



# TECHNOLOGY ENHANCED LEARNING STRATEGY



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## INTRODUCTION

This document specifies Cavan and Monaghan Education and Training Board strategy for the implementation of Technology Enhanced Learning in all FET teaching and learning practices. This strategy is intended to support CMETB in developing flexible learning opportunities and provide access to Further Education and Training for all learners. It aims to build a shared vision that will inspire staff and students in the use of technology for learning, teaching and assessment and promote a positive change in CMETB.

“It is anticipated that the impacts of current and future technological advances on our working lives will be stark, with significantly increased use of Automation, Smart Technology, Artificial Intelligence, Big Data, Augmented Reality and Virtual Reality.” (Solas, Future Ready Learning, The Further Education and Training Strategy 2020-2024 (Draft), 2019)

DESI recorded in 2018 that 52% of Ireland’s population did not have the basic digital skills, which poses challenges for individuals, society and the economy.

There has been a focus in recent years across FET to build capability in technology enhanced learning and it can be expected that future FET will be delivered using more blended and online approaches. (Solas, Future Ready Learning, The Further Education and Training Strategy 2020-2024 (Draft), 2019)

## BACKGROUND

Technology Enhanced Learning is learning that is enhanced, supported or assessed using educational technologies. In recent times, Technology Enhanced Learning (TEL) has taken the place of other recently popular terminologies such as e-learning, computer-based learning, learning technology and information and communication technology (ICT).

Technology can be used to enhance learning on initial engagement, as part of course delivery and assessment, and in supporting career progression. Learners may access technology in all course areas and models of provision, including in-class, full or part-time provision, blended learning and exclusively online learning. The figure below represents how technology can enhance each area of provision:

### Face-to-Face

Technology can be used to provide students with their class notes, presentations, video, audio, assessment briefs and guidelines (typically up to 20% of delivery uses technology).

### Blended Learning

Learning is enhanced through technology by assigning interactive quizzes, setting assignments online, virtual classrooms, blogs, discussion forums. Face-to-face element is considerably reduced (typically 20%-79% of content is delivered using technology).

### Online Learning

A large proportion of the course is delivered online typically with no face-to-face delivery. Course materials are accessed online. Virtual classrooms are predominantly used in an online setting. Assessment and feedback is conducted online (80% or more delivered online).

Pedagogically, digital learning can be highly motivating, engaging and rewarding for learners and particularly learners who find the more traditional teaching methodologies challenging and constraining.

A blended learning approach to education that incorporates the best practices of traditional teaching and learning with technology has been shown to increase student engagement and learning outcomes.

## VISION

Our vision in CMETB centres on a balanced approach, ensuring digital technologies are integrated into lessons, where appropriate, and used to enhance the learners learning experience.

We also strive to ensure our learners develop an appreciation of digital technologies and the role technology can play in society. Learners will leave CMETB as confident, creative and innovative users of technology.

## OBJECTIVES

- Foster a culture in CMETB that fully embraces digital learning and its contributing factor in education.
- Digital platforms, resources and tools are utilised to enhance teaching, learning and assessment.
- Digital tools are utilised to connect and communicate with current learners and prospective students.
- Digital literacy and digital skills of both teachers and learners are supported and developed.
- Teachers will be fully enabled to use digital technology and resources, where appropriate, to enhance student learning.
- Ensure technology is considered in all areas of curriculum development and delivery.
- Document and share good practice and expertise.



# STRATEGY AIM



*The aim of this strategy is to **enhance learning, teaching and assessment** through the use of technology.*

## STRATEGY THEMES

1

Enhancing learning experiences through the integrated use of technology

2

Continuous professional development for all staff

3

ICT infrastructure

4

Supporting structures and practice



# THEME 1: ENHANCING LEARNING EXPERIENCES THROUGH THE INTEGRATED USE OF TECHNOLOGY

**Aim:** Further enhance the use of technology in teaching, learning and assessment.

**Features:**

- Technology will be integrated into all areas of teaching, learning and assessment, where appropriate. These activities will be aligned with best practice to enhance the student learning experience.
- Content will be easily accessible to all students.
- Assignments will be published online, and the aim will be that students will submit assignments online and receive feedback in digital format in the future.
- We aim to exploit technology so that education can be availed of anywhere at any time.

**Benefits**

- Improved student experience
- Improved access to resources
- Access to a broader range of students
- Offer more curriculum

## THEME 2: CONTINUOUS PROFESSIONAL DEVELOPMENT FOR ALL STAFF

**Aim:** Create a positive learning experience for our staff which will increase engagement and implementation of technology.

### **Features:**

- A detailed continuous professional development plan will be prepared for all staff.
- New staff will be supported through a comprehensive induction programme on the use of technologies in the classroom within CMETB.
- Offer a range of workshops covering a range of topics and technologies.
- Develop and deliver online training opportunities that staff can easily access as and when needed.
- Build on current support and further embed the role of the TEL Champions.
- Encourage collaboration and team skill sharing.

### **Benefits**

- Staff are confident using digital technologies.
- Staff have access to training relevant to their teaching area.

## THEME 3: ICT INFRASTRUCTURE

**Aim:** Provide access to relevant equipment and tools to enable the effective use of technology in the classroom.

### **Features:**

- All efforts will be made to ensure all equipment and infrastructure will be relevant and kept up to date.
- Procedures will be put in place to ensure our
- IT environment can support blended learning and technology-enhanced learning.
- We will fully support the use of Office 365 as the core tool for productivity and storage.
- Utilise data analytics to improve operational efficiency.

### **Benefits**

- Maintain up to date ICT Infrastructure
- Improved systems through better data and analysis
- Reduce administration tasks

## THEME 4: SUPPORTING STRUCTURES AND PRACTICE

**Aim:** Ensure the effective delivery of technology enhanced learning is supported by relevant supporting structures and practices.

### **Features:**

- Relevant structures and processes will be put in place to ensure the effective implementation of technology supported learning.
- A robust set of guidelines will be developed that are capable of informing and supporting the selection, procurement, implementation and adoption of suitable technologies and educational resources.
- Adequate funding will be secured to support the plans of CMETB Technology Enhanced Learning Strategy.

### **Benefits**

- Maximise the use of technology in CMETB.
- All staff are supported and encouraged to use technology.
- Broadens access to CMETB programmes.

## GOALS AND ACTIONS

Enhancing learning experiences through the integrated use of technology

*Aim: Further enhance the use of technology in teaching, learning and assessment.*

Goal	Success Criteria	Actions - what needs to be done	Resources and Funding	Responsibility and Timeframe
Develop guidelines and review process for the selection, development and adoption of Open Educational Resources (OER) and other third-party material, taking into consideration copyright and creative commons regulations.	Staff when selecting OER and other third-party material will have the awareness of copyright legislation and creative commons regulations to limit the risk to CMETB.	Guidelines will be produced for the selection, development and adoption of Open Educational Resources (OER) and other third-party material	Online guidelines for staff to access as and when needed	TEL Coordinator  Feb 2020  Adhered to by all staff
Support the traditional face-to-face classroom delivery through the continued and extended usage of educational digital technologies.	Build on current capacity and further enhance the digital experience for both staff and students.	More support required to introduce technology to areas in Youthreach and Adult Education.  Training for all staff across CMETB on Moodle/Microsoft Teams and other digital technologies.	Support training put in place with training materials and resources accessible to all.	TEL Coordinator  TEL Champions/Digital Leaders  Dec 2020
Introduce more online tools to the classroom, to include, e-portfolios, online assessment and feedback, lecture capture tools, augmented and virtual reality.	Increased use of digital tools across all FET provision. Explore the area of augmented and virtual reality for curriculum areas such as tourism, electrical and motor vehicle.	Research current digital tools that are not currently being used in CMETB and analyse their benefit  Explore and research the use of AR and VR in education.  Maximise the impact of assessment by identifying tools and processes that support effective feedback e.g.: e-portfolios – capturing evidence of achievement and practice, online badging, online marking systems	Procure AR and VR equipment.  Research, select and procure an effective e-portfolio system.	TEL Coordinator/IT/Curriculum Staff  June 2021
Develop a suite of online resources and information that staff can easily access to support their use of TEL.	Build a bank of online resources that can be used by many curriculum areas.	Develop and create online resources for staff across FET that can be used in many different subject areas.	Procure eLearning course development software.	TEL Coordinator/Curriculum Staff  June 2021

# GOALS AND ACTIONS

Continuous professional development for all staff.

*Aim: Create a positive experience for our staff which will increase engagement and implementation of technology.*

Goal	Success Criteria	Actions - what needs to be done	Resources and Funding	Responsibility and Timeframe
Conduct a skills audit of relevant tutoring staff in relation to TEL and implement CPD programmes where appropriate.	Staff have the relevant digital skills to embed digital technologies into their teaching.	Regular reviews of teaching staff digital skills set and suggest areas for training and development.	Ongoing training  External trainers when required	TEL Coordinator  Ongoing
Review the usage of existing TEL technologies in each centre and put in place relevant CPD programmes, where appropriate.	Have the most up to date TEL technologies in each centre so our students receive the best experience while attending CMETB.	Regular reviews of TEL technologies utilised in each centre.  Develop relevant CPD programmes based on available technologies.		TEL Coordinator/Centre Managers  Ongoing
Establish a team of TEL leaders to promote and foster a culture of TEL amongst tutors and learners.	Fully embed the role of TEL Champions	Further enhance the skills of TEL Champions so they can pass knowledge on to other staff.  Include TEL Champions in CPD Workshops as facilitators e.g.: FET Meet	Further training required	TEL Coordinator/TEL Champions  Dec 2020
Develop a centralised calendar of internal and externally related training opportunities in conjunction with CMETB's CPD Strategy and Plan.	Integrated TEL/CPD calendar of events	Agree and schedule a range of TEL CPD events throughout the year in conjunction with CPD Coordinator	Internal and external training opportunities	TEL Coordinator/CPD Coordinator  Ongoing
Develop a framework process for the dissemination and sharing of good practices.	Good practice is actively shared among curriculum teams and across FET services	Develop and disseminate a framework for the sharing of good practice. Make this widely available to all staff. Recognise/incentivise good practice each year.	Yearly incentive for best use of technology in CMETB FET Services	TEL Coordinator/FET Director/Centre Managers  March 2020
Implement a system for recording, monitoring and evaluating learning experience in TEL CPD opportunities.	All staff development in the area of TEL is recorded and monitored. Each training session/workshop will be evaluated.	Develop a recording and monitoring system for the delivery of TEL CPD opportunities.	Recording system.  Evaluation form for training created (MS Form).	TEL Coordinator  Jan 2020

## GOALS AND ACTIONS

Continuous professional development for all staff.

*Aim: Create a positive experience for our staff which will increase engagement and implementation of technology.*

Goal	Success Criteria	Actions - what needs to be done	Resources and Funding	Responsibility and Timeframe
TEL support will include workshops, information sessions and seminars that will be delivered according to the specific needs identified by specific FET Services.	Staff will have access to a range of workshops, information sessions and seminars on an ongoing basis.	A range of workshops, information sessions and seminars to be agreed that meets the specific needs of FET Services		TEL Coordinator/TEL Champions  Ongoing
Develop and deliver online training opportunities which can be accessed by staff as and when needed.	Staff will be able to access a range of online training materials as when and needed.	Develop and create a bank of online training opportunities for staff, where appropriate.	eLearning software  Managed hosted solution for the handling of online courses	TEL Coordinator/IT/CPD Coordinator  Continuous/Ongoing

# GOALS AND ACTIONS

## ICT Infrastructure

*Aim: Provide access to relevant equipment and tools to enable the effective use of technology in the classroom.*

Goal	Success Criteria	Actions - what needs to be done	Resources and Funding	Responsibility and Timeframe
Ongoing review of existing TEL technology in each centre to ensure equipment meets the required needs and all centres have the same level of supports.	All centres will have access to the required technology to offer blended and online programmes of study.	Regularly review existing TEL technology and suggests areas for improvement/enhancement.		TEL Coordinator/IT/Centre Managers  Continuous/Ongoing
Implement a system for measuring the effective usage of TEL tools.	Use of technology will be measured and evaluated.	Develop a framework for measuring effective usage of TEL tools/technology.	Analytical software	TEL Coordinator/IT  March 2020
Develop a framework for the selection, purchasing and support of TEL tools/ technologies.		Develop a framework for the selection, purchasing and support of TEL tools/ technologies.	Framework for purchase of TEL tools/ technologies	TEL Coordinator  April 2020
Develop an IT environment capable of supporting blended and technology enhanced learning.	IT environment will be capable of supporting all online activities.	Continuously monitor and evaluate developments in IT in relation to TEL activities in the classroom.		TEL Coordinator/IT  Continuous/Ongoing

# GOALS AND ACTIONS

## Organisational Structures and Practices

*Aim: Ensure the effective delivery is supported by relevant organisational structure and practice*

Goal	Success Criteria	Actions - what needs to be done	Resources and Funding	Responsibility and Timeframe
Develop and support a culture of innovation and experimentation with TEL use in each FET centre.	TEL is encouraged by all Senior Managers in CMETB. A culture of TEL is successfully embedded in CMETB.	Supports and encouragement from all Senior Managers.		Senior Management  Continuous/Ongoing
Incentivise and celebrate new initiatives around the use of technology to enhance and enrich learning and teaching.	Exceptional uses of TEL will be celebrated and incentivised.	Determine what ‘exceptional’ usage of TEL is.  Put in place a recognition scheme for good practice.	Recognition scheme	Management/TEL Coordinator
Secure adequate funding to support TEL activities	Funding will be available for the successful implementation of TEL	Secure funding for TEL toolsand technologies	Budget	Management/TEL Coordinator
Implement a systematic approach to how new technologies are selected, procured, implemented, evaluated and monitored.	TEL tools and technologies will be selected, procured, implemented, evaluated and monitored.	Develop a systematic approach to the selection, procurement, implementation, evaluation and monitoring of TEL tools and technologies.		Management/TEL Coordinator

# INDICATORS OF SUCCESS



- Technology enhanced learning, and blended learning become an integral part of all programmes in FET.
- Staff are confident using technology in the classroom and can reflect on positive experiences using technology.
- Evidence of good practice is shared among FET services.
- Students enhance their digital skills and have the confidence to use technology in the work environment.
- Technology is considered in all new curriculum development and design.

## IMPLEMENTATION

The TEL Coordinator will drive forward the implementation of this strategy. The goals and actions will be reviewed on a regular basis and this will be used to inform management on progress of the implementation of this strategy.

A key component of this strategy is that all FET Services will benefit from the goals and actions outlined above and all activities are built on the following values:

**Purpose:** enhance teaching and learning experiences and activities in meaningful, innovative and engaging ways.

**Need:** understand the needs, problems and potential solutions in learning and teaching.

**Enhance:** embedding effective TEL into all aspects of teaching and learning to enhance the learner experience.

**Communicate:** good practice is recognised and valued.



# GLOSSARY OF TERMS

**TEL** – Technology Enhanced Learning

**Automation** – use of automatic equipment.

**Smart technology** – adoptive technology, wearable technology, wireless technology, etc.

**AI** – artificial intelligence – machine learning.

**Big Data** – large amounts of data that can be with technology.

**Augmented Reality** - an artificial environment created through the combination of real-world and computer-generated data.

**Virtual Reality** – an environment created by technology.

**DESI** – Digital Economy and Society Index.

**Blended Learning** – mix of traditional face-to-face teaching methods and technology.

**Online Learning** – all learning completed online with the use of technology.



**cmetb**

Bord Oideachais agus Oiliúna  
an Chabháin agus Mhuineacháin  
*Cavan and Monaghan  
Education and Training Board*