



Introduction to blended learning

IN PRODUCT ORIENTED LEARNING
FOR INSPECTION

Blended learning is an educational practice that is combining digital learning tools with traditional face-to-face classroom teaching

Classroom based training versus blended learning frameworks

In the classroom the topics of the face-to-face activities often define the weekly content. Power Point style teaching is often used. The face-to-face teaching activities must be moved in a way that is suitable for blended learning solutions.

In the blended learning framework the main challenge is not to structure the content, but to ensure that learners have enough activities every week.

To provide a clear timetable:

The course may be structured in weeks that follow the topic. Problem based learning supports weekly activities for the students. Power Point slides don't work.

Designing the online learning activities: Select those that are most appropriate for the class learning outcomes. Teaching should reflect that internet today is part of the everyday activities in the society.

Criteria for success:

How appropriate are the learning activities and the chosen technologies for the learning context?

How well are they integrated into the learning process?

Effective teaching experiences:

It is important that there is a strong alignment between the planned learning

outcomes and the learning activities that intend to help developing students' achievement of those.

Factors to consider:

- What are the intended learning outcomes ?
- The situation for the students; where are they located, number, access to work-based training etc.
- Technical requirements related to course content and the previous learning experiences.
- Has the teacher a broad and deep previous online experience?

**It
may be
tempting
to use new
tools and
services
in blended
teaching**



Why should pedagogy be considered before technology?

Start examining the reasons for introducing blended learning activities to help providing successful learning experiences.

Students value technology when it supports, adds and improves their learning experiences.

Define the key pedagogical principles, to be followed by selecting how technology can support activities that are going to explore them:

- What are the learning outcomes?
- What do the teacher want to achieve?
- What knowledge and skills should the students learn?

If the students have control over their own learning experience, the more likely they are to remain engaged.



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Despite of usually well-defined teaching strategies for the classroom, it may be difficult to know where to start.

How to select which technology would be appropriate and how should it be applied it an effective way in a blended learning framework?

Technology should help facilitating the learning process. How to select sound teaching strategies and relevant learning activities that are going to support the learning processes?

Regular student activities are crucial for keeping them engaged.

- Start simple!
- Start slowly in order to build up your own experience and confidence.
- Introduce one component, use it appropriately, evaluate the success and adjust the training if necessary.



Link the stated learning outcomes to the selected blended learning activities.

Students are frequently aware of the benefits of using technology in their daily lives for communication, socializing, shopping, etc.

If you ask workers to list knowledge and skills they use at work, and where they learned those, many will tell they learned them at work!

At the same time, teachers and students from industry are often not so

comfortable or familiar with using technology for learning.

Thus, the teacher must:

- Explain the purpose of and why a blended learning activity has been introduced
- If necessary provide briefing sessions with supporting materials.
- Support the students throughout the semester.

- Ask students to help each other.

Learning activities should be regularly spaced and include an estimate of the time the learners need to complete them.

Students need timely feedback and comments towards their learning activities from the teacher, or from their peers in the class.

Blended learning in a work-based training framework

Work-based vocational education and training (VET) refers to learning that happens by undertaking real work that includes the production of real goods and services.

WHY APPLY IT?

- 1. Work based learning may raise company productivity and innovation.*

During the 1980s UK-based NIESR showed that distinctive features of the German dual apprenticeship system, and of German companies approach to learning and skill development within the workplace, helped explaining the higher productivity of German firms compared with closely matched English firms.

The studies not only showed that there is a link between the level of skill development within German apprenticeships and enterprise productivity, but also that the breadth and quality of the skills plays a central role in enterprise productivity through influencing the ways in which work is able to be organized.

The nature of the skills in German firms was shown to result in workers being able to operate with greater autonomy and less supervision than in comparable English firms. Workers did take greater responsibility for the quality of their work,



and in labour being able to be used more flexibly.

The workers were able to operate with greater autonomy and less supervision. They took greater responsibility for the quality of their work, resulting in labour being able to be used more flexibly.

Furthermore, for instance the greater attention towards quality among German workers in metal-working plants resulted in their cleaning and maintenance of their machines more frequently, thus reducing breakdown rates. These superior skills of German production workers had been developed through learning in the workplace. This enabled more sophisticated automated machinery to be used, allowed smaller production runs with more frequent machine resetting and thus lower inventory levels and more customized production, and resulted in fewer breakdowns.

2. Work-based learning is a powerful form of pedagogy

This is a form of experiential learning that has implications for the development of practical techniques to improve the quality of work-based learning within VET. Work-based learning can be used in VET to develop problem-solving skills and learning skills. For example through allowing learning to be organized around joint accomplishment of tasks, so that elements of a skill take on meaning in the context of the whole, and by allowing competence to build step by step (Ainley, 1996; Resnick, 1987). Finnish research (Lasonen, 2005) has shown that it can teach entrepreneurship, promote maturity, and help to develop generic skills such as initiative and problem-solving.

3. Work-based learning can improve individuals' carer development

Good career education programs incorporate systematic experience of and learning from work, using techniques such as work shadowing, research projects about the nature of work, work visits, and carrying out real work tasks.



**Making
work-based
learning
work**

The literature shows that, for existing employees, work that is learning-rich benefits their career development. A relatively recent study (Brown et al., 2010) shows that:

- People in learning-rich work environments are more likely to be positively disposed towards learning and to take a positive approach to their future career development;
- There is a strong link between working in a learning-rich work environment and willingness to engage in formal vocational education and training; and
- Lack of engagement with learning and development at work increases the likelihood of downward career drift;

Thus, experience of and in work can be a valuable way for young people to sharpen and clarify their career plans

4. Work-based learning may raise the quality of VET

It is difficult, if not impossible, to replicate the real demands of daily production, or the cycle of production over a period of time, in a classroom or workshop, and neither can these settings easily replicate the social context of work that arises from interacting with workmates and from dealing with customers and suppliers. Workshops and classrooms cannot easily replicate the context in which skills need to be applied.

The arguments are largely based on the superior quality and relevance of the skills that are developed through involvement of the learner in the production of real goods and services, thus increasing their confidence in the system, and of increasing the link between learners and the labour market.

Reference (page 5-7): Work-based learning: Why? How?, Richard Sweet, 2013

What are the first steps in work-based blended learning?

Work-based vocational education and Training (VET) is a powerful form of pedagogy that can be used to develop basic work habits, occupational identity and specific occupational competences.

HOW TO APPLY IT?

In much of the developing world, informal unregulated apprenticeships in which all of the learning is work-based, there is no requirement for associated off-the-job training to be undertaken, and the acquisition of competence is not recognized through the award of formal qualifications, are the dominant mode of skill formation for many occupations.

There is a need to point out some key institutional requirements for effective arrangements that link informal work-based learning to the formal assessment and certification of competence. They include the existence of agreed occupational competency standards, a legislative or regulatory mandate for assessment and certification, mechanisms for the accreditation of assessors and/or assessment centers, support from employer groups and trade unions and the availability of opportunities for individuals to take part in skill upgrading courses prior to being assessed.

Work-based learning can take many forms within vocational education and training. These range from informal apprenticeship-type arrangements at one extreme to formalized apprenticeship arrangements at the other.



Between these two extremes there are a number of variants. These include alternance programs and structured work placements, in which the learner is legally a student rather than an employee.

It can motivate disadvantaged, disengaged and failing students, develop generic skills such as initiative and problem-solving, and teach entrepreneurship. It can improve students' labour market outcomes through the links that it creates between them and employers, which in turn assist recruitment, as well as through the superior quality and relevance of skills that are developed through involvement of the learner in the production of real goods and services in the workplace. The institutional arrangements that need to be put in place to support extended, high-quality work-based learning systems can be a way of more closely involving employers in vocational education and training, thus increasing their confidence in the system and raising its quality.



Step 1: Select a digital learning platform

A learning management system (LMS) or learning content management system (LCMS) will support all your online and offline courses and ensure that your students are able to access all the material they need, whenever and wherever they need it.



Step 2: Which part of the teaching are not successful?

Try to identify some areas for improvement and explore how these elements could be replaced with digital options. Try to aggregate a collection of relevant online resources and supplement classroom time with digital discussion groups.



Step 3: Invite for use of digital devices during classes

Support students work by using computers and mobile devices to do additional research or do online revision activities. Ask students to work together on group work that can be completed both in the classroom and via an online educational platform.