

E-portfolio Implementation Trial

Fire Protection Association Australia

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and Workplace Relations**

Acknowledgment

This report was produced by Virginia Krumins and Katharine Ebbs of the Fire Protection Association Australia.

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Purpose

The purpose of the E-portfolios Implementation Trials¹, conducted by the Australian Flexible Learning Framework's (Framework²) E-portfolios business activity³, was to identify the factors that contribute to the successful implementation of an e-portfolio system which supports learners move into, through or out of vocational education and training (VET) quickly and easily.

Organisational overview

Fire Protection Association Australia (FPAA⁴) is Australia's major technical and educational fire safety organisation aiming to achieve continual improvement in fire safety through active membership and industry activities.

Members represent every aspect of the fire safety community – manufacturers and suppliers of fire protection products and services, fire-fighters, building owners, insurers, designers and surveyors, government and legislators, educators and anyone else working as part of the fire safety community to provide a safer environment.

Trial overview

A Ning⁵ was created and trialled by FPAA as an e-portfolio system. Ten fire service technicians were invited to access the Ning to submit samples of workplace evidence to achieve the unit TAAASS404B, *Participate in Assessment Validation*, which supports service technicians who apply for an *Extinguishing Agent Handling Licence*.

The Ning was called an "Evidence Record" rather than using the term e-portfolio.



¹ <http://www.flexiblelearning.net.au/content/e-portfolios-funding>

² The Framework is the national training system's e-learning strategy: <http://flexiblelearning.net.au>

³ The E-portfolios business activity supports the development of national e-portfolio standards to improve the portability of learner-collected evidence of learning: <http://flexiblelearning.net.au/e-portfolios>

⁴ Fire Protection Association Australia: <http://www.fpa.com.au/>

⁵ Ning is a free online social networking site - <http://www.ning.com/>

Each service technician was asked to:

- upload photos of assessment activities to the Evidence Record website
- share and comment on the assessment materials on this website.

The progress of the trial was documented using a spreadsheet contained within a separate FPAA project Ning, and available at:

<http://spreadsheets.google.com/pub?key=tzWuzsuxgoDG7QwAaaa3-dg&output=html>

Implementing the e-portfolio system

Ning was chosen as a cost effective, secure and user-friendly online resource for housing workplace evidence.

The features that appealed when choosing to trial Ning were:

- Ning is a secure site where participants must be invited by the site administrator.
- Ning allows for an additional level of privacy for each participant to set up their own group.
- Ning provides a choice of blog or forum to facilitate participant discussion and feedback.
- Ning site administrators can customise the look and feel of the site by changing the 'skin' or template.
- Ning has an easy to use 'manage' function for the site administrator to add text boxes and additional features such as RSS feeds.
- Ning offers 10GB storage, 1,000GB bandwidth and can hold up to 5,000 photos and 500 videos per site.

Our project staff spent eight hours per week in the initial stages of the trial talking to participants and making sure they were comfortable using the Evidence Record site as they gained new ICT skills to operate in this online space. This time was well spent as participants then had the confidence to display their technical skills by making comments on forums and communicating online with other trial participants.

Considerations when trialling the Ning as an e-portfolio system included securing:

- agreement from FPAA management and member companies
- willingness from FPAA learning and development team to trial different methods to capture skills to map against competencies
- commitment by participants to learn new concepts and allocate their time.

The Ning was a simple and cost effective option that enabled the creation of a friendly online space to share skills and comments.

FPAA will use the Evidence Record Ning again as an e-portfolio but will simplify the process, as described in the *Barriers to implementing e-portfolios* section overleaf.

Strategies to enable e-portfolio use

Worksite mentors and peer learning opportunities were set up for training and research staff at the FPAA national office. These included:

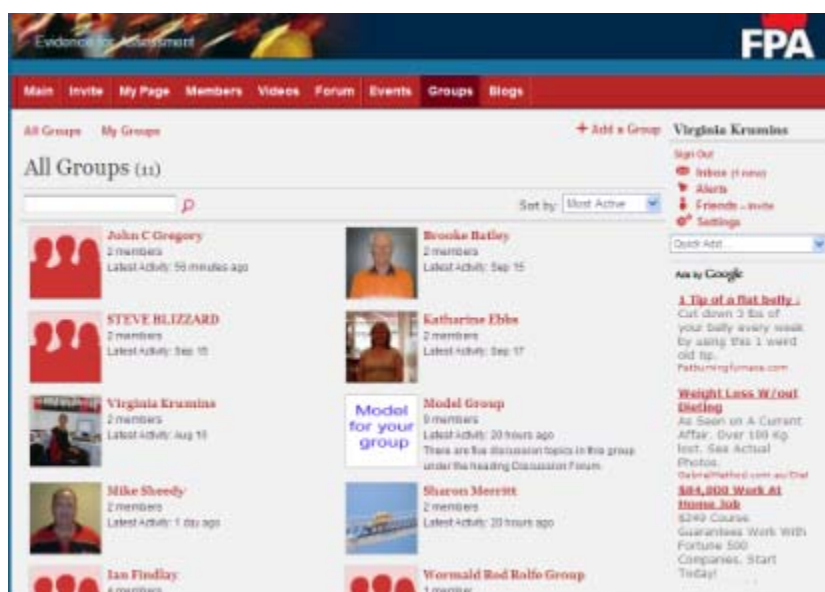
- face-to-face internal support and sharing of knowledge and skills

- the FPA project Ning (invitation only), to share information on the progress of this trial
- participating in an Australian Council for Private Education and Training (ACPET) training program where FPA staff learned and practiced multimedia skills in group sessions with representatives from other registered training organisations (RTOs).

Framework staff, the ACPET mentoring scheme and contacts supplied by the E-portfolios Business Manager, Allison Miller, all provided the staff involved in this trial with ideas on related activities.

Each participant completed a pre-trial survey to identify their ICT strengths and weaknesses. Eight hours a week were allocated by the trial staff to provide phone and email contact to each participant. Participants were appreciative of the opportunity for 'just in time' support, particularly to master the uploading of information to the site and setting up their own group in the Evidence Record site.

A model Group was set up by the trial staff for participants to follow as they established their own Groups. The Group feature in the Ning was considered to be a more private online space to upload participants' evidence.



Barriers to implementing e-portfolios

Nine of the 10 participants maintained their interest during the trial by contributing to the Evidence Record site as well as adding comments to validate the assessment evidence of their peers.

The one participant who didn't complete the trial was called on to fight fires in Queensland during the early stages of the trial. This meant that they were then trying to catch up on their workplace responsibilities in the latter stages, making it very difficult for them to continue with the trial.

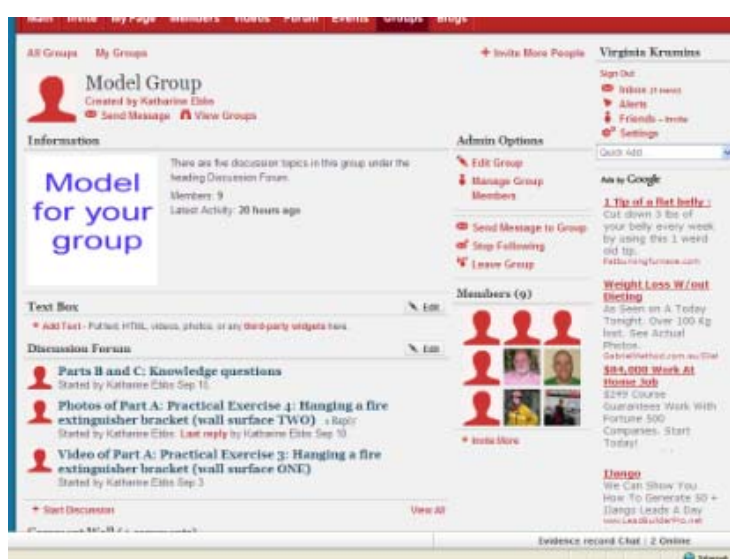
To further extend the participants' ICT skills, trial participants were offered the opportunity to learn how to submit photos to the website via Bluetooth transfer from their mobile phone. Audio instructions for how to do this were placed on the main page of the Evidence Record. This offer was only accepted by one participant, however, more trial participants said they would have learned this skill if the trial had been over a longer period to provide participants with more time to consolidate this new skill.

Aspects of our approach which made it difficult for the participants included:

- Using the Ning Groups section rather than My Page section to capture evidence and comment on the evidence submitted gave participants an extra level of privacy to only invite those who they wanted to view their uploaded evidence into their own Group. However, this added an extra layer of difficulty when uploading and accessing information.

To simplify this in the future, FPA Australia will gain written agreement from participants to share their information with the whole group using the My Page option. The My Page has intuitive steps for participants to upload images to their own space.

- Giving participants the option to provide evidence for multiple assessment tasks rather than just a single task was helpful to ensure that each assessor had some evidence to upload that was relevant to the trial, but it also complicated the requirements. In the future, FPAA will focus on one evidence collection task at a time to simplify the process.



- There was a mixed reaction by participants to written instructions. To increase participation we initiated and responded to requests via 'on call' telephone mentoring and online audio instructions.
- For learners in industry, FPAA realised that participants needed short, precise guidelines to describe the benefits of each technology used and step by step instructions to support their development of each new skill ie:
 - uploading images and video
 - using RSS feeds
 - ease of access to stored evidence
 - guidance to allow or disallow access to personal or group online space.

Additional considerations

Participants demonstrated that they believed that online technology can enhance their work environment by giving feedback during the trial that:

- Uploading videos and using them as evidence is a good way to ensure that candidates being assessed are following correct technical procedures. Three trial participants uploaded videos to the Ning site and were positive about the ease of doing this once they knew how.

- The Evidence Record website was a ‘really good idea’ and ‘very useful’ for collection of evidence.
- The website would be a great place to store information so that technicians and assessors can check correct technical procedures and information about training and assessment in the fire protection industry.
- The website would be useful to allow communication about solving technical problems faced by technicians and assessors in the industry.
- The website should be set up to include members of the FPAA Training Special Interest Group⁶ so they can communicate easily online.

Future directions

Interest for future activity was generated in three areas:

1. Incorporating evidence exemplars and comments from the FPAA Training Special Interest Group into the Evidence Record website.
2. Using the Evidence Record website as a place to demonstrate examples of good workplace practice by experienced technicians and how each task can increase maintenance and installation standards. This could address the need for improvements in the quality of the work in the fire protection service industry.
3. Interest in opportunities for this industry to use digital media to connect instructors and learners, who are often very busy and dispersed. Industry is also interested in being able to submit examples of workplace tasks.

The trial highlighted the need to continue:

- providing just-in-time mentoring to support the development of digital technology skills
- listening to our participants about the immediate and ongoing transferable skill development, so that we are fully aware of participants’ specific skills and their skill development needs – some participants needed a lot more phone and online support than others due to different skill levels, which became obvious during the one-on-one phone support
- documenting and changing anything that does not work or enhance participant productivity
- creating opportunities for computer savvy participants to gain additional skills.

Post trial, the Evidence Record will be used by members of the Training Special Interest Group, initially as a skills validation tool. One of the trial participants is a key member of this group and has expressed their enthusiasm that the site be used by this group in the future.

The knowledge and skills gained during the trial can be incorporated into the FPAA Recognition Policy.

FPAA is continuing to lobby key industry players to identify and agree on the benefits of an added online approach such as the Evidence Record e-portfolio website.

⁶ FPAA Training Special Interest Group is a group fire protection industry members who meet regularly to discuss qualifications, training pathways and training resources.

Additional materials

Learner feedback

The nine participants who participated in the trial submitted photos, personal information and uploaded evidence. They were aware that the short time frame for the trial, combined with their own work commitments and their need to spend time learning the ICT skills required to use the website, would not allow for full completion of the Assessor Unit 404B, but that the trial would help them gain the skills needed for full completion of the unit in the near future.

None of the trial participants expressed a need to export material out of the Evidence Record website and it is envisaged that the website will be used and added to by the participants in the future.

The participants said that the Evidence Record website:

- was a good starting point for remote assessment and they could clearly see a use for the Evidence Record website in their industry
- was a great place for fire protection industry assessors to check for updated information
- increased their skills in publishing to the web.

However, they reported that the website was not easy to navigate. They thought the website's navigation was not intuitive enough and creating Groups was difficult.

They also felt that uploading photos to this website was a complicated process (probably due to the Groups functionality), and that photos were too static for this form of evidence and it would have been better to use videos. Using video recordings would have made it easier for the remote assessor to determine the candidate's competence, as mentioned in the *Additional considerations* section of this report on page 5.

One participant said that it "*would be good to have a discussion forum on this website giving advice about certification and licensing in the industry for different states*".

Participants found it difficult to make time at the end of their long working days to complete their assessment at home after work, and one participant was regretful that he hadn't had more time to spend on the trial.

Resources

Ning can be downloaded for free from <http://www.ning.com>.

Ning contained most of the features required by FPAA, and other functionality was provided by general computer tools and mobile phones eg being able to Bluetooth⁷ photos from mobile phones.

Additional software used included:

- Video edits via Camtasia Studio - a Tech Smith Product:
<http://www.techsmith.com/camtasia.asp>
- iSpring Presenter to upload PowerPoint slides to Evidence Record website:
http://www.ispringsolutions.com/products/ispring_presenter.html

⁷ "Bluetooth is an open wireless protocol for exchanging data over short distances (using short length radio waves) from fixed and mobile devices": <http://en.wikipedia.org/wiki/Bluetooth>

- Picasa3 for compressing and resizing photos, though Ning was able to do this to an extent: <http://picasa.google.com.au/>
- Mp4 converter when mp3 files needed converting to mp4 and to embed media in a webpage: <http://www.mp4-converter.biz>
- Audacity for creating and editing podcasts: <http://audacity.sourceforge.net/>
- Elluminate web conferencing for skill building sessions of project staff and for staff to meet and share with other people experimenting with e-learning: <http://www.illuminate.com/>.
- Flash to adapt support and reference material for the trial participants: <http://www.adobe.com/products/flash/?promoid=BPDEE>

Additional resources developed during this trial can be found in the *Attachment* on page 9.

For more information

For more information on FPAA's e-portfolio implementation trial:

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Website: flexiblelearning.net.au

Attachment 1 - Trial Documents

Overview of steps to take to participate in the Evidence Record website

1. Join the Evidence Record website at <insert link>.
2. Make a Group using your name on the Evidence Record website by:
 - a. Clicking on the Groups tab.
 - b. Clicking on +Add a Group to create a group in your name.
3. Your Group is where your evidence will be stored. Additional discussion topics will be added to your Group for you to upload your evidence for assessment of Unit XXX.
4. Upload workplace photos (see instructions below) for the following:
 - a. Attaching a fire protection sign.
 - b. Hanging a fire extinguisher bracket.
 - c. Selecting tools, equipment and hardware needed to hang a fire extinguisher bracket on a plaster wall.
5. Invite another person to view and comment on your online photos and evidence.
6. Accept another person's invitation and comment on their online photos and evidence.

Uploading photos into your Group in the Evidence Record website

1. Go into your Group in Ning by clicking on this link: <insert link>
2. Open the relevant discussion forum by clicking on its title.
3. Click on Edit Discussion on the right hand side under Admin Options.
4. Click on the camera icon (above the box) which will help you browse on your computer for the photo you want.
5. Upload the photo from your computer.
6. Code will appear in the discussion box.
7. Click on Save down the bottom of the page to save what you have added.
8. Your photo should appear.
9. You can add text next to the photo by clicking on Edit Discussion again and typing text into the box above where the code for the photo is.
10. Remember to click on Save down the bottom of the page each time you add something to your discussions.

Adding comments to another person's evidence in the Evidence Record website

1. Accept the invitation to another person's Group by clicking the link in the email you have received from Evidence Record website. You will receive a separate email asking you to comment on this person's evidence.
2. Click on the different Discussions topics in the person's Group to find the evidence they have uploaded.
3. View the evidence the person has included in their Group Discussions.
4. Below each piece of evidence, type in the box under Reply to This to answer the following questions:
 - a. What part of the activity is clearly demonstrated by this evidence?
 - b. List any questions you have about the evidence presented.
5. When you have written the reply, click Add Reply to send this information to the person.
6. View the replies another person has sent to your Group. Reply back to the questions the other person has written about your evidence.