Blend4VET

Blended Learning in VET Sector

Exploring Blended Learning Approaches **for VET**

TOOLKIT

June 2018

belfast met | CDETB | h2 | KONING WILLEM I COLLEGE | TARTU KUTSEHARIDUSKESKUS | USURBILGO LANBIDE ESKOLA

Co-funded by the Erasmus+ Programme of the European Union

Project Partners:

- Belfast Metropolitan College, United Kingdom (Lead)
- City of Dublin Educationand Training Board, Ireland
- CIFP Usurbil LHII, Spain
- Tartu Kutsehariduskeskus, Estonia
- Koning Willem 1 College, The Netherlands
- H2Learning, Ireland

Blend4VET Pilot Project

The main aim for Blend4VET is to pilot a blended learning model to effectively integrate technology into an existing course to enhance the teaching and learning experience for teachers and learners. This will allow colleges the opportunity to offer courses that better meet the needs and demands of their learners and employers.

This pilot focused on moving a number of existing face-to-face courses to a blended online version over a two-year period to enhance access and provide learners with greater choice and flexibility in terms of what they learn and how they learn.

This method of learning will enable both teachers and learners to engage in ways that would not normally be available or effective in a traditional face-to-face classroom style. This adds value right across the vocational educational sector for both the learner and the teacher. Learners have an increasing expectation that resources will be available for them to access anywhere and anytime.

The act of "blending" achieves better learner experiences and outcomes, and more efficient teaching and course management practices. It can involve a mix of delivery modes, teaching approaches and learning styles. (Bath and Bourke, 2010)

Blend4VET Toolkit

The purpose of this Toolkit is to provide a free educational resource for FE Colleges to explain how Blended learning can be delivered. This toolkit is designed for new and more experienced tutors/teachers who wish to introduce a blended programme to their college. The information gathered in this toolkit is based on the experience and research of the six European partners conducting the pilot the programme and was produced over a sixteen month period.

Section one of the toolkit will give an Informative overview explaining the objectives, outcomes and benefits of Blended learning. Section two details the process of designing your blended course from the initial planning and developing to implementation and review. There are a range of different Blended Models that a college can adopt, six examples of these Models are explained in Section 3. Section 4 has links to tutorials on digital tools that were used during the pilot and suggestions on how they can be implemented. Section 5 contains a link to the Case Studies each partner conducted as part of the project while Section 5 details the evaluation and recommendations of the Blended Learning Approach.

Please be advised that the current links within the toolkit have a shelf life. These may be updated or may no longer exist in time.

The toolkit is openly available through our website www.blend4vet.eu and any interested institution may access and use the included resources. The project partners invite any interested institution to contact us to access additional resources and training materials.

Table of Contents

Section 1

Introduction to Blended Learning

1.1 Introduction to Blended Learning

Blended Learning is a formal education strategy where learners learn partly through traditional classroom methods and partly through online (e- learning using digital technologies). This combination of blending adds value right across the Vocational and Educational Sector to both learners and teachers. Research suggests that there is not one single shared definition for the term blended learning (Rochester Institute, 2004; Smith, 2004). The Clayton Christensen Institute defines blended learning as:

> ***A formal education program in which a student learns at least in part through online learning, with some element of student control over time, place, path, and/or pace; at least in part in a supervised brick- and-mortar location away from home; and the modalities along each student's learning path within a course or subject are connected to provide an integrated learning experience.***

In a blended-learning course, learners attend a class taught by a teacher in a traditional classroom setting, while also independently completing online components of the course outside of the classroom. The online and in-person learning experiences would go in parallel and complement one another.

Blended teaching occurs through online Learning Management Systems (LMS) such as Moodle, Canvas, Blackboard or Google Classroom. Learners gain access to online pre- recorded lectures, notes and reading, as well as, assessment worksheets and assignments. It also allows learners to interact with their teacher and fellow students through webinars, online group activities and discussion forums.

Online activities may take place synchronously, with every learner logged in and cooperating in real-time, or asynchronously with learners participating at their convenience. The classroom time is facilitated by a teacher and is more likely to be focused on structured exercises/activities that emphasise the relevance of the curriculum, to solve problems or work through tasks that were uploaded on the LMS. The classroom gives time for activities that benefit the learner by direct interaction.

1.2 Blended Learning Approaches

Blended learning can be delivered through a range of different approaches. The balance between online and face-to-face components will depend on the course curriculum, the college and the needs of learners.

Online learning may be a minor component of a classroom-based course or, in contrast, learners may work independently online and intermittently meet with tutors to review their learning progress or receive support.

Good practice in blended learning doesn't necessarily mean adopting a wide range of technologies for a particular course. It can mean simply using a few tools, but in effective ways, to achieve quality in teaching and learning.

Digital technology can be introduced on your chosen cloud based platform on a sliding scale as follows:

Examples chosen cloud based platform: G Suite for Education, Moodle, Canas, Microsoft Office 365

Example One: The tutor may upload lecture notes, presentations, worksheets on their course site, regularly use announcements and email. In this example, digital technologies are used to facilitate course resources for learners.

Example Two: The tutor can integrate different digital technologies, such as videos, screencasts, interactive presentations and quizzes. Discussion forums can be utilised using tools like Padlet or Mentimeter between tutor and learners, or an informal 'learners only' forum. In this example, learners are communicating and collaborating effectively with each other and their tutor using various digital technologies.

Example Three: Digital technology is fully integrated in the delivery of the module. The core elements of the course are delivered online with minimal face-to-face teaching.

1.3 The Benefits for Blended Learning

There are benefits for providers, teachers and learners.

1) Provider

- **Lower Costs:**

Blended learning can be relatively inexpensive. Colleges can take advantage of existing IT equipment with access to whatever current learning management system (LMS) they already have in place. Teachers can integrate online resources, such as course documents, lecture notes, assignment sheets and other hard-copy handouts etc at little or no extra cost. As new technologies develop they can be added to the mix to make learning more focused and engaging. Long-term costs can be curtailed with reduced expenditure on textbooks, paper and photocopying. Blended learning can also facilitate a move toward paperless learning.

- **Retention and Increased Learner Numbers:**

Today's learners need to develop the critical-thinking and creative skills demanded by modern employers. Blended learning helps teach these skills by encouraging learners to work, share and collaborate online thereby preparing them for the modern workplace. This progressive approach can result in greater learner success, a higher retention rate and an increase in the number of new learners year on year.

- **Appeal to a broader range of Learners:**

It will create opportunities to connect with distance learners as well as giving access to a potential market of learners who would like the support of studying at a physical college without the commitment of full-time study. Despite the benefits of distance learning, many potential learners are still uncomfortable at the prospect of studying entirely by themselves. Providing learners with a combination model which blends learning in their own time with part-time attendance would alleviate this concern.

- **Flexible schedule/timetable:**

Blended learning allows the provider to offer teachers a more flexible schedule, which can be part of a strategy to maximise classroom space and/reduce the number of overcrowded classrooms.

2) Teacher

- **Course Structure:**

Teachers can structure courses and deliver instruction more flexibly and creatively than in a traditional classroom setting.

- **Time – Management:**

Blended learning allows the teacher to engage learners in a deeper and more meaningful context in the classroom. Teachers can better utilize face-to-face time with learners. Teachers can spend less time giving whole-class lessons and more time meeting with learners individually or in small groups to help them with specific concepts, skills or questions.

- **Support:**

E-learning allows more effective interaction between the learners and their teachers through the use of emails, discussion boards and chat room. The teacher also can provide supplementary support to learners outside of class time. E-learning gives teachers the means to check how individual learners or whole classes are performing and better information and feedback on learners' work increases learner engagement.

3) Learner

- **Independence**

Learners often develop independence and motivation by working in their own time at their own pace. They become self-driven and responsible for tracking their individual achievements.

- **Provides student autonomy**

The use of eLearning materials increases a learner's ability to set appropriate learning goals and take charge of his or her own learning, developing skills that will be translatable across all subjects.

- **Support**

Learners experience the personal engagement and support of interacting with their tutors and peers while also benefiting from the flexibility of online delivery.

- **Technological Literacy**

Learners are required to use digital and online technologies in blended-learning situations thereby improving their technological literacy and developing greater confidence in using new technologies.

- **Flexibility**

Working online, with access to unlimited up-to-date resources, gives learners greater time, flexibility, freedom and convenience to manage their learning in a way that meets their individual needs.

- **Learner Activity and Collaboration**

Active engagement with course material is vital for learning. Research demonstrates that learning is not only more likely to occur, but is more enriched (qualitatively better), when students go beyond the passive tasks of listening, reading or viewing. Since Blended learning encourages both individual and collaborative activity, it facilitates exactly this type of active engagement giving students the opportunity to test their ideas, synthesize the ideas of others, and build a deeper understanding of what they are learning. Finally, experiences of discussion and debate can support the feeling of community and collaboration among learners.

1.4 Digital Technologies

Learning Management Systems (LMS) are online software tools that provide learners with controlled access to learning materials specific to their course. As mentioned previously Moodle, Canvas, Blackboard and Google Classroom are popular examples that colleges use today. LMSs are used to support today's learners with a wide range of tools and course-specific content. All modules or courses have their own area, which can be configured and organised by the teacher according to the curriculum design and learning outcomes. Breaking down content and avoiding excessively long pages will keep learners engaged and enthusiastic. The main advantage of LMS's is they can be used on all devices such as PCs, smartphones and tablets.

Material on the LMS, which can include audio, video, images, and links to other sites, is available to view and download 24 hours a day. Tutors need to remember to be aware of copyright and intellectual property regulations when uploading materials to their LMS. Submitting coursework via the LMS can bring much efficiency for teachers and is very popular with learners. The LMS should not be a passive learning experience. Interactive activities and learner-generated content are a huge part of it.

Teachers can set an assignment for learners to write a collaborative document using the Wiki tool. This type of assessment is real-world, authentic and efficient for markers. Learners can practice quizzes with multiple-choice questions that offer instant feedback and scoring. Discussion forums can work well but need to be carefully planned, well promoted and managed. A very valuable aspect of an LMS is facility it has to provide data analytics about learners' engagement with materials and activities. This can help support learners who are struggling and need extra support.

For Further information on LMS see the following:

Learning Management Systems Comparison
https://elearningindustry.com/learning-management-systems-comparison-checklist- of-features

Canvas:
https://www.canvaslms.eu/

Google Docs:
https://www.googleclassroom.com

Blackboard:
http://uki.blackboard.com/

Moodle:
https://moodle.com/?gclid=CjwKEAiAkuLDBRCRguCgvITww0YSJAAHrpf-Q2Nx0YQerF_44majzeZ9ZJxQUIl80cspcURtEs5oUBoCJ0vw_wcB

1.5 Digital Training for Teachers

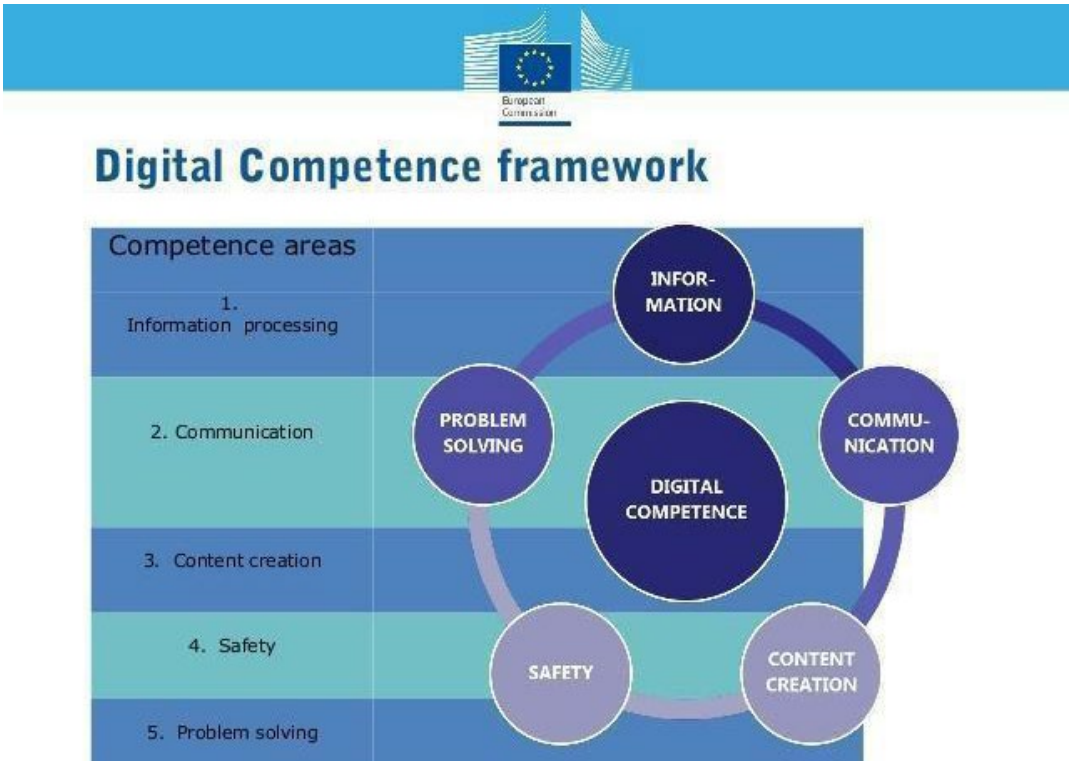
Here are some useful links to online materials and training resources to help teachers boost IT and digital literacy skills. You may find it useful to look at them all briefly and then choose one that best suits your style of learning/teaching and your needs.

http://www.bbc.co.uk/webwise/0/
http://www.open.ac.uk/libraryservices/beingdigital/pathways/13/14
https://www.microsoft.com/en-us/DigitalLiteracy
http://jiscdesignstudio.pbworks.com/w/page/60226781/Developing%20your%20digi tal%20literacies
https://www.webarchive.org.uk/wayback/archive/20160101151403/
http://www.jisc digitalmedia.ac.uk/infokit/video-planning/video-planning-home
http://www.connectsafely.org/wp-content/uploads/eduguide.pdf

1.6 The European Digital Competence Framework

The European Digital Competence Framework for Citizens, also known as DigComp, offers a tool to improve citizen's digital competence for work and employability, learning, leisure, consumption and participation in society.

The DigComp framework describes digital competence and groups the competences into five areas.

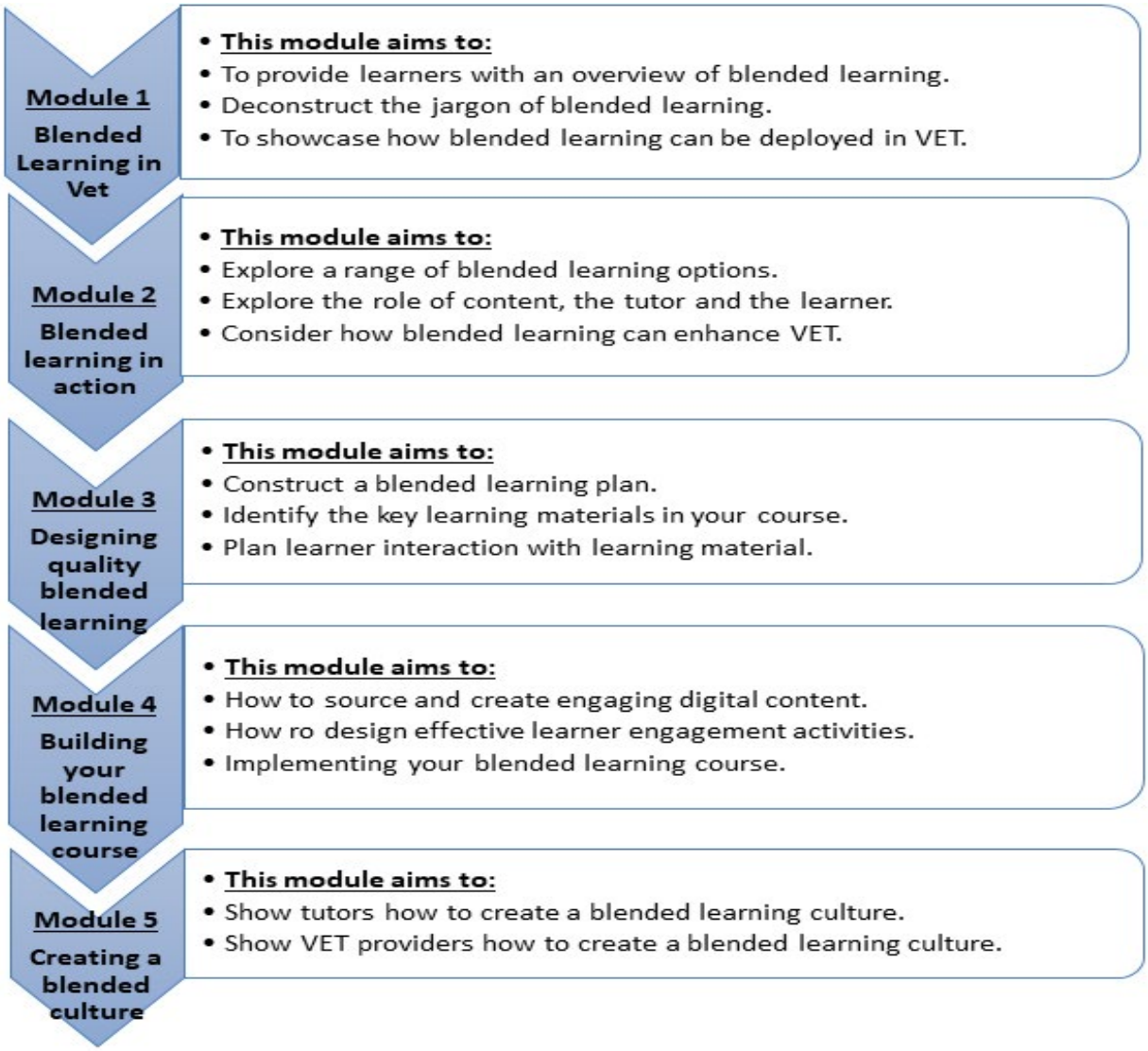


Digital competency means that people need to have competences in each of these five areas. Further information can be found on https://ec.europa.eu/jrc/en/digcomp/digital-competence-framework. Please note that there may be National Frameworks in place in individual countries.

1.7 Blended Learning for the Project Partners

At the start of the project all partners participated in online training. H2 Learning designed innovative online learning courses that were developed to prepare VET teachers to design and develop their unique blended learning units. The training allowed partners to develop a shared understanding of blended learning within the project, exchange experiences and deliberate on the introduction of blended learning into each of their own organisations.

The context for this course covered the following five modules:



For Further information on the course visit our webpage: www.blend4vet.eu

Feedback from all partners on the training and how beneficial it was:

1.8 Plagiarism

Online tools are available that can detect plagiarism in work submitted by learners. These detect possible issues of plagiarism by text matching learners' work with a range of other works such as documents available for public access on the Internet and certain library and institutional databases. Such tools generate a report that provides a percentage of similarity between the learners work and other documents, outlines which part/s of the assignment contains matched text and lists the sources where the similar or identical text has been found.

There are many learners who simply don't understand what plagiarism really means. They haven't yet developed the skills required for academic writing. It is important to remember some learners have come straight from second level school, or have come as mature students who have had very little experience in formal writing work.

There are a range of ways in which you can support learners in learning about academic writing and how to avoid plagiarism.

Resources -For information on Plagiarism:
http://turnitin.com/en_us/resources/category/preventing-plagiarism

1.9 General References

6 Blended Learning Models and Platforms :
http://www.teachthought.com/learning/blended-flipped-learning/6-blended-learning- models-platforms/

Blended learning in 2 minutes and 38 seconds (Video)
https://www.youtube.com/watch?v=Q5txJfv2q0c

Blended Learning Implementation Guide (Video):
https://www.youtube.com/watch?v=pENW-RtPEIw

Blended Learning Definitions (Christensen institute) :
http://www.christenseninstitute.org/blended-learning-definitions-and-models/

Blended Learning Infographic :
http://www.gettingsmart.com/wp-content/uploads/2016/08/Blended-Learning-Blog- Infographic-1.png

Blend My Learning Videos:
http://www.blendmylearning.com/videos/

Getting Started With Blended Learning (Griffith University):
https://www.griffith.edu.au/__data/assets/pdf_file/0004/267178/Getting_started_with_blended_learning_guide.pdf

What Is Blended Learning?:
https://www.mindflash.com/elearning/what-is-blended-learning/

What Blended Learning Looks Like in the Classroom (Video) :
https://www.youtube.com/watch?v=NPvreKWaKjY&t=8s

What is Blended Learning? (Video) :
https://vimeo.com/89546618

Section 2

Planning and Designing

2.1 Introduction

The purpose of Blended Learning is to use digital technologies to enable every learner to achieve their learning potential. The important priorities are to provide learning that is flexible, engaging, personalised to the needs of the individual and inclusive of the needs of all learners.

To look at designing a blended learning programme within a course the tutor must first look at the overall curriculum design:

1) Learning outcomes
2) Curriculum content
3) Learners' needs
4) Pedagogic approach
5) Assessment methods

This section provides guidance in the process of Planning and Designing a blended learning approach to an existing course currently being taught.

It is necessary to be conscious that the learner learns in many different settings. Using mobile technology, they can actually access course material from anywhere using LMS (more detail in section three on digital technologies). Therefore, they can access the material when they want. The whole idea of blended learning is to give the learners flexibility and the option to learn at any time or in any place that suits them. A LMS allows colleges to use lots of rich media such as animation, video, podcasting, as well as the written word to provide the support learners are looking for as they work their way through their selected courses.

2.2 Planning a Blended Learning Approach

The blended learning approach needs to be engaging so that the learner can take ownership of their learning rather than being a passive receiver of information. As with any curriculum, the learning and teaching activities need to be meaningful and integrate into the whole course experience for the learner.

Planning is key at the initial stage of the transition from a face-to-face course to a blended approach. There are three areas to look at during the planning stage. Firstly, it is necessary to review the existing course. This involves reviewing the course aims and learning objectives, teaching activities, and assessments. Secondly, looking at the overall college influence and culture, as well as the professional accrediting bodies involved. Thirdly, taking account of the cohort of learners likely to enroll and participate on the course.

2.2.1 Course Review

It is important to undertake a content inventory of the existing course in order to identify those aspects of the course which require face-to-face interactions and the learning outcomes which can be met using digital tools and strategies. . Are there any aspects that you would like to improve either from your own or your learners' perspective? (e.g. assignment submission and handling, course communication, assessment guidelines, certain activities or content). Perhaps online learning can solve current issues.

2.2.2 College Review

It is important to consider the college resources and the teaching team involved. Both are involved in contributing to the design and development of the course and its resources. The following questions are to be considered at the start of the planning stage. These may lead to additional questions based on your answers and your college.

1. Are there computer labs and efficient WIFI available for learners?
2. What time commitments are involved in development and/or teaching?
3. What teaching experience and level of technical knowledge/ skill do they have?
4. Will blended learning 'fit' within this culture?
5. Is there the infrastructure or resources to support the technologies?
6. Are there industries or professional awarding bodies' specifications which have impact on the course?

Identify where your course fits within the broader program of study and check other courses to achieve balance and cohesion with assessment due dates and use of technologies etc.

2.2.3 Learner Review

It is important to ensure that Blended Learning is appropriate for the learner. The cohort of learners will determine the Blended Learning approach, some learners may:

- Be from different socio-economic background,
- Have disabilities,
- Be mature learners,
- Have a high level of work/family commitments.

There are a range of factors that will influence the amount of online learning. Examples include the following:

- The level of skills or familiarity learners have with technology
- The number of learners in a class.
- ESOL learners (English as a second language) who could be facilitated by the recording of lectures. (Learners find it useful listening at their own pace and/or several times for clearer understanding).
- Learner accessibility to technology (PC, Ipad, Mobile) and a broadband internetconnection.
- Consider how easily aspects of your course can be adapted to suit learners with additional needs.

NOTE: Remember to provide sufficient time and resources for learners to familiarise themselves with and acquire the skills needed to use the particular technology before they have to formally engage with it.

2.3 Design and Develop Units:

Once you have reviewed the planning considerations of the course you can move to designing the Blended Learning components. There are a variety of digital tools used to integrate Blended Learning in the key areas of communication, collaboration and assessment. The face-to-face teaching should be clearly integrated with the content and the learning objectives of the online section of the course.

The activities should be purposeful and, where appropriate, have real-world activities so that learners can demonstrate their competency in a more 'true-to-life' setting.

The workload for a blended learning course should not exceed that of a course in traditional mode. Keep in proportion the time, effort and resources involved in developing Blended Learning in relation to achieving the learning outcomes of the course.

The following questions might help you work through the design process and identify, in advance, any potential issues that need to be addressed.

Specific design questions:

- What sections of the programme are more suited to face-to-face delivery?
- What sections of the programme are more suited to online delivery?
- What do I want the learners to complete face-to-face/online?
- How will Blended Learning help learners' learning?
- What benefit will it be for the learner to engage in the blended learning elements?
- How will I know/measure if students have achieved the desired outcomes?

Broader course issues:

- How accessible is the technology for learners?
- What costs, if any, are involved?
- What time is needed for planning, design, and development?
- What technological support has the college in place to support the tutor and the learners?
- Will other staff be involved, and in what ways?
- Will they need training and support?
- What initial preparation is required by tutors?

Students may not complete a blended learning course if:

- The workload is too great – if blended learning and face-to-face elements are not integrated, but simply run independently from each other, the overall workload is often far greater than when using only one mode of delivery. Keep learner workload at an appropriate level.
- They are provided with inadequate or no support and/or are confused about what is required of them. It is important to ensure learners are appropriately "oriented" at induction to the course design.
- They experience problems with technology – high-tech is often high-risk, so make sure you have tested the technology from a learner's perspective and provided adequate information and support.

Integration of Digital Tools:

It is important to think carefully about the integration of the digital tools into the course. There are a wide range of digital technologies/tools available to support blended learning in formal and informal learning. Below are some specific examples of blended learning approaches to support learners' achievement of particular learning objectives.

Example learning objective	Blended learning approach to support the objective
Recall key terms and definitions	Weekly or end of learning outcome provides an online quiz (either for revision or summative assessment purposes). Explore the use of matching or ordering question types as well as multiple choice questions.
Skills Demonstration showing a key learning outcome	Provide a video (these could be online as YouTube videos or EDpuzzle). During viewing ask questions and request opinions. Or/also After viewing get students to post their responses to trigger questions through a discussion forum.
Group presentation on a relevant topic to the class using PowerPoint.	Consider a group work activity to facilitate learner learning. For example set up a padlet for each group to allow students to work online collaboratively discussing and sharing their ideas.

Whatever blended learning elements you choose it is important that they are integrated into the whole course experience. As part of the design and development phase, consider creating a course map or plan that shows the elements of the course in relationship to one another and how they will be delivered across the course.

Example;

Face-to-face	Lecture on a topic
Online	Quiz/video and worksheet (based on lecture topic)
Face-to-face	Tutorial discussing the questions resolving difficulties
Online	Discussion Forum for further discussion/answer questions on the topic

The above is a simple representation of how each element works together to support learner achievement of particular learning outcomes – the teaching and learning activities (lectures, tutorials, online quizzes, discussion) are specifically designed to support learners' achievement of the learning outcomes.

Here is a link to the top 200 digital tools available and what they can be used for:
http://c4lpt.co.uk/top100tools/

Section four of this toolkit provides a link to a tutorial of the main tools that were used during the pilot project by the partners.

Section 3

Implementation - Blended Learning Models

3.1 Introduction

There are many VET providers across Europe implementing Blended Learning. This toolkit will focus on six main models on how a college of Further Education can implement a blended approach. It is important to note that not every college fits neatly into a single model, all blended-learning implementations are generally a combination of one or more of these models.

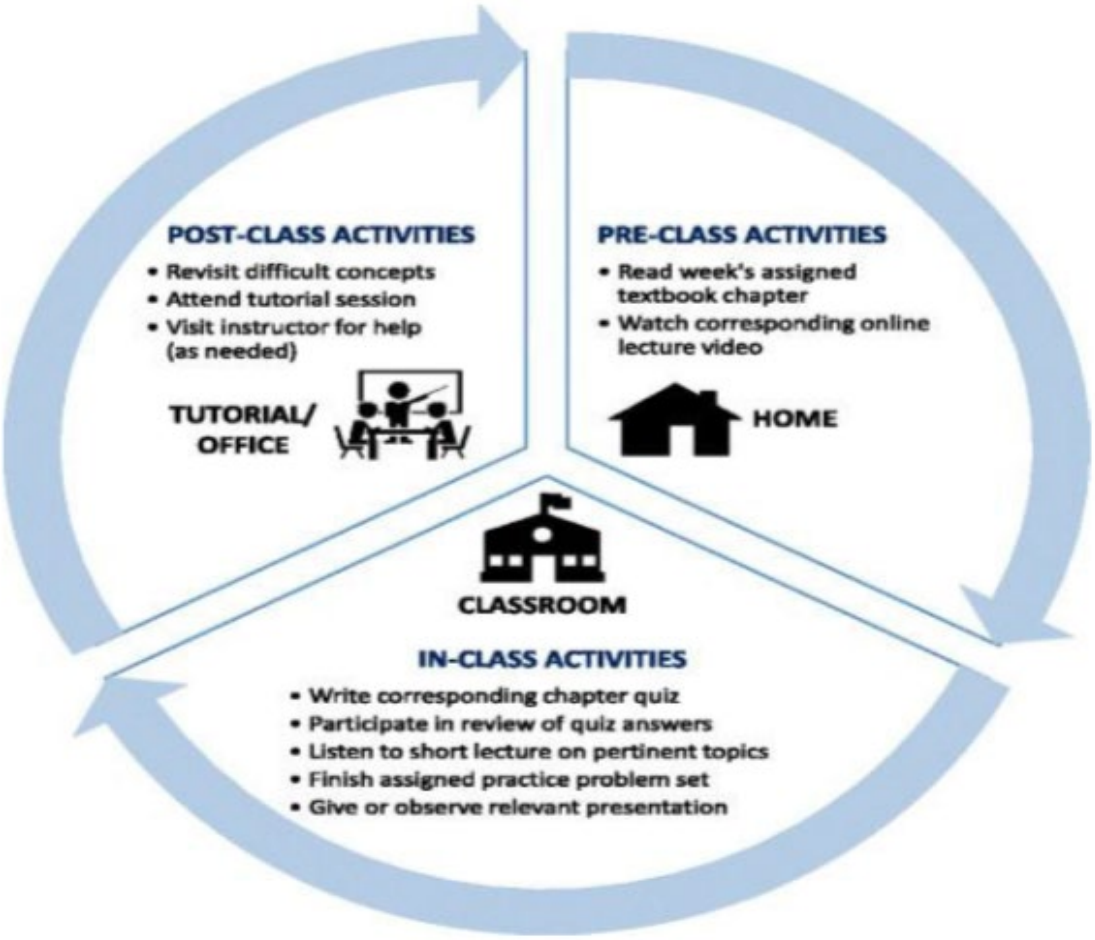
3.2 Methodologies used in Blended Learning

3.2.1 Model 1: Flipped Classroom

The flipped classroom model is where the lecture and homework elements are reversed. Learners first gain exposure to new material online and off-site in their own time, via watching, reading or listening to a pre-recorded video/lecture/podcast over the web. This allows learners to engage with interactive content and focus on key concepts prior to class and so time in class, on-site can be more usefully spent on collaborative activities that clarify the information provided and encourage problem-solving, discussion or debate.

Flipped learning engages learners by means of responsive learning environments, designed to prepare and motivate them to confidently undertake assessment tasks through interactivity.

Flowchart of the Flipped Classroom structure and settings.



For Further information to explore the Flipped Classroom, visit the following links:

The Tutors Guide to Flipped Classrooms:
http://www.edudemic.com/guides/flipped-classrooms-guide/

Flipped Classrooms Infographic:
https://www.knewton.com/infographics/flipped-classroom/

The Flipped Class Blog:
http://blendedclassroom.blogspot.ie/

3.2.2 Model 2: Station Rotation Model

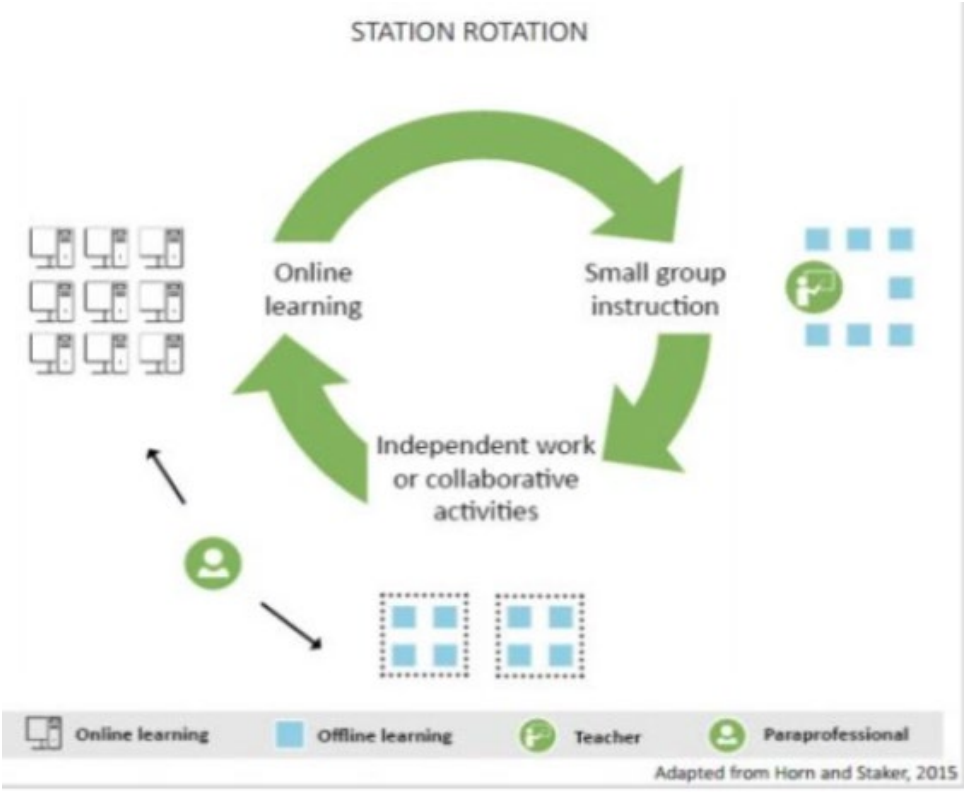
The station rotation model includes any course or subject in which learners rotate either on a fixed schedule or at the tutor's discretion within a single class. Learners rotate among online learning, direct instruction from a tutor at their desks and small-group work among themselves. Or they can rotate between online learning and whole-class discussion/lecture.

Online learning will take place on site in the college using classroom computers with learners completing a variety of activities, including, but not limited to, reading articles, watching videos/ listening to podcasts or carrying out assessments. Through these online activities, learners have opportunities to work independently and privately.

For the face-to-face learning, learners receive direct instruction from a tutor followed up by a variety of activities, which could include independent reading or other pencil-and- paper tasks. Small-group work can also be used to complete skill tests, work on projects or discuss/debate important coursework topics.

One strength of this station rotation blended learning model is that tutors increase their opportunities to work with small groups of learners. This component can benefit tutors who work with large group sizes. Small group work with learners makes it possible to address the different needs of individual learners and to engage them in the subject based on their knowledge and depth of understanding.

Flowchart for Station Rotation Model



For Further information to explore the Station-Rotation Model, visit the following links:

The Station Rotation Model of Blended Learning:
https://www.gpaed.com/station-rotation/

How to implement the Station Rotation Learning Model:
http://www.dreambox.com/blog/thoughts-implementing-blended-learning-model

The Station Rotation Learning Model (video):
https://www.youtube.com/watch?v=QKghZNGL3eM

The Station Rotation Model of Blended Learning:
https://www.readinghorizons.com/blended-learning/models/rotation-model

3.2.3 Model 3: Enriched Virtual Model

The enriched virtual model is an alternative to a full-time online course. This model allows learners to complete the majority of coursework online, at their own pace, in their own time outside of the college, but they must attend college for required face-to- face learning sessions with a tutor. Learners can be timetabled to attend college face-to- face as required.

For Further information to explore the enriched virtual model, visit the following link:

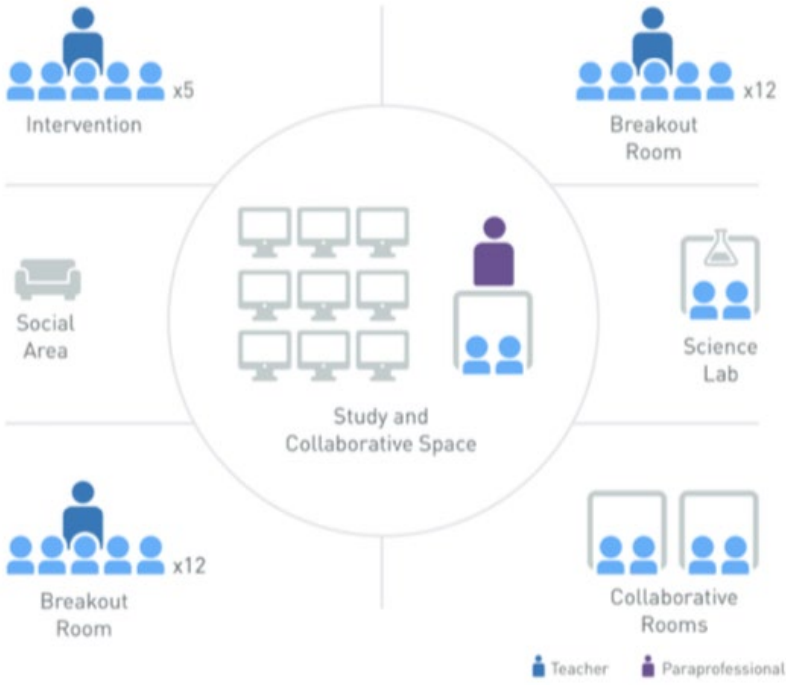
Enriched Virtual Model (video):
https://www.youtube.com/watch?v=N-YPJyhkvbg

3.2.4 Model 4: Flex Model

The flex model uses online learning to deliver the main content of the course with learners still learning primarily on-site. Every class is divided into online and offline components. The tutor provides face-to-face support on a flexible basis through activities such as small-group instruction, group projects, and individual tutoring.

The college can require learners who aren't making progress on their own to attend small group sessions, while allowing learners who are moving at a faster pace to attend them if they choose. Apart from small-group instruction, tutors are available to provide one-on-one help to learners when needed.

Flowchart for Flex Model



For Further information to explore the Flex Model, visit the following links:
Spotlight on, The Flex model of blended Learning:
http://www.dreambox.com/blog/spotlight-on-the-flex-model-of-blended-learning
The Flex Model (video):
https://www.youtube.com/watch?v=jMRYMRzowCI

3.2.5 Model 5: A La Carte Model

The á la carte model offers a learner the opportunity to take one or more courses online in addition to traditional courses at a brick-and-mortar college. When using the à la carte model learners may choose between online and face-to-face courses at their convenience. The tutor for the à la carte course is the online tutor.

Learners who take courses á la carte can at the same time continue to have face-to-face educational experiences at the college.

For Further information to explore the á la carte model, visit the following links:

The A la Carte Model (video):
https://www.youtube.com/watch?v=RuXd0L0DZC8

The A la Carte Model (video):
https://www.youtube.com/watch?v=adqwaFlEDQ4

3.2.6 Model 6: Lab Rotation Model

Lab rotation model is very similar to station rotation, except that with lab rotation, learners fulfill the online learning part of instruction in a computer lab rather than in the classroom. One benefit of this model is that using the lab frees up classroom space for other activities within the rotation model.

For Further information to explore the Lab Rotation Model, visit the following link:

The Lab Rotation Model (video):
https://www.youtube.com/watch?v=wmp-aV0bPuE

Section 4

Digital Tools
Supporting Blended Learning

4.1 Introduction

There are a wide range of digital technologies that have been used successfully with learners within classroom settings. All of the technologies chosen for the purpose of this toolkit supplement face- to -face learning activities. They are engaging, interactive and flexible and all of them will work seamlessly across desktop computers, laptops, and mobile devices. This is an important feature to look out for when evaluating a tool. All of the open tools described here are freely available and can be used in many teaching and learning context. To create successful educational experiences, you must ensure that the selected technology works well with the intended teaching approach. Trying a variety of different methods of technology will engage learners and enhance their learning experience.

The following digital tools were used by the partners during the pilot programme.

4.2 Tool 1: Screencast

A screencast is a digital recording of computer screen output, also known as a video screen capture, often containing audio narration. Screencasts provides learners with a learner-centered approach to learning which can be experienced in both online and face-to-face settings.

Software to create a Screencast
There are many different tools available to create screencasts.

- Cam Studio
- Camtasia
- Screenr
- Screenflow
- AviSreen
- Jing
- SnagIT
- Wink
- Adobe Captivate
- Screencast-o-Matic

Please use the following link to learn to how to create a Screencast using Screencast-o-Matic:
https://www.youtube.com/user/screencastomatic

4.3 Tool 2: Nearpod

Nearpod enables tutors to combine presentations, collaboration, and real-time assessment tools into one integrated solution. Tutors can use nearpod effectively in the classroom to support learning and as an instructional tool to discuss, review, or evaluate individual responses.

Please use the following link to learn to how use Nearpod:
- https://www.youtube.com/channel/UCvFJLTw-LJWne-fy5XvTn2w

4.4 Tool 3: ED Puzzle

EDpuzzle provides tutors with a free learning space to create and edit videos and enhance them with embeddable questions. EDpuzzle gives the options to trim, record voice and embed questions to a video and hold the learners accountable while they watch the video.

Please use the following link to learn to how use EDpuzzle:
https://www.youtube.com/channel/UC-wRQQ_gfvSomuZJaBLRshQ

4.5 Tool 4: Kahoot!

Kahoot is game-based learning tool used to discover, create, play and share learning games. This tool can be used to capture learner knowledge throughout the course in a fun way.

Please use the following link to see how to use Kahoot:
https://files.getkahoot.com/academy/Kahoot_Academy_Getting_Started_Guide_2nd_Ed_- _ June_2016.pdf

4.6 Tool 5: Prezi

Prezi is a presentation tool that can be used as an alternative to traditional slide making programs such as powerpoint. Instead of using slides, Prezi makes use of one large canvas that allows you to plan and zoom to various parts of the canvas and emphasise the ideas presented there.

Please use the following link to see how to use Prezi:
https://www.youtube.com/watch?v=Nvs0h3zreU0

4.7 Tool 6: Padlet

Padlet is an online bulletin or discussion board that tutors can use to display information or create collaboration among learners. Tutors can add images, links, videos etc.

Please use the following link to see how to use Padlet:
https://www.youtube.com/watch?v=UuzciL8qCYM

4.8 Tool 7: Audacity

Audacity is a multi-track audio editor and recorder. This tool can be used for live audio and recording feedback to learners on assignments.

Please use the following link to see how to use Audacity:
https://www.youtube.com/watch?v=fGJ8wIRy7gA

4.9 Tool 8: Thinglink

ThingLink is an image interaction technology tool that helps learners become fluent in using digital media to express themselves and demonstrate their learning. With ThingLink, tutors and learners can easily create interactive infographics, maps, drawings, and engaging 360 documentaries in a classroom setting, at home, or on field trips.

Please use the following link to see how to use Thinglink:
https://www.thinglink.com/edu

4.10 Tool 9: Google Hangout

Google Hangouts is a communication platform developed by Google which includes messaging, video chat, SMS and VOIP features for free. Connect with learners across computers, Android, and Apple devices.

Please use the following link to see how to use Google Hangout:
www.hangouts.google.com

4.11 Tool 10: Google Forms

Google Forms allow tutors to create custom forms for surveys and questionnaires for learners. All responses are gathered in a spreadsheet and allows the tutor to analyze data right in Google Sheets.

Please use the following link to see how to use Google Forms:
https://www.google.com/forms/about/

4.12 Tool 11: ClickView

ClickView for VET Colleges is designed for learner centred learning. It enables tutors to embrace flipped teaching and allows VET colleges to create an innovative educational environment that fully utilises blended learning.

ClickView offers over a thousand educational videos all accompanied by resources and worksheets. Using the innovative tools allows tutors to build-in questions or problems, which encourages learners to engage more deeply with the video.
All videos can be easily embedded within your LMS.

Please use the following link to see how to use ClickView:
https://us.clickview.tv/

4.13 Tool 12: Zeetings

Zeetings deliver interactive presentations that combine your PowerPoints and PDFs with video, web content, images and polls. Everyone participates from their own device, in person or remote, in real-time or in their own time. No need to download or install a thing. It just works.

Zeetings can facilitate a dialogue. Empower learners to ask questions, post comments, take notes and connect with everyone that tunes in. It can all be anonymous so people share what they're really thinking and it's all saved so you can review it later and the conversation can continue. Zeetings tracks every interaction and gives you data driven insights so you know what's really going on.

Please use the following link to see how to use Zeetings:
https://www.zeetings.com

4.14 Tool 13: OneNote

Microsoft OneNote is a computer program for free-form information gathering and multi-user collaboration. It can store notes, drawings, screen clippings and audio commentaries. Notes can be shared with other OneNote users over the Internet or a network.

OneNote notebook is like a three-ring binder. You use sections to divide up your notes into manageable chunks of text. You can choose a color for each section, or let OneNote choose that for you. Within each section, you can add pages so that you can add the notes that you want to take. You can have as many pages as you want in a section, and merge or group sections. Password protection can be added to sections to hide teacher notes, or to unlock a section at a time as the teacher chooses.

Please use the following link to see how to use OneNote:
https://www.onenote.com

4.15 Tool 14: Skype for Business

Skype for Business is a free voice, video, instant messaging and file sharing capabilities for groups and individuals. It allows you to take notes that automatically save them in onenote.

Please use the following link to see how to use Skype for Business
https://skype-for-business.en.softonic.com

4.16 Tool 15: Mentimeter

Mentimeter is easy-to-use presentation software. With Mentimeter you can create fun and interactive presentations. It helps make events, presentations, lectures, and workshops innovative and memorable. This tool allows tutors to answer questions, learners can vote/give a response and the result will be displayed in real time as the results come in (anonymously if necessary). Mentimeter allows learners to have fun by seeing their answers appear on screen. Tutors can add a little competition with a Mentimeter Quiz and increase the engagement even more. Fun and innovative presentations will stay at the top of learners mind and therefore improve learning outcomes

Please use the following link to see how to use Mentimeter:
https://www.mentimeter.com

4.17 Tool 16: Plickers

Plickers can be used for quick checks for understanding to know whether learners are understanding concepts and mastering key skills. It gives all learners the chance to participate and engage in learning without feeling self-conscious in a fun way. Plickers is a powerful but simple tool that lets tutors collect real-time formative assessment data without the need for learner devices. Learners do not need to log-in on PCs and open apps. Plickers integrates seamlessly into the way you already teach face-to-face by giving learners individual cards.

Please use the following link to see how to use Plickers
https://www.plickers.com

4.18 Additional References

Articulate:
https://articulate.com/

Audacity:
http://www.audacityteam.org/download/

BBC Learning Podcast:
http://www.bbc.co.uk/podcasts/genre/learning

Big Blue Button:
http://bigbluebutton.org/

BigMarker:
https://www.bigmarker.com/?utm_campaign=elearningindustry.com&utm_source=/6-online-collaboration-tools-and-strategies-boosting- learning&utm_medium=link

Blended Learning Models in K-12 Classrooms:
https://www.youtube.com/watch?v=GB7rA6vhZas

Coursera:
https://www.coursera.org/

Docs.com:
https://docs.com/en-us/search?q=cells

Docs.com:
https://docs.com/en-us/search?q=cells

Documents Emaze:
https://app.emaze.com/mypresentations#/home

Educational Podcast Network:
http://www.edupodcastnetwork.com/

Examples of OERs (Emory):
http://guides.main.library.emory.edu/c php?g=50821&p=326180

Guide to Open Source Education:
https://opensource.com/education/13/4/guide-open-source-education38

Flicker :
https://www.flickr.com/

Freedigitalphotos:
http://www.freedigitalphotos.net/

Google Docs:
https://www.google.com/slides/about/

Google Docs:
https://www.google.com/docs/about/

Google Hangouts:
https://hangouts.google.com/

Google Images:
https://images.google.com/

How to cite an Image:
http://www.easybib.com/guides/citation-guides/mla-format/how-to-cite-a- photo-digital-image-mla/ https://open.umn.edu/opentextbooks/BookDetail.aspx?bookId=420 https://www.panopto.com/blog/7-unique-flipped-classroom-models-right/

ITunes:
http://www.apple.com/ie/education/itunes-u/

JHSPHOPEN:
https://docs.com/en-us/search?q=cells

Keynote:
http://www.apple.com/lae/keynote/

Khan Academy:
https://www.khanacademy.org/

Learner.org:
http://learner.org/

LibreTexts:
http://chem.libretexts.org/

Making Blended Learning Work in VET:
https://www.youtube.com watch?v=QgEcmTqnGMY

Microsoft Office:
https://www.office.com/1/?auth=2
MIT Open Courseware:
https://ocw.mit.edu/index.htm

NPR Podcasts:
http://www.npr.org/sections/education/

Office Mix:
https://mix.office.com/en-us/Home

Open Educational Resources:
https://www.oercommons.org/

Open Learning Initiative:
https://oli.cmu.edu/learn-with-oli/see-our-free-open-courses/

Open Michigan:
https://open.umich.edu/find/find-open-educational-resources

Open Office Impress:
https://www.openoffice.org/product/impress.html

Open Office Writer:
http://www.openoffice.org/product/writer.html

Open Yale Courses:
http://oyc.yale.edu/courses

Other Ways to take a screenshot in Microsoft Windows:
http://www.wikihow.com/Take-a-Screenshot-in-Microsoft-Windows

Paint:
https://support.microsoft.com/en-ie/instantanswers/8a779cf7-3362-4948-a65e-e3a78c86f9a8/download-paint

Powerpoint Online:
https://office.live.com/start/PowerPoint.aspx?omkt=en-GB

Powerpoint search engine:
http://www.pptsearchengine.net/

Project Cora:
http://www.projectcora.org/resources

Role of Teacher and Student in Blended Learning:
https://www.sophia.org/tutorials/role-of-teacher-and-student-in-blended-learning-3

Sandford Social Innovation Review:
https://ssir.org/podcasts

Shutterstock:
http://www.shutterstock.com/

Skype:
https://www.skype.com/en/business/skype-for-business/

SlideShare:
https://www.slideshare.net/

Stock.xchng:
http://www.scx.hu/

Stockfreeimages:
http://www.freedigitalphotos.net/

Synchronous Communication Go to Meeting:
http://goo.gl/zyEMO3

TED Podcasts:
https://itunes.apple.com/us/podcast/tedtalks-education/id470623037?mt=2

TED:
http://www.ted.com/

Wikiversity:
https://en.wikiversity.org/wiki/Portal:Tertiary_Education

Word Online:
https://office.live.com/start/Word.aspx

WordPad:
http://microsoft_wordpad.en.downloadastro.com/

Section 5

Evaluations

5.1 Introduction

The purpose of the evaluation is to gather information on the challenges and successes associated with implementing Blended Learning in a Further Education College. During the pilot programme each partner collected data using both quantitative and qualitative methods. A combination of methods provided a best overview of the project. Partners accomplished this through tutor questionnaires, learner questionnaires, classroom observations, teacher and principal interviews, learner interviews and different focus groups involving all key stakeholders.

Feedback was collected at different points throughout the programme. Ideal times to evaluate were after a learning outcome was achieved or when new technology was being introduced to the learner. Most learners appreciate the opportunity to provide feedback on issues they feel are important so improvements can be made to enhance the course for the future.

Evaluating in the blended learning environment entails the same basic elements of a course; however, because of "blend" and the use of technology, these will present additional issues to gather data about. For example, Herrington et al (2001) propose a model of evaluation for online learning and teaching based around the three main areas: Pedagogies: the learning activities which underpin the unit; Resources: the content and information which are provided for the learners; and Delivery strategies - issues associated with the ways in which the course is delivered to the learners.

5.2 College Management / Principal Evaluation

Within a VET college it is necessary to hold discussions with a range of senior management and operational staff across the college, including the head of the college (director or principal), quality managers, heads of departments, information and technology (IT) managers and tutors leading curriculum delivery.

As a college it is necessary to reflect and evaluate the experience of the blended programme through ongoing meetings and holding focus group sessions. The college principal should provide strong leadership and a clear strategic vision of how the pilot provision would develop. There should be a specific objective for the pilot to widen the access and increase participation in a blended approach. The college must have a strong commitment for the enhanced use of technology across the college, with blended learning featuring strongly in the pilot programme. With good planning led by the college, it should increase learner participation within an appropriate niche market for the future.

5.3 Tutor Self- Evaluation

Tutors should have good curriculum knowledge which they use well to plan and develop the programme. As a tutor it is essential to reflect and self-evaluate on the experience of planning, designing and implementing a blended part to an existing programme. Self- evaluation is a process whereby tutors collect the data on their own teaching methods and analyse the information to make improvements where necessary. This experience recognises what is going well, what can be improved and what needs to be changed.

5.4 Learner Evaluation

The information collected from the learners was based on the learners perceptions of what they learned, how they learned and the extent of how they enjoyed the experience of the blended aspect of the programme. Being a blended course it was necessary to gather information on accessibility, usability, relevance, and integration, as well as information relating to good pedagogical practices.

5.5 Methods of Evaluation

The following methods to evaluate a blended course can be used:
Tutor questionnaires, learner questionnaires, classroom observations, tutor and principal interviews, learner interviews and different focus groups involving all key stakeholders.
During the pilot project the following methods were used to gather feedback.
Visit the website to see the questionnaires and interview questions with the results that was compiled throughout the pilot the programme by the partners.

Activities	Objectives
Learner Feedback questionnaire on Digital Technologies	To capture learners' learning experience in this blended course using digital tools.
Online Learner Feedback Questionnaire (End of Blended Learning Experience)	To capture learners' perception and overall learning experience of the blended learning in this blended programme.
Face-to-face learner focus group (Mid Course)	To collect learners' in-depth opinions about their blended learning experience, how learning differs from face-to-face teaching and the impact it has on their learning.
Learner interview (End of Course)	To gain in-depth knowledge about the learner experience in the design, effectiveness of the blended course and using digital technology, as well as the support they need.
Course Tutor interview (On going)	To learn more about the course tutors experience in the design, delivery, and effectiveness of the blended course, as well as the support they need.
Course Tutor Questionnaire (End of Delivery of blended course)	To learn more about the experience of the tutor regarding the design, delivery, and effectiveness of the blended course, as well as the support they need.
College Principal or Management Team Meetings or Focus groups (Ongoing through the delivery of blended course)	To learn more about the experience of the blended programme; the design, delivery, and effectiveness of the blended course, as well as the support and IT facilities needed.
Learning Management Systems course analytics (Canvas/ Moodle/ BlackBoard)	To identify the trend of learners' usage pattern. The data collected offers a rough idea of an overall picture of the online activities.

5.6 Additional Resources on Evaluation Frameworks

Frameworks for evaluation	Resources
Sloan-C Quality Framework (The 5 Pillars)	The framework focuses on five areas of evaluation: 1. Learning effectiveness 2. Scale (cost effectiveness and commitment) 3. Access 4. Faculty satisfaction 5. Learner satisfaction It describes the goals of each of these elements and discusses some possible metrics. The 5 Pillars http://sloanconsortium.org/5pillars
Col Survey (Arbaugh, Cleveland- Innes et al., 2008)	The Community of Inquiry Survey Instrument identifies three areas of evaluation: 1. Teaching presence 2. Social presence 3. Cognitive presence The survey consist of a 34 statements. To view the survey go to the website above and click on Download the Col survey. Col Survey https://coi.athabascau.ca/coi-model/coi-survey/
Blended Learning Toolkit	The Blended Learning Toolkit was prepared by the University of Central Florida and the American Association of State Colleges and Universities. It provides two separate surveys exploring the experience of the students and the faculty members involved in the blended course. Blended Learning Toolkit https://blended.online.ucf.edu/evaluation-resources/survey-instruments/ It is also worth exploring some of the other resources that the Blended Learning Toolkit has posted on their page, including the Process of creating a course, examples of blended courses, and effective practices: HYPERLINK "https://blended.online.ucf.edu/" https://blended.online.ucf.edu/

5.7 Additional References

https://www.teachthought.com/technology/7-questions-evaluate-blended-learningplatform/
https://teaching.unsw.edu.au/evaluating-blended-or-online-course
http://www.ascilite.org/conferences/Wellington12/2012/images/custom/smythe%2C_michael_-_toward.pdf
https://www.inacol.org/resource/approaches-to-evaluating-blended-learningprograms/
https://blended.online.ucf.edu/evaluation-resources/

Section 6

Recommendations

6.1 Introduction

Embedding e-learning approaches in Further Education Training (VET) colleges has been the main objective for this pilot programme. There have been suggestions that a blended approach is the 'preferred approach' to learning in recent years. As colleges introduce Blended Learning, the best practice approach is required to ensure that all leaners and staff are supported effectively. The potential to support and enhance the learners experience while offering a more flexible and responsive way to learn makes it particularly appealing to the VET sector.

The Blended Learning tutor, along with the principal, has an important role in presenting the learner with a fully integrated, planned, prepared programme. This programme should be made up of rich experiences encouraging active learning with clear guidance in a supportive environment.

6.2 Recommendations

On completion of implementing a pilot blended programme, the partners have a series of practical recommendations to facilitate any VET college to successfully adapt and implement a blended approach. Blended Learning course design entails more than simply converting content for online delivery or finding ways to supplement an existing face-to-face course. Ideally, designing a blended course would begin with identifying learning outcomes and topics, creating assignments and activities, determining how interaction will occur, and selecting the technologies to best achieve those learning outcomes. It is important to highlight that no two blended learning designs are identical.

Support from management is paramount for the teaching staff throughout planning, designing, implementing and evaluating the programme.

The following are recommendations based on the pilot programme:

6.2.1 IT Skills

It is recommended where necessary that college staff and learners complete training to gain new skills in information technology (IT) to learn new ways of interacting on line. Important skills training for tutors revolve around IT, information literacy, and e- learning development. Skills training for learners will involve IT, e-learning study skills, time management and advice on organising e-learning tasks. Adequate time needs to be allocated to this training for learners and tutors as well as adequate time for tutors to develop e-learning material.

6.2.2 Technical Support

It is clear that the technology underpinning any blended learning environment is of pivotal importance to programme efficiency, user acceptance and satisfaction. A comprehensive support for all stakeholders should be available as and when required. The presence of a range of skilled IT staff, support staff and administrators have all been identified by the partners as being an important part of a blended programme. Partners did suggest there may be a need for a dedicated learner service support center to assist learners with the technical side to blended learning. Having good technical support will assure minimal possible disruption to the learning delivery.

6.2.3 Pedagogy

It is paramount for the college to consider which learning outcomes can be achieved with face-to-face contact/classroom discussion or online learning within a course. The tutor must take in the needs of the learner cohort and the context of their learning, e.g. the level of education and/or learners' previous experience. A tutor must consider the key learning tasks for their learners and based on these write which learning outcomes should be face-to-face or online.

Consideration should be given to the learning process, learning outcomes, and the learning environment. The importance of interaction and discussion to the learning process was suggested. In this regard the face-to-face class has also been identified as a relevant variable in the design and implementation of blended learning.

6.2.4 Course Content

According to the partners, for existing courses, elements which are to be delivered in a blended learning style should be carefully reviewed to see how they can be optimised for the different method of delivery. It is best practice to divide learning activities or content best suited to either online or face-to-face environments carefully; otherwise it may create a duplicate of the class in both online and face-to-face formats. It is necessary to consider how the MLS, could be used to assist learners to understand and engage with the module's online content e.g. use of mini-quizzes; case study examples; video clips; on-line lectures. There is a need to demonstrate and make clear to learners how online activities will link to assessment.

The partners recommend having an induction on commencement of the new blended course. There is a need to clearly explain to learners and other teaching staff why you are introducing an online component. Partners recommend providing an induction at the start of the course to outline what is hoped to achieve, and what the benefits will be for learner. Learners will usually be more willing to try new methods of learning when they can see the benefits, and it will help to develop an environment of cooperation and communication between learners and their teacher.

A short introduction to your module can be provided on your MLS can help to orient learners to your expectations of them. Each blended module should provide guidance on time-management, reading list and suggestions on where to find other useful resources. Allow learners to see how information relates to prior knowledge and wider context e.g. either explain or use mind-maps/timeline to note how each week's material links to the previous week. It is important to make material appear more relevant to learners e.g. by using a variety of culturally diverse and 'real-life' examples. Provide learners with opportunities to actively reflect on their own goals and the module learning outcomes e.g. provide checklists or short multiple-choice quizzes to help learners stay engaged and see their own progress.

To help reduce information overload at the beginning of the course partners recommend creating a structure to the module by grouping the learning materials by topic, concept, activity and/or time-scale, i.e. weeks 1-3; weeks 4-6. The partners recommend setting out the expectations of what the learners have to do, why they are doing it and how it links with their learning and assessment. When setting activities/tasks for learners to complete online it is necessary to communicate in the Management Learning System the expected amount of time they will spend on this task. It is also important to ensure that all learning materials are in an accessible format to meet diverse learners' needs.

6.2.5 Communication

Partners recommend encouraging learner collaboration and peer learning where possible. VET colleges can use their learning management system as an opportunity for learners to collaborate with each other and with tutors, i.e. forums or discussion groups. These collaborative activities can be assessed for learner participation and contribution to the course.

6.2.6 Digital Tools

During the planning process of designing the blended module the tutor must consider the needs of the learner group and the context of their learning to decide which digital technologies are most suitable to support this. For a blended approach VET colleges should introduce learners to a variety of digital tools throughout the year that will allow all learners to achieve the learning outcomes. The partners recommend incorporating some scaffolding that supports or develops digital literacy into the class. This can be completed over the duration of the first term, or over a series of classes within a programme. When introducing a new online technology, allocate sufficient time beforehand to fully brief learners in a 'step-by-step' process on how to use that technology. It is necessary to provide ongoing support. Always prepare written instructions (online or hard copy) that reiterate what was introduced to allow learners to revise any steps they may have forgotten. Provide a 'Question and Answer' thread in a discussion board where learners can ask questions, and ensure that you respond. It is important for tutors to assess and evaluate its merits at the end of the day/week/month/term; adjust accordingly what you have learnt and then gradually add more online components or more depth to the existing component if it is required.

6.2.7 Feedback and Evaluation

Feedback and evaluation from tutors and learners should be incorporated into planning and implementing of a blended programme. What is clear from the partners is that prior to, and during the development and implementation phases of a blended learning approach, it is vital to consider a variety of stakeholder perspectives (VET College, tutors and most importantly, the end-user or learner). A consideration of the identified areas in this review from all relevant perspectives is necessary.

The learners' needs, learning styles, expectations and motivations should be considered. To achieve commitment from the learners, they will need to be motivated to participate. If their expectations are met (or exceeded) it will result in a positive effect on their experience and motivation to engage further in the blended learning.

Section 7

Partner Experience

7.1 Introduction

The following five pilot programmes, one from each project partner, demonstrate how using a blended learning approach/model provides new opportunities to design and deliver courses. They give insights into a partner's journey during the project and capture different aspects of the learning which have taken place in the planning and piloting of blended learning models. Each pilot programme gives a brief description of the participants, outlines course content, and includes an evaluation and findings. They provide excellent examples of how theoretical knowledge gained from the literature can be transformed to real life situations.

7.2 Partner 1: Belfast Metropolitan College, United Kingdom

Introduction

Belfast Metropolitan College is committed to providing excellent education and skills for life to the individuals, employers and communities of Belfast and beyond. This commitment is founded on the belief that learner success in terms of personal development and achievement of employment is the key goal of the college. This in turn is depended on the quality of the overall student learning experience.

The college's new Learning Teaching and Assessment framework (1.0.2018) supports the key principles and expected outcomes required to ensure consistent excellence. These high-level aims expressed across 10 Themes, with 'Delivery and Management of learning' and the 'Advancement of Learning and improvement' being key to delivering learner success.

'Teaching will be creative, energising, motivational, varied, differentiated and appropriate for the learning '; 'Teachers will use a wide variety of highly effective and methods of teaching and learning including Technology Enhanced Learning (TEL); 'Priority areas for development include improving teaching and learning through the use TEL.'

Rationale

To support this new framework of Teaching Learning and Assessment, the College has invested in a new Learner Management System (LMS) with a greatly enhanced interactive capability to deliver teaching and learning. The College is currently in a transitional phase in not only moving all existing resources to this new LMS, but in up skilling staff through a series of workshops in the relevant TEL skills to ensure maximum benefit is gained in the delivery of teaching and learning.

Participation in the Erasmus Blend4VET project provided an opportunity to trial a number of Blended Learning (BL) activities on the new LMS for the benefit of obtaining constructive feedback not only from staff but also from students. This supports not only early adoption by both staff and students but also allows Information Technology (IT) staff to make any necessary refinements to the LMS based on this feedback.

The Participants

A group of 20 students enrolled on BTEC Level 3 (UK) Extended Diploma in Business was selected to undertake a variety of Blended Learning activities to complete two units – Project Management and Events (total: 120 guided learning hours of which 15 hours were designated as Blended Learning).

This group of learners range from age 16 -20 and have a wide range of capabilities but all coming from a Level 2 (UK) academic background. All students are from IT literate generation and so readily and positively embraced this new way of learning.

The Course Content

First session was to introduce learners to the concept of Blended learning on new virtual Learner Management System (LMS) and to demonstrate some of the opportunities for new methods of learning. In this initial session, learners were shown an overview of the LMS layout, its capabilities and its interactivity potential. This included allowing learners to independently trial Discussion board, Online calendar, Assignment folders, Chat, Conferencing and Collaboration tools.

The following session then introduced students to LMS per se to allow them to complete a task independently and to formally assess their understanding and knowledge of planning and preparing an event. An Online Quiz was uploaded to LMS, which the students accessed through log on and completed independently at a time, place and rate of progress of their own choosing. The quiz was set up to have automatic marking of answers and to indicate the correct answers on completion.

The third BL session required students to use Padlet in the preparation of an assignment requiring them to individually evaluate and differentiate project and event planning. All students participated in the group activity and then used the information collectively gathered, to prepare their own independent response.

Discussion board was used on the fourth BL session to allow students to work collaboratively on an assessment, testing their knowledge and understanding of the need to meet legal and regulatory requirements when project planning. This gave students a valuable start and informed support to working independently on their individual assessment submission.

In the final BL session, students were given access to the Group Collaboration Tool to draft a group presentation addressing problems which can affect progress when project planning and how to redress these. This can be an area of challenge for this level of student with very little experience of project work within the business environment. This Group collaborative tool effectively ensured that all students worked together and actively contributed to the presentation. It also made it fun.

Evaluation

After testing a variety of interactive learning tools – Online quiz, Padlet, Discussion Board, Group Collaborative powerpoint presentation, students completed an electronic survey questionnaire.

A student focus group was held at the end of the module and overall survey feedback was recorded as being extremely positive.

Students completed the Blend4VET on line Survey monkey questionnaire for comparative analysis against other Blend4VET case studies.

The tutor leading this BL pilot provided a reflective statement at the end of each of the individual sessions and a final summary statement of the experience.

A second member of staff joined a number of the BL sessions as an observer and provided a summary reflective statement on her observations.

The relevant curriculum manager who had initiated this BL pilot met with firstly with the tutor and observer to gather qualitative feedback on the experience; and then with the wider programme team to share the results and findings.

Findings Learners

Overall feedback from this learner Focus group was unanimously positive to the introduction of Blended learning. It is important to note however that any LMS must ensure all learner types (VAK) and abilities are fully accommodated before implementation.

LMS must be visually appealing, the site easy to navigate and modules easy to follow to retain learner interest. Learners must not only embrace independent learning, but also feel confident in their own ability to work independently. This includes a need for a full and detailed induction of the LMS before any BL activity takes place.

All learners expressed that they had within Survey Monkey electronic questionnaires scored highest or second highest 5/5 or 4/5 Strongly Agree) to scoring questions regarding quality of course execution, tutor support/assistance and tasks undertaken.

Qualitative responses to summary questions included:
What did you like most about this method of delivery?

- Liked the collaboration between peers. Easier to bounce ideas off people.
- Group assessments completed more quickly – easier to delegate tasks to people.
- Quicker than emailing work between people.
- Everyone has a copy of it. Reduces the risk of loss of work.

In your opinion, what would you like seen done differently?

Students felt that the Blended delivery format meets their requirements and could not come up with a definitive answer to this. However, they all agreed that they would like more interactive learning within future course modules.

What were the main problems that you encountered while participating in this method of learning?

Main feedback consensus was the encountering of technical difficulties and not enough initial focus on training of new LMS system before task commencement. They did agree, however, that they were "technically savvy" and that with minimal instruction they could complete the set tasks. However, the group agreed that the college should implement a more detailed LMS induction session at the start of the programme to ensure those less able did not feel disadvantaged.

Findings Tutors

The tutor's primary focus for personal evaluation was student engagement and how it affected differentiation to meet all student needs as there is a variety of educational, psychological and medical needs within the class.
It was noted that those with lesser ability initially took control of the blended VLE environment; those with higher ability wished to be presented with the information and allowed to read and disseminate materials individually.

However, with the introduction of Discussion Boards to assist with knowledge requirements of higher level Merit criterion, it was noted that there was full participation and interaction by all students online. They were encouraging, interactive, added to initial views of others and increased in confidence as the task progressed. Feedback was extremely positive and the tutor felt that this method is an excellent interactive tool for this type of student.

Padlet, although engaging and fully enjoyed by learners, was felt by the tutor to be less successful as it left less room for student interaction or input within the Higher Merit criteria tested. Once one student had presented their view, other students simply agreed and did not add much more with regard to any additional thoughts. Although there was sufficient evidence to meet the task requirements, the tutor felt that the Padlet tool could be further explored alongside Clickview and worksheets to allow the tutor to test/gauge individual underpinning knowledge testing at Pass level only. The tutor did agreed however, that Padlet was an excellent interactive tool for this type and level of learner.

The Collaboration tools available for group work astounded the tutor as she was surprised at how quickly and efficiently the learners completed the assessments. It also added an element of peer pressure to ensure assessment was completed within deadline – and in fact, all assignments were submitted well in advance of that time. An excellent tool that will be utilised fully in future.

Overriding support from students for Blended learning was unequivocal from these initial sessions. A fun and engaging method of learning to integrate and support traditional methods of teaching and peer mentoring

Recommendations

It is clear from the feedback above that Learners are keen to engage in Blended learning (BL) as a new teaching and learning method. The success of BL however will be highly dependent on the selection of the right medium and tools at a level of challenge to effectively meet both the learners' needs and expectations.

The IT proficiency of the learner will be a key issue to consider- aligned with a full induction of both the LMS and the tools within it. Learners with a higher level of IT confidence are likely to not only expect to learn in this format, but will embrace it at a quicker rate. Learners with less confidence in their IT capability will need a greater level of support in a traditional classroom format, before BL is introduced.

Learners are quick to identify what works for them and it will be important – particularly in early implementation- that regular feedback is sought from learners. Appropriate actions must then be taken to refine the BL tool/model to ensure that it is fully meeting learners' needs.

From a pedagogical aspect, there will also be a need to constantly review as to how BL contributes to the overall learner experience. We need to ensure that that all learner styles are accommodated (VAK) within any programme of work without an overdependence on any one style. The introduction of BL should look to enhance any programme delivery and not look to either compete or replace traditional classroom delivery where this remains relevant.

There appears to be a clear correlation between the suitability of the curriculum for BL; the level of and type of learner; and the IT proficiency of the staff member. There also needs to be not only a confident working knowledge of the new LMS system, but also confidence in the successful working of the technology for the learner.

Staff need a high level of support through this transition process and are likely to be most influenced and supported by peer mentors. Key to this will be the identification of a number of early adopters amongst staff and appointing them as TEL (Technology Enhanced Learning) champions. These TEL champions will lead the change most effectively with their colleagues through trialling, testing and sharing of best practice.

7.3 Partner 2: City of Dublin Education and Training Board, Ireland

Introduction

Marino College of Further Education, CDETB introduced a blended learning model to learners completing the QQI Level 6 Major Award in Early Childhood Care and Education. The childcare department chose the module Early Childhood Curriculum to blend. The aim of this module is to equip the learner with the knowledge and competence required to develop and implement a curriculum in an early childhood setting.
The college used existing IT equipment with access to the learning management system, Moodle, which was already in place. The Teacher integrated online resources, such as, course documents, lecture notes, assignment sheets and other hard copy handouts etc at little or no extra cost. The model and IT tools chosen were based on the needs of the particular cohort of learners and the facilities currently available in the college.

Rationale

In order to improve organistion performance, City of Dublin Education and Training Board undertook an audit of their existing provision to identify a current course that would benefit from being moved online. This task involved senior and higher management. It revealed that in terms of numbers the QQI Level 6 Childcare course was under performing. Learners accepted employment quite quickly after completing the Early Childhood Education and Practice QQI Level 5.

On securing employment, they were reluctant to return to college on a full- time basis. However, all childcare practitioners and room leaders must hold a minimum QQI Level 6 Major Award in Early Childhood Care and Education (or equivalent) from December 2016. This is a requirement of the Early Childhood Care and Education (ECCE) scheme in Ireland. Such potential learners, who would like to remain working without the commitment of full-time study, would be suitable candidates for a blended approach. It is the CDETB's intention to provide a balance for learners which blends learning in their own time with part-time attendance. This balance could prove to be success all round for both CDETB and the learner.

The Participants

The participants were 20 childcare learners, who were enrolled in a QQI Level 6 Early Childhood Care and Education for one year.

The learners had already completed a QQI Level 5 in Early Childhood and Education and/or have substantial employment experience working with children under the age of six years. The average age of the group was 25 years and they were all female. Having successfully completed the year, learners would be qualified to progress to a supervisory role (Room Leader) within a childcare setting and/or to higher education and training awards.

The Course Content

The blended learning course was designed to prepare learners to create and apply part of a curriculum effectively with young children in an early childhood setting. A preliminary study with the relevant stakeholders of Marino College revealed that the teacher needed a new course design that would allow course content delivery with some face-to-face contact between the tutor and the learners, but also with an opportunity to engage in supplementary online learning.

The childcare course was designed into a blended format and was scheduled to be rolled out over the first and second term taking seven weeks. In order to support the course, a learning management system, Moodle, was used. We use the Moodle virtual learning environment which provides us with a range of tools that we can use to build courses, include video, interactive activities like quizzes, assignments, the various elements that we use to engage learners and make sure that they have an input into the educational process.

For this project, fourteen lessons were designed into a blended format and was delivered by having one hour face-to-face and one hour online learning over an eight week time frame. The schedule was rolled out over the first and second term of the academic year 2017-2018. At the beginning we had an induction with all learners to explain the pilot project and provide training on digital tools. The model chosen to deliver the content was a flipped classroom approach with our online material was uploaded every Wednesday and face-to-face class was on a Monday. The college used the existing IT equipment and Learning Management System which was already in place. The digital tools chosen for a flipped classroom approach were based on the needs of the learners and the learning goals that needed to be achieved. E- mail and forums were the two main tools used to communicate and to provide feedback between with the tutor and learner while outside of the classroom.

As part of the course, learners needed to have personal interaction, regular collaboration and have a question bank which would allow learners ask questions when they didn't understand something or needed a better explanation. To achieve this we used a tool called Padlet, a great tool that allowed learners pose questions, have the opportunity to teach one another and allowed learners to become active participants in their learning process. Forum discussions were used to ensure continuous participation in the course throughout each week.

For learners to understand how our national curriculum for early learning is implemented in a childcare setting, we wanted to demonstrate using a video that would stimulate learners' interest, create a much more interactive experience and track our learners' understanding. To accomplish this we used EDpuzzle, a tool that played a short video we created. Learners viewed a video and during the recording they were assigned questions which needed to be answered before the video moved on to the next part. This provided the tutor with feedback of who answered the questions and how well they knew the important points of the topic. With EDpuzzle you can upload your own video / videos on youtube/EDpuzzle itself.

On completion of a lesson the tutor used Kahoot, a tool (online quiz) that provided opportunity for revision, reinforcement or re-delivery, depending on the outcomes. The results of the quiz serve to assess learners' understanding of the lesson, both individually and collectively. The tutor wanted to engage the learner with real world experiences of planned activities within early childcare setting. To achieve this we used the digital tool Thinglink to engage the learners and support their learning. This is an excellent visual digital tool.

The face-to-face lesson was delivered through traditional methods, as well as, at times adopting a rotation model. This was purposefully selected to measure the impact of learning through a variety of experiences. During the traditional face-to-face class we wanted to deliver an interactive presentation to increase learner engagement and encourage them to give their opinions. The digital Tool used was Nearpod, allowing learners follow an interactive presentation. Learners could interact by participating in a poll to give their point of view, answered open-ended questions requesting them to suggest their own ideas and participate in group discussion. Using open ended questions, discussion and poll features in Nearpod provides multiple methods of both representation and engagement while also checking for individual and collective understanding.

Evaluation

To evaluate our blended programme a mixed method approach was used, involving qualitative and quantitative components through questionnaires, focus groups and individual interviews. It was important to get a critical review of the blended approach of online and face to face classes.

Face-to-face Interviews were conducted with learners to gain a better understanding of the participants' experiences. These took place at the end of the module, and each interview lasted approximately 15 minutes. The interview was to inquire about positive and negative features of the online part of the course, and to inquire about positive and negative features of the face-to-face sessions in the blended setting.

Findings

Learners:

On completion of the evaluations of questionnaires, focus groups and individual interviews the overall view is very positive. Learners responded extremely well to a blended style approach and adapted to using different technology tools with ease. The learners response were 'easy to use after been shown'.

The most important benefit from the learner focus group and interviews was the ability to complete assignments/worksheets weekly at a time that suits them and to submit online. It proved to be beneficial to learner's whose first language is not English as they had the freedom to do research at their own pace and in their own time to complete weekly work. Some learners reported they enjoyed using different digital tools as they kept their interest.

Learners found padlet and forums very beneficial and felt they could get support when they needed it. They felt they got a richer source of experience to draw on because they could pool references and learn different ideas from each other. It provided evidence of regular contact between the tutor and fellow learners, as well as giving the learners the opportunity to always give their opinions to the class and the tutor.

On some occasions the technology stopped midway and caused a short term disruption. Once the tutor was notified of this the error it was quickly corrected. Some learners did request a hard copy version of written material which was provided by the tutor. At times learners mentioned they got distracted while completing college work online with other personal interest ssuch as Facebook/online shopping etc.

Tutor:

The tutor was generally satisfied with the course, relevant course content was created through different digital technologies which brought real-life situations into the online learning. Interaction with learners was encouraged in the online environment by having the tutor respond to learners' questions and provide feedback on their assignments/worksheets in a timely manner.

A blended approach caters to each learner's pace and learning style. If the learners are struggling with a particular topic, they can reach out to online resources or ask questions in forums or make contact by email/private message to the tutor. Blended learning improved learner communication, facilitated student evaluations with comprehensive online feedback and increased accessibility for the learners.

The tutor could see the learners being engaged and enjoy their learning through technology by actively completing online activities and being part of discussions. This led to an increased participation from the learners in face-to-face class as a result of the online learning. They were knowledgeable and confident in the area of their study during face-to-face time.

Recommendations

The learners recommended continuing the blended model approach for the remainder of the academic year for that particular module. They found it to be a flexible approach in that they could go to work during the morning and complete online work at night. They completed the work in their own time, at their own pace and with the facility to ask a question on the online forum.

Learners liked using online technologies and recommended their continued use. However they suggested spending more time at the beginning to familarise future learners with the different technology. This will make it easier on both the learner and the tutor during the academic year.

It is also important to have a good laptop and good access to the internet and important for learners to get involved with class discussions as this creates collaboration and keeps everyone in contact.

7.4 Partner 3: CIFP Usurbil LHII, Spain

Introduction

CIFP Usurbil LHII introduced a blended learning model to learners completing the Higher VET degree EQF level 5 in Energy Efficiency and Solar Thermal Energy. The school used existing IT equipment with access to the learner management system, Moodle, which was already in place (access through web site of school, www.lhusurbil.eus). The teacher integrated online resources, such as, course documents, lecture notes, assignment sheets and other hard copy handouts etc . The model and IT tools chosen were based on the needs of the students groups, the facilities currently available in the college and the requirements of the project itself i.e. the requirement of having the possibility of connecting to the course from outwards.

Rationale

In order to improve organization performance, CIFP Usurbil LHII undertook a process to identify which current course would benefit from being moved online. This task involved management of the school as well as staff members of the Energy and Water Department.

It revealed that there was a need for extending a blended learning approach, especially taking into account that dual training is spreading all over Vocational Education. The problem that this system is posing to traditional full -time attendance of courses makes blended learning approach a really interesting one for those students.

Even if second year course would be, at first, the most suitable, it has been decided that it would be interesting to design a pilot experience with first year students . That way the feedback of course will be used in designing second year courses with a blended learning approach for students who carry out a work and study experience.

The Participants

The participants were 20 students, who were enrolled in a EQF level 5 Energy Efficiency and Solar Thermal Energy course for two years. The learners were first year students who came straight from the Higher School (choosing to attend a Higher VET course instead of a university degree) or after completing a Medium VET degree (EQF level 3). The average age of students was 20 years and were all male. Having successfully completed the year, students would be qualified to progress to second and final year.

The course content

The blending learning course was designed to prepare learners to have the principles of thermal solar collectors and their efficiency and connection principles. This would enable teacher to deliver content of course by a mixture of “traditional” magistral classes and online learning. The solar thermal collectors course was designed into a blended format and was scheduled to be rolled out over the first and second term taking four weeks. In order to support the course, a learning management system, Moodle, was used. The use of Moodle as a virtual management system was prioritized over other systems as Google Classroom based on the accessibility from an external source as well as the lack of structure that Classroom presents. Moodle, even if it would appear a bit more rigid, shows consistency while building courses, including videos, interactive activities like quizzes, assignments.

The emphasis of the blended course was to enable learners to have a more practical view of contents as well as a flexible follow-in of the course.

Two different models of blended learning were put in practice throughout the implementation of the experience:

Station Rotation Model: this approach entailed students working in certain contents online in the classroom and sequentially moving to face-to-face learning of problem solving contents in the classroom. These activities included pencil and paper assignments as well as individual work on a
computer or tablet.

Enriched Value Model: this approach entailed students having, at their disposal, supplementary material for enriching basic contents taught on a face to face modality at class through home-recorded videos.

Configuration of Solar Thermal Systems

This subject is part of the curricula leading to the Higher Vocational Education title "Energy Efficiency and Solar Thermal Systems". Its aim is to train students in the design and the procedure of preparing a project of a solar thermal system and is taught in the first course.

Specifically, the part of the course covered with a blended learning format was the one referred to solar collectors, their composition and the calculation of their efficiency rate at certain conditions.

The content of the course was prepared so as to give learners more control about their learning pace. At the same time, the teacher designed a flexible schedule for both online and face-to face classes. The teacher used e-mail to contact students who were not active in the online as well as for collecting some of the assignments which needed more calculation work.

There were two different ways of delivering the contents to learners. One of them was based on online videos and materials in pdf format which were very useful for carrying out face-to-face activities and for having a better introductory understanding of solar collectors and their internal structure. So students did work on their own this content because of the little complexity of the contents covered and their understanding was measured through online questionnaires and simple tasks to send by email. The other one did cover a much more complex content referred to energy efficiency calculation in solar collectors as well as flow rate estimation in which face-to-face explanations were the base methodology and online material was used in order to gain a better understanding of the different ways technical documentation can be showed in real life examples.

The activities posed to students were carried out in individual and small groups. The teacher used the online technology to provide quick feedback on the blended course. The email was used to give students information about their achievements in the tasks assigned. The learners were frequently reminded to finish their work on time.

The basic tool used for undergoing the project was Moodle even if MovieMaker was used to record the videos.

Evaluation

A mixed method approach was employed to evaluate the blended learning module, involving qualitative and quantitative components.
Questionnaires were designed so as learners could give their feedback about the course and the methodology used together with their improvement proposals.
Face-to-face interviews were carried out to have learner´s point of view regarding all the process, both the online part and the face-to-face part of it.

Findings

The questionnaire revealed that the material used was comprehensible and diverse as well as clear for having good understanding of the contents. On the other hand, there was found that students were willing to have more blended learning approach on their courses and that there was a need for a unified structure of the course delivery.

The interviews revealed that students look blended learning as very enriching for their experience since they can have a very active role on the learning process and a better understanding of the contents covered.

Discussion

The findings reveal that the student´s responses were in general positive since the blended learning approach enabled them to work interactively with the teacher as well as giving them the choice to work at their pace, at least when it comes to the contents covered with the Enriched Virtual Model.

It is clear as well that the connectivity of the classroom should work properly at least when it comes to downloading files and working with Internet videotutorials.

When it comes to contents developed under the "Station Rotation" model, students did find very useful to have material (pdf format, links to interesting Internet sites which give access to in-depth understanding of subjects...) which could help them in the solution of complex problems as the ones related to energy efficiency rate calculations.

Blended Learning approach seems to be a good solution to implement PBL (Project Based Learning) methodology at class since, as we see in this first course, one of our worst problems is the lack of time to develop contents that, under the traditional scheme, were easier to deliver. Station Rotation or Enriched Value model would be interesting depending on the complexity of the contents.

Regarding second course students following Dual system, it seems that blended learning, under these two models, is suited specially to them. Basing on the difficulty of these students, due to their customized timetable, to follow general class rhythm we consider that more effort should be done in this question.

Recommendations

Students are working actually with a variety of TIC solutions for gaining interactivity in the different subjects of their course but there is not uniformity among the different tools (Moodle, Google Classroom, Google Drive...) so it is understood that a certain methodology should be chosen so as to make the experience of students more enjoyable.

This applies not only to our pilot experience in the first course of HVET title of Energy Efficiency and Solar Thermal Energy but to all first courses of the entire range of HVET titles offered by School.

In the same sense, we think that a widening of this experience to second year students should be carried out emphasizing its implantation among students that are under dual system scheme.

The suitability of the model should be analysed for each case but, from our pilot experience, we can deduce that Flipped Classroom model works better with more complex contents and/or contents which demand the development of practical skills and usage of workshop.

7.5 Partner 4: Tartu Kutsehariduskeskus, Estonia

Tartu KHK prepared a course "Digital Marketing Basics" as a blended learning course. The course was created with a capacity of 2 EKAPs, or 52 academic hours, of which 8 hours took place in the classroom and 44 hours as an e-learning course. The course platform is Moodle. The reason why the Moodle platform was choosed, is the fact that the Moodle LMS is widely used both in school and in the whole country, it means that many students have an active user experience from their previous studies. In addition, the program offers a variety of opportunities for the creator of the e-course, as well as for the students to present both materials and co-operation for interactivity. It is also important that the use of this LMS is free for the school.

Rationale

The target group of the blended course is upper secondary graduated learners who study at the fifth level of vocational education and who study in a non-institutionalized form, ie attending school one day a week. In such a timetable, the proportion of learners' independent learning is high in time and the need to learn by e-learning is necessary.
In addition, the topic of digital marketing is by nature a way of achieving the learning outcomes of the digital and web world perfectly. Students will be able to confirm the theories by using real-world and practical information on the web.

The participants

Course attendees are at least upper secondary school graduated students who have completed basic education in the areas of marketing. Students had a different level of education, gender and age. Both middle-aged, with master´s degree, and students, who come after graduation from upper secondary school. The participants' digital capabilities were different - those who had participated previously in a variety of e- learning or blended learning courses, or those who created their Moodle account for this course first time only.

The course content

The course was structured in a thematic format so that passing the course would be logical - first introductory tasks with the reading material, then different subthemes. Each subject has a content material written by the teacher and presented in the Moodle, using tools of these LMS, complemented by Internet sources - video films, case studies, additional reading. There was also an assignment exercise for each subject to support the acquisition of the topic. For example, the topic "Content marketing" was first introduced to learners by the theoretical background, then the course provided links to web-based samples of content marketing and tutorials for creating content marketing stories. During the workshop, the students had to draft a for the content marketing plan and timetable in the classroom, and then each student had to make one content marketing message on his or her chosen topic. So the acquisition of the subject was covered both by theory, practical examples, and practical work and ended with an assessment exercise.

In the course, several blended learning methods were implemented-the flipped classroom method, which supported the preparation for intermediate seminar students, the station-rotation model where the teacher shared and directed the learning process and the enriched virtual model, which was primarily reflected in various study materials and sample materials. The course also had common tasks for the whole group - for example, a common vocabulary of digital marketing was created using the group's collaboration tools, provided by Moodle.

Evaluation

The evaluation of learning outcomes of the course took place as a summary of various tasks - all the tasks related to the topics had to be presented in a Moodle, and there were themes that were also subject to seminar work. This was, for example, the analysis of web pages, in which the learners prepared an analysis of a previously selected website, based on a set of questions, and also produced a presentation, what was presented in the classroom in form of the seminar.

Findings

At the end of the course, feedback was gathered from the learners in Moodle where they answered answered the feedback questions and The teacher was interviewed to evaluate the feedback.

Learner

For the students, the content and logic of the course was interesting. Positive was the ability to choose the tempo during the week (each theme in the course was for a week) and in the case of interim seminars it was two weeks- in this case, the students were preparing for class seminars. The learners also highlighted the technical issues - all the learners did not feel themselves in the Moodle course technically, and in this case, they needed to get online help, although there was a forum where they could post questions and answers. In addition, learners found that the teacher could have giving more feedback individually.

Tutor

The teacher found that creating an e-course at an early stage is very time- consuming and requires a lot of details, but when done, it has a longer-term impact and the ability to use the course flexibly. According to the teacher, the disadvantage was that the lack of modern materials from diverse Estonian languages was due to the fact that many had to use the translation and matching of the material to the Estonian cultural context, which is also time -consuming. Certainly, every time, when teacher open the course, it is needed to review the study material so that it is up-to-date, as well as check that the links are open, etc., which are needed for the learners.

In addition, the teacher pointed out that there were different levels of students in the world of technology. Uploading homework students or, for example, saving pdf files was difficult for learners with older and low technical experience. In addition, teacher say, that tutorial work took a lot of time - writing personalized feedback from the main work or contact hours is very time -consuming.

Recommendations

There is certainly many possibilities of blended learning in several aspects: it is an opportunity to present content in a diverse and creative way, involving a variety of learning styles. If blended learning is planned, then there's needed time for it and technical support to help set up the entire course so that it works technically and the learners can easily deliver the course. If there are no time and a lot of learners, one might think of, for example, the possibility of mutual evaluation for learners in order to reduce the burden on tutors.

7.6 Partner 5: Koning Willem 1 College, The Netherlands

During the pilot we used more video content than in our regular programme. This is a very helpful tool in meaning of the students that participated in the pilot. The video's were around two to three minutes. The students experienced that the video content should be a maximum of one minute to keep their focus. Screencast is very helpful, thanks to the Toolkit created by the CDETB.

In terms of collecting the evidence in their online folders they didn't like to put in video material of themselves. We have to work on that mindset, they want to look good like on their social media. We only want the evidence and don't mind about the looks like they do.

The best part of the pilot is that they can work on assignments which are a smaller part of the regular portfolio. They experience the workload less stressful. Actually the workload in the pilot is 120% of the regular programme. The student also gives us the feedback that it is very relaxed to complete subject by subject instead of the complete module at once.

The start-evaluation is very good for questions before they actually start going through their practical working days. We didn't experienced this much questions in our regular programme.

Even if the online module is divided in several subjects the students can still see the consistency in the learning course. The teacher needs less hours of Q&A during the pilot which is an advantage and gain of time.

The transfer of their knowledge in other learning/working environments is another advantage of the pilot. The student is more aware of transferring their knowledge to, for example, their traineeship in the hotel business.

To continue the progress we have made during the pilot we need to use the Toolkit because there are very much (online)tools that are easy to use. We used Screencast, Kahoot, and Prezi already. Maybe Nearpod, Padlet and Thinglink might be an opportunity in the future. We will definitely consider the use of more tools because of the Toolkit.

NOTES:

Co-funded by the
Erasmus+ Programme
of the European Union