

VET Teacher E-learning Toolkit

Required functionality to support e-learning in Australian vocational education and training

This document was developed by the Australian Flexible Learning Framework (Framework¹), through the E-standards for Training business activity².

It specifies the **minimum** web and desktop-based functionality requirements needed to support e-learning in the national training system. The purpose of this document is to inform the development of vocational education and training (VET) Standard Operating Environments (SOE) to support the e-learning functionality required by teachers and trainers.

Table of Contents

1. Required web-based functionality	2
1.1 - Access to national VET teaching and training resources.....	2
1.2 - Access to online resources to support teaching and training.....	2
1.3 - Access to social, collaborative communication and content creation tools.....	2
1.4 - Access to virtual classroom and synchronous communication tools.....	3
1.5 - Access to tools to support evaluation and assessment activities.....	3
2. Required desktop functionality	4
2.1 - Ability to author and view documents	4
2.2 - Ability to play audio and video content.....	4
2.3 - Ability to create and customise multimedia content.....	5
2.4 - Ability to access and subscribe to information feeds.....	5
For more information.....	5

¹ The Framework is the national training system's e-learning strategy; for more information: <http://flexiblelearning.net.au>

² The E-standards for Training business activity is focused on developing national standards to underpin essential e-learning infrastructure, conducting research into new technology areas and providing guidance materials and tools to support the effective use of emerging technologies; for more information: <http://flexiblelearning.net.au/e-standards>

Licence Types		
C = Commercial	CNC – Commercial No Cost	F = Freeware, Open-source, Free for use in Education

1. Required web-based functionality

1.1 - Access to national VET teaching and training resources

VET practitioners require access to the teaching and training resources available through the national VET sector's network of learning object repositories.

Functionality	Examples	Licence	Notes
Discover and download VET learning resources	LORN (Learning Object Repository Network) http://flexiblelearning.net.au/lorn	F	Install as desktop short-cut and/or added to search toolbar in web browser.

1.2 - Access to digital resources to support teaching and training

Practitioners require the ability to access supporting digital resources that are available online.

Functionality	Examples	Licence	Notes
Discover and use digital resources	TeacherTube http://www.teachertube.com	F	Video-based educational resources that can be viewed online, or downloaded for use in class or personal viewing.
	YouTube http://www.youtube.com	CNC	Video-based resources that can be viewed online and commented on.
	Google Maps http://maps.google.com	CNC	Web services that include interactive mapping, satellite and terrain imagery.

1.3 - Access to social, collaborative communication and content creation tools

Practitioners require the ability to communicate, collaborate and create content online using web-based applications and tools.

Functionality	Examples	Licence	Notes
Blogging	Blogger http://www.blogger.com	CNC	Web logs (or blogs) are commonly used in education for topic discussion by a learning group or as a reflective journal as a group. Blogs are thought to be more interactive than an ordinary web-based discussion board as they may contain text, audio, video or images.
	Edublogs http://www.edublogs.org	F	
Social Bookmarking	Del.icio.us http://del.icio.us	CNC	Social Bookmarking tools are used by individuals or learning groups to collate, manage and rate links to web-based resources.
Wikis	Wikispaces http://www.wikispaces.com	CNC/C	Wikis are commonly used for group documentation or assignment work.

Photo sharing	Flickr http://www.flickr.com	CNC	Images can be shared with the online community or private groups.
	Picasa http://picasa.google.com	CNC	
Video sharing	YouTube http://www.youtube.com	CNC	Videos can be uploaded and shared with the online community, or topic-based and private channels.
	Kaltura http://www.kaltura.com	F	

1.4 - Access to virtual classroom and synchronous communication tools

Practitioners require the ability to connect to teachers, trainers and students to deliver and participate in training and professional development activities.

Functionality	Examples	Licence	Notes
Use virtual classroom software to connect remote teachers, trainers and students	Adobe Connect http://www.adobe.com/products/connect	C	Virtual classroom tools can be used to deliver and collaborate in online workshops, training, demonstrations, seminars, professional development and meetings.
	Centra http://www.saba.com	C	
	Elluminate http://www.illuminate.com	C	
	Horizon Wimba Live Classroom http://www.wimba.com	C	
	IDL React http://darwinnt.biz	C	
	VET Virtual http://vetvirtual.com	F	

1.5 - Access to tools to support evaluation and assessment activities

Practitioners require the ability to access tools to support the creation and publish surveys and quizzes for research, evaluation, feedback and assessment.

Functionality	Examples	Licence	Notes
Create, publish and collate data	Survey Monkey http://www.surveymonkey.com	CNC/C	Surveys can be conducted for research. Teachers and trainers can also use these tools for evaluating a session, or collating data.
	Lime Survey http://www.limesurvey.org	F	
Create quizzes for assessment.	Respondus http://www.respondus.com	C	Quizzes can be created offline, then delivered via the web, or through a learning management system.
	Wimba Create http://www.wimba.com	C	

2. Required desktop functionality

2.1 - Ability to author and view documents			
Practitioners require the ability to create and view PDF, DOC, TXT and RTF files			
Function	Recommended applications	Licence	Notes
View PDF documents	Acrobat Reader http://www.adobe.com	CNC	
View DOC, RTF and TXT documents	Microsoft Word Viewer http://office.microsoft.com	CNC	
Create PDF documents	CutePDF http://www.cutepdf.com	CNC	Different functionality exists within these tools. In some products, the ability to set security settings for PDF documents varies between commercial and free versions.
	Acrobat Writer http://www.adobe.com	C	
Create documents	Microsoft Office http://www.microsoft.com	C	
	Open Office http://www.openoffice.org	F	

2.2 - Ability to play audio and video content			
Minimum requirement for practitioners is the ability to play all media created in content formats recommended to VET by E-standards for Training.			
Function	Recommended applications	Licence	Notes
View FLV and SWF 9 content	Flash Player 9 http://www.adobe.com	CNC	Also plays other standard formats. Refer to website for info.
Play MOV, MPEG -2, H.264/MPEG-4 AVC content	QuickTime 7 http://www.apple.com	CNC	Also plays other standard formats. Refer to website for info.
Play WMA and WMV content	Windows Media Player http://www.microsoft.com	CNC	Microsoft website provides information on which version is recommended for which operating system platform.

2.3 - Ability to create and customise multimedia content

Minimum requirement is for practitioners to be able to create and customise multimedia content.

Functionality	Example application	Licence	Notes
Record and edit audio	Audacity http://audacity.sourceforge.net/	F	Commonly used for creation of audio content for podcasting.
Take screen-captures	Wink http://www.debugmode.com	F	
	Snagit http://www.techsmith.com/	C	
Create demonstration or interactive tutorials and assessments	Captivate http://www.adobe.com	C	
	Camtasia http://www.microtech.com	C	
	Adobe Flash http://www.adobe.com	C	

2.4 - Ability to access and subscribe to information feeds

(for example, RSS, podcasts and newsgroups)

Minimum requirement is for practitioners to be able to access, subscribe to, and download news feeds and podcasts.

Function	Example application	Licence	Notes
Subscribe and download	Newsgator http://www.newsgator.com	CNC	Recent web browsers include news and RSS aggregators
	Juice http://juicereceiver.sourceforge.net/	F	

For more information

E-standards for Training

Email: e-standards@flexiblelearning.net.au

Website: <http://flexiblelearning.net.au/e-standards>

Australian Flexible Learning Framework

Phone: (07) 3307 4700

Fax: (07) 3259 4371

Email: enquiries@flexiblelearning.net.au

Website: flexiblelearning.net.au