enables the creation of engaging multimedia courses efficiently and speedily. Integrates with Wordpress and Moodle, OpenEdx, Chamilo.

See tutorial: https://www.openelearning.org/docs/open-elearning-docs.htm?GettingStartedwithOPenelearnin.html

3.4.1. Assessing and choosing an Authoring Tool

If you are not sure how to choose the authoring tool that best matches your needs and the needs of your institution, use some of the websites that run a quick requirements analysis for you. G2 is a peer-to-peer review site previously known as G2 Labs. The platform allows real-world, verified users of business software and services that they use to review them. These reviews are intended to help other corporate and institutional buyers choose and buy software/services more intelligently.

Best Education Software - compare and sort online

The page titled Best Education Software offers a range of types of software in a variety of categories, and real-life feedback from end users.

https://www.g2.com/categories/education

3.5 Micro-learning tools

Micro-learning is the latest buzzword in the training industry, and there is often some confusion about the exact meaning of the term. It can be defined as content delivered on demand, in bite size chunks of ten seconds to one minute in length. A good micro-learning authoring tool will allow such small learning "packages" to be created very quickly and easily.

Apps that provide micro-lessons, on-the-go or just to offer a micro-learning experience to your busy judges and prosecutors, include the following:

• **Talent cards (**Micro- learning LMS)

Try a demo: https://www.talentcards.com/app

Engaging, bite-sized learning can be built on the TalentCards platform. Institutions can tailor their training materials to focus on the most essential information with the mobile learning card editor. Cards can be shared for users to access on their smartphones. Learning and training results can be tracked and growth can be monitored. TalentCards leverages the power of micro-learning; it is a great tool to boost memory retention. Learners can spend a few minutes every day learning or reviewing information, straight from their phones. This mobile tool lets your participants train at any convenient location and time.

• **Ottolearn**

A micro-learning platform that delivers personalised training, course-authoring and analytics across web, Android and iOS devices. Training can be automated by creating mastery profiles for the trainees. You can configure what your participants need to know and for how long they should retain it; Ottolearn will personalise the experience for you and your learners, without any course enrolments. Ottolearn is a mobile-first learning platform designed to deliver equally effective learning experiences on the web as well, both online and offline.

See the demo: https://youtu.be/66VA7PADnG4

3.6 Study Tools

Study Tools provide users with resources to learn, study, prepare for tests, quizzes, and assessments (see also the sections on interactivity and learner engagement 3.8. and 3.7). These range from entire courses geared towards standardised test preparation to digital flashcards for practicing vocabulary or other subject-specific material. Study tools may be deployed as a desktop or cloud-based solution through the web or a mobile device. Those may be used by trainers as well as learners to reinforce important concepts. Study tools can be combined with other tools such as LMS or authoring tools.

To qualify for inclusion in the Study Tools category, a product must:

• Have features specifically for test preparation

• Include various study methods

• Be accessible for both learners and educators.

Top Study Tools as ranked in 2020 by a range of surveys:

Quizlet: An online study application that allows trainees to study information via learning tools and educational games.

Short introduction: https://quizlet.com/_1h6ae1?x=1jqt&i=4ggrk

Kahoot! A game-based learning platform, used as educational technology in schools and other educational institutions. Its learning games, „Kahoots", are user-generated multiple-choice quizzes.

Sample quiz: https://create.kahoot.it/share/regent-elearning/ad50170f-ebcd-4043-810f-f36586232627

Brainscape: Brainscape is a web and mobile education platform that allows students to study adaptive flashcards. The website and mobile application allow students, teachers, and trainers to create electronic flashcards, and to find flashcards created by other users and publishers around the world.

Introductory video: https://youtu.be/zbIvSl2oKTM

StudyStack offers free flashcards for both serious and fun learning. The trainees can create their own sets or use sets shared by other trainees and trainers. The sets can be converted into games.

See sample flashcards (and check your understanding of the key e-learning concepts):

https://www.studystack.com/flashcard-1268

https://www.studystack.com/flashcard-3244390

https://www.studystack.com/flashcard-922160

McGrawHill Connect

This is a set of study tools integrated within a robust LMS but able to be used separately, for interactive quizzes, games, and revision.

GoConqr

GoConqr is a free online learning platform where you can create, share and discover Mind Maps, Flashcards, Study Planner & other resources.

Introductory video: https://youtu.be/LWubGdhlMx4

Anki is a program which makes remembering things easy. It uses efficient, less traditional study methods, you can either greatly decrease your time

spent studying, or greatly increase the amount you learn.

Introductory video: https://youtu.be/F1j1Zx0mXME

3.7 Learner engagement platforms

Learner Engagement Platforms help educational institutions increase learner participation in courses and at home through real-time communication and access to information. These platforms are necessarily less interactive than synchronous learning platforms but they do not merely enable content storage and distance learning assignment; instead they enable communication between the trainer and the learner akin to networking, or an experience similar to an online training community.

The question is often asked which platform is the best. Here again, comparison and research must be made so that stakeholders assess the entire range of factors, including the fact that different stakeholders might have different interests in or reasons for preference towards one specific platform. It is strongly suggested you first shortlist the platforms you are seriously considering, work together, brainstorm and run tests and trials before making the final choice.

Some of the most appreciated and common platforms include: https://www.capterra.com/student-engagement-platform-software/

To name but few:

Nearpod: A collaborative presentation tool that allows teachers to engage and assess their students‘ data using mobile devices.

Edmodo (see Section 3.2.1)

Moxtra: A platform that powers interactive education experiences with a digital OneStop portal. It delivers a secure, immersive learner and trainer connection. Physical barriers can be bridged with text, voice, and visual messaging, video meetings, document sharing, annotative notes, and more. Educators can conduct and comprehensively manage their courses online

3.8 Synchronous e-learning tools

Synchronous training and learning (see section 1.2.2.2 at page 12) in a virtual classroom environment can be a challenge. However, real-time communication is a very important aspect of distance learning at times when face-to-face training is not possible. Amongst other things, it can reduce feelings of isolation and increase a sense of community in the online world. Below are some of the most common synchronous tools used in online education.

3.8.1 Real Time Communication Tools

- **Chat**

Chat is a form of synchronous text-based communication allowing students and the instructor to meet in “real-time” for conversation, discussion forums, question and answer sessions, or virtual office hours. Many platforms (Zoom, BBB, Blackboard, Skype, Teams, GoToMeeting) offer this feature and allow the chat sessions to be recorded for later viewing by the instructor or learners unable to attend the session in real time.

• **Skype**

Skype's free version enables one to make voice calls, video calls, send instant messages or chat, and send SMS (Short Message Service) text messages. Skype basically turns the computer into a telephone using a voice over Internet protocol (VoIP) technology allowing people to communicate from anywhere in the world. A contact list is created when Skype users accept contact requests from other Skype users.

3.8.2. Web conferencing and synchronous online training platforms

• **BigBlueButton**

BigBlueButton is an open-source web conferencing system. It supports real-time sharing of audio, video, slides (with whiteboard controls), chat, and the screen. Instructors can engage remote students with polling, emojis, multi-user whiteboard, and breakout rooms. Trainers and content designers can record and playback content for later sharing with others. BigBlueButton has been especially designed for online learning.

The educational use cases for BigBlueButton include:

- Online tutoring (one-to-one)
- Flipped classrooms (recording content ahead of your session)
- Group collaboration (many-to-many)
- Online classes (one-to-many)

• **Zoom**

Zoom is a cloud-based video conferencing service - either by video or audio-only or both, all while conducting live chats - and it permits sessions to be recorded for later viewing. A Zoom Meeting refers to a video conferencing meeting hosted using Zoom. You can join these meetings using a webcam or phone. Zoom Rooms require an additional subscription on top of a Zoom subscription and are an ideal solution for larger companies.

As some have voiced concerns about security, and many have used this platform, the most recent security toolkit is included: https://gosecuritypro.com/zoom-risk-assessment-toolkit/

https://www.techradar.com/news/zoom-update-delivers-a-huge-security-upgrade

Zoom's main features include:

• One-on-one meetings: Host unlimited one-on-one meetings even with the free plan.

• Group video conferences: Host up to 500 participants. (but for that the „large meeting" option would be needed). The basic option, however, allows hosting a video conferences of up to 40 minutes and up to 100 participants.

• Screen sharing: Meet one-on-one or with large groups and share your screen with them so they can see what you see.

• Breakout rooms: allow you to split your Zoom meeting into a maximum of 50 separate sessions.

• **Microsoft Teams**

MS Teams is a persistent chat-based collaboration platform complete with document sharing, online meetings, and many more extremely useful features for business communications.

The features include:

- Conversations within channels and teams.
- All team members can view and add to different conversations.
- A chat function.
- Document storage in SharePoint.
- Online video calling and screen sharing.
- Online meetings. Audio conferencing.
- Microsoft Teams is included in Office 365 for free.

• **Google Hangouts**

Like Skype, Google Hangouts offers a free way to run live online classes. Hangouts is available on mobile devices, tablets, and computers, so your trainees can video conference with you anywhere, even if they don't have a PC at hand or connect from a remote location. It includes the ability to instant message, call, or text contacts. It can be combined with other Google products. Google Hangouts video conferences are limited to 10 participants at a time, including the trainers, and there is a 150 user limit on contact lists.

https://www.youtube.com/watch?v=GbcrnI_TLy8

• **GoToMeeting**

GTM is a web-hosted service. It is an online meeting, desktop sharing, and video conferencing software package that enables the user to meet with other computer users, customers, clients or colleagues via the Internet in real time. GoToMeeting can enable teachers to host classes of all sizes – from small size groups sharing 25 HD webcams to huge, 250-attendee lectures.

• **Blue Jeans**

This software works with any device, classrooms can connect for live, face-to-face video courses featuring screen sharing and Dolby Voice. It can be integrated with Canvas LMS and paired with modern collaboration tools.

In attempt to shed some light and logic onto the murky waters of distance learning tools, it is important to realise that by no means can the tools be divided into specific separate boxes set in stone and that there is a great deal of overlap, multi-functionality and continuous development.

3.8.3 Webinar Tools

Webinar software is one of the popular ways to engage with trainees or colleagues within training institutions. However, hosting live webinars can be challenging. The difficulties can range from a poor internet connection or randomly getting expelled from a meeting, to forgetting to click a Record Meeting button. When choosing the most suitable webinar tool, we should ask some of the following questions:

What is the waiting room experience for your participants?

How easy is it for them to download the plug-in and join the meeting?

How many presenters can you have at any one time?

How good is the audio quality?

How many participants can you present to at one time?

These factors all matter. The best webinar software makes it easy to record, share, and follow up with participants without much difficulty.

In terms of webinar software tools that are most frequently praised for their high quality video, built-in surveys, live-chat features, streaming capabilities and many more features, it could prove beneficial to test run some of the following: Livestorm, Demio, WebinarJam, Webinarninja, GoToWebinar, LiveWebinar, EverWebinar, My Own Conference, and EasyWebinar.

3.9. Interactivity Tools

3.9.1. Quizzes, Surveys, and Polls

No learning experience, whether instructor-led or digital, is complete without a quiz (see Section 2.4, page 28). References for platforms and tools enabling you to create quizzes, surveys, polls and feedback have therefore been included although it has not been possible to include all of the top tools. The selection below can be utilised for fun activities and professional feedback and polling use.

- **ClassMarker**

ClassMarker is an online quiz creation tool used for the creation of public or private tests. The tool makes quiz configuration easy, with settings such as test duration, randomizing questions, instant feedback, choosing from multiple question types, custom certificate creation and branding, and automatic grading.

- **Topgrade**

This is a multi-platform learning system where registered users create quizzes, courses, and flashcards specific to their own courses, and play quizzes created by others. It can be used to design various question types such as multiple-choice questions, match-the-following, and fill-in-the-blanks. Images and time limits can be added to quizzes. Topgrade provides features to add

resources to quizzes anytime and anywhere, online or offline, through its app. It enables quizzes to be shared with others through links, or email. Users can sign up for a free personal or business account.

• **FlexiQuiz**

FlexiQuiz is an online tool to create courses or online tests. A time duration can be configured for tests, which can be made public or private. There is an option to choose from a variety of question types. The auto-grading function and generation of analysis reports is a further feature.

There is a choice between a free version which allows unlimited quizzes to be built with limited questions in each, or a premium version that allows the quiz builder to upload media and offers unlimited questions.

SurveyMonkey

This online survey software helps create and run professional online surveys. It is a very powerful and well-known online application - SurveyMonkey is perhaps the best known and most widely used. SurveyMonkey is on par with industry standards, but adds a lot of other features that make data collection and analysis extremely simple.

SurveyMonkey provides all the tools necessary for you to create strong, professional surveys easily.

There are different options offering the users access to a variety of features. The basic option offers the basic tools needed to create great surveys.

Questions can be added in three categories – close-ended, open-ended, and descriptive. SurveyMonkey allows single answer, multiple-choice with multiple answers, rating scale, and 3 matrix type questions in the close-ended category. This is more than sufficient to create high-quality, professionally appropriate surveys.

3.10 Mobile learning tools

Mobile learning has emerged as one of the most rapidly-evolving industries in recent times. More and more institutions and trainers are aware that Internet and learning resources are increasingly being accessed via mobile devices. This creates a need for mobile e-learning tools that help in developing engaging content for participants, while providing them with easy access to all the resources without any limitations in terms of time and location. For your assistance, a short list follows of some of the many mobile e-learning tools that can be used to develop an interactive e-learning course.

• **Claro**

Claro will help create an online course including mobile-compliant HTML5. The tool provides excellent features and options to incorporate into your learning course. Options that come with this tool include pre-designed mobile themes along with a wide variety of assessment functionality of the kind commonly available in a desktop course. Claro produces e-learning mobile

content for tablets and smartphones providing support across iOS, Android, Blackberry, WebOS, Windows Phone and more, and you can even create content with Google Chrome book. Moreover, it eliminates the need to develop multiple versions.

• **Adrenna Mobile**

Adrenna Mobile is a revolutionary solution for mobile learning that brings formal, informal, social and collaborative learning, and performance support to one central platform – mobile. This advanced and multifunctional platform is now available on all major operating systems, namely iOS, BlackBerry OS and Android.

• **iSpring Learn**

iSpring Learn LMS is a straightforward corporate platform designed to manage training online. The platform features all the core functions you'd expect from an LMS with a few refreshing extras. With no learning curve, administrators can easily create e-courses directly in the LMS or just upload existing content, invite learners, and track their results.

• **Brainshark**

Tool for creating both online and mobile video presentations.

• **Blackboard Mobile**

The mobile tool for Blackboard ( ) – a major education LMS tool.

With mobile learning experiences gaining in popularity, many of the above-mentioned tools now offer a mobile learning option, including TalentCards, TalentLMS, Canvas LMS and GoToWebinar.

3.11 Content Development Tools, Podcasts and Presentations

Content development can be a long and arduous process, depending on what the goal and objective of the institution or department are when addressing distance learning processes. Working with the right content development tools is therefore crucial. They can make life much easier by improving efficiency, productivity, and designs, and adding the right functionality to training courses. Here are some tips for a few e-learning content development tools that will serve to enhance your course-building efforts.

3.11.1 Content Development Tools

• **Adobe Captivate**

Adobe Captivate is a widely-recognised name in the photography and design industry. Captivate is used to storyboard courses, and tap into an extensive interactions library, including transitions and triggers. Courses can be built quickly and easily with their user-friendly interface.

• **iSpring**

This tool takes PowerPoint presentations and turns them into e-Learning courses. iSpring Suite also offers plenty of course templates and themes, backgrounds, and more. iSpring can integrate with most popular LMS platforms, including Moodle and Learnbook.

• **Elucidat**

Elucidat is a cloud-based authoring tool that focuses on simplicity and user-friendliness. It works similarly to Google Suite, allowing multiple users to work on the same piece at once free from concerns about version control.

3.11.2. Podcasts

As regards resources to support the creation and launch of podcasts (see section 1.1.3) for your distance-learning solutions, the following highly-recommended podcast tools are available free of charge. These podcasts tools for e-learning can be used to record, integrate, and distribute podcasts.

• **Audacity**

Free, open source, cross-platform audio software, Audacity is an easy-to-use, multi-track audio editor and recorder for Windows, Mac OS, GNU/Linux and other operating systems. It has been developed by a group of volunteers as open source.

• **Ardour**

Ardour is a free, fully-featured digital audio workstation, similar to other software like ProTools, Nuendo, Sonar and Logic, and capable of replacing analogue or digital tape systems. Available for Mac OS X, and Linux.

• **PodBean**

For beginners in podcasting, PodBean will prove of great use, as it makes publishing easy, in three steps. Users are spared having to learn technical details, and the software offers promotional tools that empower the podcaster, along with iTunes preview and statistics. It has been described by many users as a state-of-the-art podcast hosting solution for internal communications and training, radio networks, and media organisations.

3.11.3 Presentations

Choosing the right presentation software tool can also be essential for e-Learning, especially if your trainers need to host interactive webinars, or create detailed tutorials for e-learning courses. This section includes tips for several tools in the form of presentation software that e-learning course builders may want to add to their toolbox.

• **Prezi**

This is a cloud-based business presentation tool that is ideal if a highly interactive platform is needed. The software features an intuitive interface that shows the big picture within the workspace, with the ability to zoom in on the smaller details of the presentation. This contrasts with the slide design tools that many other presentation tools employ.

• **Camtasia Studio**

This flexible presentation software tool features a screen recorder, HD video importer, and a wide range of editing tools. It is intended for both Mac and Windows devices, meaning that virtually anyone can use this tool to create professional presentations that show off their e-Learning courses or complex processes or interactive content screen-by-screen.

• **GoAnimate**

GoAnimate boasts an impressive range of themes, characters, props, and other pre-made elements that make presentation production stress-free. It offers a simple and straightforward drag and drop interface. Content is simply moved from the library, or existing elements are shifted around to create the perfect professional online presentation. There is no need to edit or record with a third-party tool. When finished, simply publish the video on any website or export it to YouTube.

3.12 Security and GDPR Compliance

3.12.1 Potential Security Issues

Distance learning is now a very different environment to that of several years ago and offers significant learner engagement via online learning systems. E-learning systems share the same characteristics and challenges as other e-services, requiring the sharing and distribution of information. More specifically, they are associated with accessing services via the Internet, the consumption of services by a person via the Internet, and the payment for a service by a customer. Institutions administering distance learning must put greater emphasis on security risk management, taking into consideration the type and severity of the different threats and vulnerabilities, and recognising the diverse interactions and integration between clients, servers, databases and other components.

E-systems are vulnerable to a range of security threats (Rjaibi, Neila & Gannouni, Nawel & Ben Arfa Rabai, Latifa & Aissa, Anis. (2014). Modelling the propagation of security threats: An e-learning case study. 2014 3rd International Conference on Cyber Security, Cyber Warfare and Digital Forensic, CyberSec 2014. 32-37. 10.1109/CyberSec.2014.6913968.): those might include broken authentication and session management; insecure communication; availability issues such as denial of service; confidentiality and integrity attacks.

In brief, security in e-learning is relevant because:

E-learning systems are:

• run as projects and all projects have security risks.

• no longer research prototypes but production systems that need to be made secure.

• **All new electronic systems introduce new threats.**

• **Trust in an electronic system is a key condition for user acceptance.**

Before implementing any tool, be sure to check the latest security updates and references. Consult with your IT department on security issues. Strengthen security infrastructure and be aware that tools get updated and upgraded so their security standards and compliance change too.

3.12.2. GDPR Compliance

Learning Management Systems as well as other tools mentioned in this section forms the very backbone of e-learning. Without the tools, there is no way that training can occur. With the GDPR now in force, many institutions worry whether they are required to use an EU-hosted learning management systems or tools.

EU-based institutions may use software and tools hosted in other countries as long as the platforms hold EU data protection approval. For compliance purposes it is recommended for best practice you check and ensure GDPR compliance. Before using any LMS, synchronous or asynchronous learning tools or other applications or software for your e-learning course, of course it is also recommended that you always read and understand its GDPR compliance policy, Terms of Use, and Privacy Policy.

3.13 Conclusions

In this section, the intention was to address the key components for the toolkit of training institutions as well as their trainers, across the spectrum of formats of distance learning. It is not possible to produce a comprehensive list, neither is it possible to ensure the preferred tools of everyone involved are listed, but besides the building blocks of distance learning such as LMS, authoring tools, learning platforms, and interactivity tools such as quizzes, surveys and polls, the focus should be on functionality, interactivity and the latest trends, consequently including tools for micro-learning and mobile learning. Last, but not least, when looking at the tool kit security and GDPR compliance aspects of the tools are to be considered when making choices for the final toolkit. Choosing and testing tools should be a hands-on experience with a high degree of engagement, and that you should enjoy looking for those tools you find most suitable for the needs of your training. The information included is merely pointing in the directions that could help.

4. How to design an e-course

4. How to design an e-course

This section is an introduction to the factors to be considered and the decisions to be made before designing and delivering an effective and engaging e-course. It will explore the activities that must be undertaken before, during and after the creation of an e-course.

4.1 Preparation

The design of an e-course starts in the same way that the design of any training course should start, and that is with the end in mind. Before any decision is made on the best way to deliver the training, the purpose, aims and objectives of the training activity must be clearly defined. There are some simple questions that need to be answered at this stage before doing anything else:

- What is the training subject?
- Who is the audience?
- Why do they need this training?
- What is their current level of experience in this subject?
- What knowledge, skills and/or behaviour will the training introduce or improve?
- How will you know if the training has been successful – what will be different?

When you have the answers to these questions you will know the topic that needs to be taught, you will be able to identify the overall aim of the training, and you will be able to set out measurable learning objectives that need to be achieved. The learning objectives are of great importance as they identify what it is that you want the participants to be able to do; they will also influence how you deliver the training and evaluate it. For example, if your learning objective is: the participant will understand how the ruling of Simms v. Villalba (2019) affects future decisions in cases relating to EU licensing legislation; you might decide that you can deliver the training and test understanding using a short-written document, or a presentation, followed by a short test. However, if the learning objective was: the participant will be able to apply the ruling of Simms v. Villalba (2019) when making decisions on cases relating to EU licensing legislation; this is a very different learning objective and the methods used will also need to be different. The second learning objective suggests that the participant will be able to positively use their new knowledge within their judicial role, rather than simply understand it. The training activities required to deliver and achieve this will probably need to include elements of reading, discussion, case study and practical application. Once you understand your training aim, your learning objectives and the activities that need to be created and delivered to achieve them, you can finally start to think about how this might be structured within an e-course.

A useful model to assist you in the creation of effective learning aims is Bloom's Taxonomy. Created by Benjamin Bloom in 1956, Bloom's Taxonomy is a hierarchy of cognitive skills that assist in the achievement of effective and long-term learning. The higher levels of the taxonomy require greater effort by the participant, but they can provide deeper understanding and longer learning. A participant cannot achieve the higher levels of the taxonomy wit-

hout first achieving the lower levels. For example, a participant cannot apply knowledge unless they can first remember it and understand it. Bloom's taxonomy is also useful as it provides suggestions for verbs that can be used within learning objectives.

Bloom's Taxonomy

If we revisit our first earlier learning objective of 'The participant will understand how the ruling of Simms v. Villalba (2019) affects future decisions in cases relating to EU licensing legislation', you might decide to demonstrate the achievement of this learning objective by requiring the participant to complete some tasks that involve discussion, selecting, explaining or giving examples. For our second learning objective 'The participant will be able to apply the ruling of Simms v. Villalba (2019) when making decisions on cases relating to EU licensing legislation', you might decide to ask the participant to complete tasks that involve interpreting, application, problem solving and choice.

Once you know the aim and the learning objectives of your training course you must consider how this can be taught and tested as an e-course within an online and digital environment. You might have taught many participants in a classroom or training room environment; however, do not think that you can simply reproduce your training in the same way for delivery as an e-course. The skills and experience that you have gained from face to face teaching are of great value, but you need to adapt these abilities for a very different teaching environment and participant experience.

There are many advantages to delivering training using e-courses, but there are also some challenges that you must recognise and manage to ensure the delivery of effective training. Some of the advantages are well known and include:

- savings on travel time and the cost of training venues,
- e-courses provide participant focussed activities and give control over when learning is accessed to the participant,
- e-courses can be designed to appeal to all types of learning preference,
- once resources are created for e-courses they can be used many times over and be accessed by large numbers of participants without further cost or work by the tutors.

One of the most positive advantages that e-courses provide is the opportunity to move away from the traditional model of vertical blocks of training time. For example, traditional training is delivered in blocks of days and half-days. This limits the time that is available for the retention of knowledge and the testing of learning; breaks also must be incorporated in the training time. E-courses allow you to deliver the same learning, over the same number of hours, but over a longer period of days. For example, a traditional-style learning activity that is delivered in one day will only contain approximately 5.5 hours of learning activity. There is often little time allowed for adequate reflection, testing and application of the learning. After the training activity, new knowledge and learning can be easily lost if it is not required, recalled or used in a real-life situation. According to Ebbinghaus' Forgetting Curve, a participant will lose 79% of what they have been taught unless it is recalled or applied.

Ebbinghaus' Forgetting Curve

However, the same training delivered as an e-course can be structured so that it allows time for repeated recall and application. To start creating the structure and the content for your e-course revisit your training aim and learning objectives. For each objective, consider what information is required by the participant, what the participant should be doing and what the trainer wants to achieve. We can simplify this to: what does the participant need to know (knowledge), what does the participant need to do (skills and attitude), and how will the trainer know when this is achieved? This information is key to deciding how your e-course will be structured and what digital and online tools your will use to deliver it.

If we return our earlier learning objective of 'The participant will understand how the ruling of Simms v. Villalba (2019) affects future decisions in cases relating to EU licensing legislation', we can see that it relates to the 'Understand' and 'Remember' levels of Bloom's Taxonomy. To enable the participant to understand and remember, the trainer must provide some form of information that explains what the case of Simms v. Villalba was about, what particular details the case dealt with, the reasoning behind the judicial decision, and how it creates a legal precedent. The taxonomy also provides us with several verbs that act as suggestions for how we will test that the learning has been effective. So, to achieve this first learning objective, we require a means to provide the participant with the essential knowledge and another means to enable the participant to recall it, match it to future cases, discuss it, summarise it and give examples etc. In a traditional style classroom environment,

you might deliver this by providing some pre-reading and a lecture followed by a discussion, questions and answers and even some case studies; all of which would probably be delivered in the same day and look something like this:

How the same training is created as an e-course will depend on what technology and equipment you have available. The earlier sections in this handbook have explored e-course training methods and the range of digital platforms and tools that are available to you for your e-courses; now is the time to decide which method(s) and tool(s) you want to utilise.

The following example outlines how the training could be structured and delivered as an e-learning module.

E-course example 1: Fully Digital

In this example, all of the participant activities are planned in advance. The learning material is identified by the trainer and is provided to the participant in the form of hyperlinks, recommended texts, e-learning and pre-recorded pre-

sentations. The participant is provided with instructions on what they must do to complete the learning and a deadline for its completion. The use of quizzes and tests included within the e-course allows the trainer to test the knowledge of the participant at regular stages in the programme. The final assessment allows the trainer to check that the participant understands the information with which they have been provided, and when to use it in a real life situation. Once the e-course has been created, the trainer has little to do except to monitor the participant's progress, offer support if required and to mark the final assessment.

As you might notice, there is little opportunity for engagement between the participant and the trainer in the 'Fully Digital' model. Although there are times when this model is the one most suited to deliver your training and to achieve your learning objectives, there will be occasions when you require more interaction between the participants and the trainer during the e-course. If you need to increase the amount of interaction within your e-course you should consider using the 'Blended Digital' model.

E-course example 2: Blended Digital

The 'Blended Digital' model seeks to maximise the opportunities for interaction between participants, and between participants and their trainer, by using technology in real time during live events. In the e-course example 2 (above) you can see that the knowledge is still provided in the same way, but the remembering and the understanding elements are achieved through live quizzes, webinars, discussions and even through virtual syndicate group work. As technology continues to develop, it is becoming more possible for the trainer to replicate the activities of a live classroom in a digital and remote environment.

4.2 Implementation

Once you have decided on your training model, your activities and your content, you must then consider your timing, your audience and your trainers. There are three key questions that you must answer before you can implement your e-course.

1. Over what period of time will the e-course be delivered?

2. What technology will our audience need to engage in the e-course?

3. How confident are the trainers in delivering and facilitating an e-course?

The answer to question 1 will influence when information and resources will need to be prepared and issued to the participants. The participants will also need information on any deadlines for the completion or submission of work. If you are working with cohorts of participants, you might also want to ensure that they start and finish an e-course at the same time. If you adopted the 'Fully Digital' model for your e-course you would only need to set the participants a start date and a finish date. However, if you adopted the 'Blended Digital' model you would need to provide the participants and the trainers with a clear study timeline that identified when they should complete self-study and when they would be participating in live online events. Remember, e-courses allow us to spread learning activities out over a much longer period of time and we are not restricted to single calendar days.

Question 2 is important as you must identify whether any of your participants might be disadvantaged by their digital equipment, their internet connection or their digital skills and confidence. You should consider including information within your e-course joining instructions about internet browser requirements, passwords and how online materials might look and function differently on different digital devices. For example, Apple devices operate very differently to Windows devices; will this affect how your participants access your online learning resources and activities? You might also consider offering participants the opportunity to test their devices and ensure that they can access learning resources before the start of the e-course. This allows any problems to be rectified as soon as possible. You might also find it beneficial to offer some form of digital support during the e-course and especially during any live online events, such as webinars. This could be someone that the participants can contact whenever they are experiencing problems with the technology. This can help to increase the participant's confidence and removes any additional pressure from the trainer.

It is also very important that the trainers of an e-course feel confident in the use of technology and feel that they have the skills to facilitate online live events. Please recognise that this is a new environment for many trainers, and it can take some time to adjust to teaching and facilitating when you are not in the same location as your participants. Trainers should be encouraged to share their experiences on e-courses with each other and to learn from each other. Trainers will also need to be trained in how to use many of the new digital training tools, and again they should be encouraged to experiment with new tools, learn from colleagues and to gather as much participant feedback as possible.

4.3 After the training & evaluation

Once an e-course has been delivered you must evaluate it. However, you should not evaluate it in the same way that you might currently evaluate a training event delivered face to face in a classroom style environment. In this environment participants have usually just experienced one or two days of training and are immediately presented with an evaluation form. The participants are often asked how effective the learning has been, however, at this point, it is too early to tell; participants need to go and apply their learning to real life situations. The participants will often also be asked how happy they were with the training location and the hospitality provided. For training in a digital environment, these questions are no longer relevant. In the digital environment you now have the opportunity to ask more focussed questions about the participant's experience of using the technology. There is also the opportunity to ask for feedback at many stages of the learning journey rather than just at the end. There are digital tools that we can use to collect feedback online after every learning activity, or at regular intervals during the e-course. We can use such feedback to check on participant satisfaction, progress and to check how successful the use of digital tools has been. You should use this feedback from participants to make improvements in terms of how and when you use digital training tools in learning.

It is also very important to gather the trainer's assessment of the training activity as a whole. Trainers must reflect not just on what the participants say in their evaluation, but also on how their own feelings about how the e-course went. A trainer may decide to use a particular digital tool within their e-course, only to find that it was not as successful as they had expected. This is natural and all trainers have experienced something that did not go according to plan, and this can happen in any training environment. It is important to reflect, to learn from experience and where necessary to amend, add or remove the use of digital tools to ensure an effective learning experience for all parties.

The use of digital tools and e-courses also provides another benefit. The end of the e-course does not have to mean that learning has finished. Digital tools can be used to create alumni discussion forums for participants. This allows participants to stay connected after the e-course and offers a place for discussion, sharing and continued learning. Trainers can also use such forums to measure the longer-term effects of training activities and e-courses.

4. 4 Conclusions

The use of digital tools in the design and delivery of training and e-courses provides both trainers and participants with some exciting opportunities. No longer are we constrained by the availability and size of training venues, by the availability of expert speakers, or by the belief that training can only be delivered on one specific date and time. The use of digital tools to create e-courses and online learning events enables trainers to increase engagement with participants, develop interactive learning activities and to develop and maintain their own digital knowledge, skills and confidence as trainers. The key to developing the most effective e-courses is to remember that digital technology should only be used if it can add value to the learning experience of the participants and actively contribute to the achievement of the learning objectives.

5. Moving from face-to-face training to online training

5. Moving from face-to-face training to online training

5.1 Main considerations

Training institutions can often find themselves needing to move from a solely face-to-face approach towards a blended approach to training, which includes the use of digital and online training activities. Reasons for the move to online training can include the need to meet increased trainee demand that cannot be met by a traditional teaching approach, the need to provide greater flexibility in the provision of training, the need to support trainees who are unable to travel to attend face-to-face training, and the need to reduce costs and use resources effectively. The journey from face-to-face to online training is not as simple as replicating the face-to-face training structure with a variety of new digital tools. As with face-to-face training, any online or digital training must be thoroughly designed to be effective and engaging and must reflect the learning environment in which the trainees find themselves. Any short cuts taken when moving from face-to-face training to online training are likely to result in poor outcomes for both trainers and trainees. Whatever the reason for the change, it is important to keep certain considerations in mind before redesigning a whole training program:

- What are the learning outcomes of the training program?
- How can you still achieve those outcomes with online training? Should you change the outcomes to better fit the delivery?
- Who is the audience and how will they react if you change the format?
- What are the Institution's resources to convert the program from face to face into online training?
- Can the current trainer deliver online training or should you consider different experts?
- Do you have enough time to make the changes and still deliver an effective training program?

5.2 Conclusions

If after considering these questions, you decide that you do need to move towards the delivery of online and digital training, you will find that the information and guidance contained within this "How to design an e-course" handbook will offer great support along the journey.

Recommendations

The Learning Management System and e-learning team

A Learning Management System (LMS) is an essential tool for distance learning. Take enough time to choose the good platform, and to define the appropriate distribution of tasks.

• Implementing distance learning in a school entails new tasks in the organisation and new jobs. Once the decision to adopt distance learning is taken by the school board or a group of trainers, then a specific team will have to be recruited, or at least, trainers will have to be supported and helped to adapt existing conventional courses and curricula to the specific features of e-learning.

• Looking for quick wins (short courses, easily taught online) is a good way to encourage emulation and create the desire to implement distance learning.

Methodology is the key

The trainers and the participants are the key factors in making e-learning work. You can invest in the latest software and other e-learning solutions, but if the methodology is not accepted by your training stakeholders, i.e. trainers and participants, you will not achieve satisfactory results.

Promote the methodology to your target group. Do not use a laissez faire approach combined with an attitude that “some will like it and some will not”. With e-learning, it is crucial for a training institution to adopt an active role in getting it accepted by their target group. If it is not working, ask why is it not working and try to find workable solutions.

Training the trainers on how to get the best out of the e-learning solutions that are at their disposal is half way to success. The other half is getting participants to finish the e-course, which is ultimately the goal for any course. For that you need a synergy of different factors - expert trainers (whether just to design the e-course or act as trainers), an expert management team, a stimulating institutional climate, and a little bit of e-learning magic.

Confidence, dedication and trying new tools

When choosing tools you will probably encounter one key obstacle: there seem to be too many options.

You might not always have the time and energy to try all of them. As mentioned in previous sections, you can have the best tools in the world, but without viewing your trainers and trainees as the key factors, you will never make the right choices.

Select a user-friendly interface, and think about the end-users, your trainers and your trainees. Employ tools that enable online collaboration. Consider the support services for the tools your trainers will have available, and the technical support or tutorials that will be available to your trainers and trainees. Get feedback from both your trainers and the trainers on how user-friendly and helpful they find the individual tools, and do not be afraid to change to another option on your shortlist; everyone benefits if you act on the feedback you receive.

Offer training on the tools you employ not only to your trainers but also to your trainees, you would be surprised how positively this will affect the whole concept of e-learning and how even the most resistant trainees might start feeling more confident in the world of e-learning tools and platforms. Do not accept

a lukewarm reception from your stakeholders - keep trying with your passion and enthusiasm to convert everyone to see the positive and exciting aspects and the great opportunities and benefits of e-learning, until they start to feel enthusiastic too!

Similar, but not the same

Do not try to exactly replicate face-to-face training in a digital environment or on an e-course. Always consider your learning objectives first; and then decide if they could be achieved using an e-course.

Ensure that all participants have access to suitable technology to attend and complete the e-course. If not, they could lose engagement and interest.

Try new approaches and new technology in training but learn very quickly from mistakes and acknowledge when a learning activity is not suitable for an e-course.

Tips while moving from face-to-face to online

Moving a face-to -face activity to an online activity requires the whole process of creating an online activity to be followed step by step. Any short cuts might lead to a poor training outcome. That said, work done on face-to-face activities will be of great help to progress more quickly through every step of the process.

Glossary

Authoring tool

An authoring tool assists in creating digital content. The tool could be something as simple as Google documents, or as complex as a video production suite.

Asynchronous and synchronous learning

Asynchronous learning refers to forms of education and learning that do not happen in the same place or at the same time (e.g. in an online environment this would be self-guided modules, pre-recorded video content, online discussions etc). Synchronous learning happens in real time (e.g. in an online environment the trainer and the participants interact live at a set time via live chat, live lectures etc.)

Blended Learning

Blended learning is a combination of face-to-face and technology-based online training methods.

Distance learning

Pre-internet, this term was used for asynchronous distance learning where the teacher and the student were at different locations. Today, distance learning can be asynchronous or synchronous but it still refers to the teacher and student being at different physical locations (e.g. distance learning degrees).

E-learning (Electronic Learning)

E-learning is learning facilitated by the use of electronic (digital) resources. Learning and training is delivered using electronic devices such as computers, laptops, tablets and smartphones, and usually over the internet (see also: online learning)

E-course

A specific course delivered using e-learning methods.

F2F (Face-to-Face Training)

Training in-person given by a trainer.

Gamification

Inclusion of game mechanics into a learning process. In e-learning, it usually takes the form of points, badges, and leader boards used to engage and motivate learners

Instructional Designer

Instructional designers are paramount to the process of learning. They are tasked with redesigning courses, developing entire courses or curricula and creating training materials, such as teaching manuals and student guides. They might be trainers, but can also be the trainers' trainer, framing instructorsˇ ideas into the shape of the LMS or other digital platforms.

Interactivity

In distance learning, interactivity can be defined as the level of "dialogue" between participants and their learning environment (learning tools, learning resources, etc.), and the capacity of the course to adapt to participants' needs and wishes.

LMS (Learning Management System)

Software application for the administration, documentation, tracking, reporting, automation and delivery of educational courses, training programs, or learning and development programs.

Mentor

A trainer in an e-course who assumes a similar role to a trainer in face-to-face training, also referred to as a tutor, instructor or teacher.

Mentored e-courses

E-courses directed by trainers, also referred to as instructor-led e-courses.

Micro-learning

Micro-learning can be defined as content delivered on demand, in bite-sized chunks of ten seconds to one minute in length. A good micro-learning authoring tool will allow you to create such small learning "packages "very quickly and easily.

m-Learning

Also known as mobile learning, this is a new way to access learning content using mobile devices. It is possible to learn whenever and wherever you want, as long as you have a modern mobile device.

Module

A part or a unit usually used to build an e-course structure. A module can consist of various resources and activities (files, assessment content, media content, etc.)

Moodle

Moodle is a modular system based on plug-ins, which are like Lego blocks that you put together to build whatever you want. There are plug-ins for different kinds of content, and plug-ins for all kinds of collaborative activities.

Online learning

Learning delivered using digital resources online (see also: eLearning).

Open source software

Open source software (OSS) is software that is distributed with its source code, making it available for use, modification, and distribution with its original rights. An open-source tool makes its source code freely available to everyone to inspect, modify, and enhance according to their education needs.

Participants

Persons participating in a training activity also referred to as learners or trainees.

Podcast

A digital audio file consisting of spoken words from an expert, a trainer or a lecturer, that can be used as a training resource. Participants can access podcasts and listen to them at their own convenience.

Self-paced learning

Learning not directed by a trainer. Participants are in charge of their learning process (when, how, to what extent, etc).

Synchronous/asynchronous

A synchronous learning experience needs participants and mentors / trainers to be connected at the same time on the same e-learning tool. In contrast, an asynchronous learning experience enables participants and trainers to be connected whenever they so wish or are able.

Webinar

Lectures and presentations delivered to participants anywhere in the world through the use of an online communication tool, such as Skype, Zoom, Go To Webinar, etc.

Annex 1: Decision Support Tool for choosing the interactivity level

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Elements to be addressed to define the level of interactivity required for a resource/course:

The goal for online courses is to offer resources that are as interactive as possible, so to maximise the trainees' experience. However, budgets and the time available are limited. So here are 4 key factors to help you determine the most suitable level of interactivity for your courses:

1. How long is the period of time before the course/resource is launched?

Close to launch — Launch is far into the future

\- conceivable level of interactivity +

Time needed for implementation depends a great deal on the level of digitalisation anticipated. A high level of digitalisation will often mean using an external provider.

2. How big is the budget allocated to implementing the course/resource?

Reduced budget — High budget

\- conceivable level of interactivity +

Budget depends a great deal on the level of digitalization.

When deploying an online course, ensure some budget is earmarked for trainee support (hotline, tutorship, etc.) and for LMS management. The whole budget must not be spent only on creating resources!

3. What is the strategic interest of the resource within the whole course or the school?

Low stakes — High stakes

\- conceivable level of interactivity +

Will the resource be used in different courses? Is the course designed for different audiences? Is creating this resource is a high-stakes issue for the school's reputation?

The higher the stakes, the higher the level of interactivity targeted.

4. What is the lifespan of the course/resource? How often will it be updated?

Frequent updates — Stable content (few updates)

\- conceivable level of interactivity +

A high level of interactivity means more complex updates to be implemented. It is consequently advisable not to aim for too high a level of interactivity if resources are bound to need frequent updates.