# Creating Digital Stories to Enhance Vocational Learning

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# Acknowledgements

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# Executive Summary

## Aim

The aim of this pilot study was to improve the vocational learning and literacy development of learners by engaging them more fully with course content through the creation of digital stories. The project had five objectives.

1. Support the development of vocational learning and literacy skills.

2. Increase learners' engagement with course content.

3. Value and utilise the technical expertise of learners.

4. Foster learners' reflective thinking skills.

5. Evaluate the potential of digital stories as an assessment tool.

## Introduction

In the last decade, a burgeoning array of technologies has changed the landscape of learning and the expectations of learners. To accommodate this development, lecturers must regularly explore and evaluate which technologies best meet the needs of specific learner groups, deliver pedagogically robust content and foster reflective learning experiences. Some reflective practitioners and researchers advocate a storytelling approach (McDrury & Alterio, 2003; McKillop, 2005; Moon, 2010) because it accommodates and values cultural differences and lies at the heart of everyday human interaction. Barrett (2006) asserts that digital storytelling, in particular, has the potential to make reflective thinking more concrete and visible. Digital storytelling also offers learners a range of multimedia options that supports the inclusion of static and moving images, music and narratives. This media-rich tool caters for every learning preference. It also has the capacity to draw on and utilise the skills of individual storytellers. For example, in this study, media savvy learners shared their digital expertise and lecturers explored story ideas while the researchers facilitated scriptwriting and reflective thinking opportunities. Throughout the storytelling process, everyone worked together to integrate vocational learning and literacy development with course content.

## Methodology

Conducted within a socio-cultural and social constructivist framework, this pilot study incorporated learner-centred principles, experiential learning approaches and reflective activities. Based on the premise that we construct our understandings of the worlds we inhabit by reflecting on our experiences, four tenets were of particular significance:

- collaboration – learning with and from others;

- conversation – using reflective dialogue and creative learning strategies;

- context – emphasising workplace and lifelong learning that values cultural and personal diversity; and,

- construction of knowledge – making meaning from experience using deep learning approaches.

## Participants

Seven participants were involved in the pilot: three students enrolled in a Certificate in Professional Cookery programme and four lecturers from the Schools of Hospitality, Design and Fashion. One researcher from the Educational Development Centre and another from the School of Hospitality completed the research team. A small group of participants was invited by the researchers to take part in the pilot. Numbers were limited to enable the researchers to work in depth with the participants, as a group and on an individual basis, since the literature suggests considerable time is needed to orientate learners to digital tools and reflective processes.

## Findings

Participants created seven stories. On analysis, their stories had three themes: personal and professional journeys, creative practices, and learning and teaching philosophies. The collaborative methodology provided a platform from which to build a storytelling culture and the technology offered a media-rich learning and teaching approach with the capacity to embed vocational learning and literacy development with course content. Three key findings emerged from the project.

**1. Digital storytelling supports vocational learning and literacy development**

Participants developed richer understandings of digital, global, technical, visual and information literacy through the active creation of digital stories. Student participants utilised multiple senses and learning approaches to create their stories and make vocational learning gains. Lecturer participants extended their ability to embed multiple forms of literacy into their learning and teaching practices.

### 2.    Reflective conversations encourage deep learning

Participating in reflective conversations prior to and during the creation of their stories helped all participants gain an authentic storytelling voice. These same conversations enabled student participants to recall aspects of their learning journeys, value their achievements, widen their career ambitions and broaden their views of life-long learning. Lecturer participants improved their ability to select topics with strong underlying themes to turn into story resources. They also became aware of the possibility of introducing future students to reflective practice through digital storytelling.

### 3.    Collaboration fosters empathy and transformative learning

Participants from both groups experienced transformative learning moments during the creation of their digital stories. They also made empathetic connections with other project members. Student participants stated that working collaboratively with peers and lecturers improved their interpersonal skills and increased their confidence, enabling them to showcase their stories to peers and staff at the School of Hospitality end-of-year function. Lecturer participants reported experiencing professional development gains as they mentored others in their area of expertise and advanced their multimedia skills through interactions with other team members, including learner participants.

## Implications

Both groups experienced challenges, although these differed in focus. Student participants required extra time to adapt to a reflective storytelling culture and substantial support to script their narratives. Lecturer participants wanted to explore software options prior to working on their stories, which also proved time-consuming.

## Recommendations

The following recommendations have two purposes: firstly, to support the integration of vocational learning and literary skills with course content and, secondly, to provide lecturers with guidelines to set up a digital storytelling culture.

- Show learners examples of digital stories that use multimedia, including static and moving images, music and narrative.

- Orientate learners to a reflective way of thinking and working by facilitating discussions about story elements such as theme, purpose and craft.

- Consider whether to assess the reflective process or the digital story and justify your preference to colleagues and learners. (We favour *assessing as learning*. Therefore, we assess the reflective thinking process rather than assessing the highly individualised creative stories).

- Ascertain the digital skills of learners and value and utilise them.

- Explore a range of digital storytelling software options. (For instance, Moviemaker which is free and easy to use).

- Build learners' vocational learning and literacy skills using reflective conversations and scriptwriting strategies that relate to course content and storyboard development.

- Allow plenty of time to move through each storytelling stage. Remember the learning is in the process. Have fun!

As a pilot study, this research highlights the potential of digital storytelling as a vocational learning and literacy development tool to engage learners more fully with course content. However, further investigation is needed to determine its overall effectiveness because it does require significant time to orientate learners to a reflective storytelling culture.

# Introduction

In the last decade, a burgeoning array of technologies has changed the landscape of learning and the expectations of learners who operate in these media-rich contexts (Bendt & Bowe, 2000; Prensky, 2001; Oblinger, 2003; Robin, 2006; Valentine, 2004). To meet the needs of such learners, lecturers must constantly update their teaching practices. In the tertiary sector, this means valuing the experiences of learners, integrating technology with course content and supporting the development of different literacies. Brown, Byran & Brown (2005) have summarised the work of key contributors in the field, coining the term 'Twenty-first Century Literacy' and outlining five interrelated aspects.

- **Digital Literacy –** ability to communicate with an ever-expanding community to discuss issues, gather information, and seek help.

- **Global Literacy** – capacity to read, interpret, respond and contextualise messages from a global perspective.

- **Technological Literacy –** capability to use computers and other technology to improve learning, productivity, and performance.

- **Visual Literacy** – capacity to understand, produce and communicate through visual images.

- **Information Literacy** – ability to find, evaluate and synthesize information.

Literacy development intersects with vocational learning in much the same way as reflection connects with deep learning. Equally significant is the evolving relationship between technology and literacy. As Leu asserts, "literacy is no longer an end point to be achieved but rather a process of continuously learning how to be literate" (2001, p.568), suggesting the need for a reflective approach.

While various researchers and practitioners have documented the benefits of reflective learning (Dearing, 1997; Boud, Keogh & Walker, 1985; Moon, 2004; Schön, 1983) engaging learners in the process continues to challenge educators (Boud & Walker, 1998). Some reflective practitioners and researchers advocate a storytelling approach (McDrury & Alterio, 2003; McKillop, 2005; Moon, 2010) because it accommodates and values cultural differences and lies at the heart of everyday human interaction. Barrett (2006) asserts that digital storytelling has the potential to make reflective thinking more concrete and visible, which suggests it might also support the development of vocational learning. She also recognises the potential of this tool to create stories using multiple literacies, as do Burmark

(2004) and Ormord (2004). Used conjunction with interactive learning approaches, digital storytelling has the potential to transform higher education (Alexander, 2004; Attewell, 2005).

Creating digital stories encourages "learning-about" and "learning-to-be" skills, both necessary attributes for lifelong learners (Barrett, 2005; Brown et al, 2005). Creative storytelling encourages learners to engage in reflective thinking processes and to capture the complexities of their experiences (McDrury & Alterio, 2003). Like traditional storytelling, digital forms have a theme and a point of view, elements that can support particular learning outcomes, such as literacy development (Robin, 2006). Net Generation learners are often already competent users of computers, scanners, cameras and other digital technologies and know their way around free music and image sites, skills that contribute to the creation of dynamic digital stories.

## Background to study

Like many tertiary institutions, Otago Polytechnic offers a range of digital learning opportunities to meet the complex needs of learners. During 2007/2008 lecturers in the School of Hospitality delivered course components using cell phones and iPods. Learners appreciated the flexibility this approach afforded them. Rapid advancements in mobile technologies enabled them to revisit their notes at home, on the bus, between classes. Not surprisingly pass rates improved. Wanting to build on this success, the hospitality lecturers were open to exploring the learning potential of other media.

 Digital storytelling offered a way forward. Using multimedia to tell stories is not a new concept. In the early 1990s, co-founders of the Centre for Digital Storytelling (CDS) in Berkley, California, began supporting individuals to create and share their personal narratives, using seven frequently cited elements.

| Seven Elements of Digital Storytelling |
| --- |
| 1. Point of View – who is telling the story and what is their perspective? |
| 2. A Dramatic Question – what question does the storyteller want to answer? |
| 3. Emotional Content – how will the storyteller draw in listeners on an emotional level? |
| 4. The Gift of Voice – how will the storyteller personalise the story to help the audience understand the context? |
| 5. The Power of Soundtrack – what music or other sounds will support and enhance the |

| storyline? | |
|---|---|
| 6. Economy – how much content will the storyteller need to convey the story yet not overload their audience with too much information? | |
| 7. Pacing – how slowly or quickly will the story progress? | |

**Table 1: The Seven Elements of Digital Storytelling**

(Adapted by Alterio & Woodhouse, 2009)

Although the finished product is usually no more than a few minutes long, the process of making digital stories offers learners multifaceted learning experiences. This approach appealed to lecturers in the School of Hospitality and the staff developer already working alongside them to develop their research capability as they embarked on the development of a Degree in Culinary Arts. Ideas for a project began to evolve.

## Project Description

The overall purpose of this study was to improve the vocational learning and literacy development of learners by engaging them more fully with course content through the creation of digital stories. The project had five objectives.

1. Support the development of vocational learning and literacy skills.

2. Increase learners' engagement with course content.

3. Value and utilise the technical expertise of learners.

4. Foster learners' reflective thinking skills.

5. Evaluate the potential of digital stories as an assessment tool.

## Methodology

Conducted within a socio-cultural and social constructivist framework, this study incorporated learner-centred principles, experiential learning approaches and reflective activities. Based on the premise that we construct our understandings of the worlds we inhabit by reflecting on our experiences, four tenets were of particular significance:

▪ collaboration – learning with and from others;

▪ conversation – using reflective dialogue and creative learning strategies;

- context – emphasising workplace and lifelong learning that values cultural and personal diversity; and,

- construction of knowledge – making meaning from experience using deep learning approaches.

## Participants

Four student participants and five lecturer participants were initially involved in the project. However, one student withdrew for personal reasons and one lecturer because of an unexpected increase in her workload. The remaining lecturer participants were from the disciplines of hospitality, design and fashion. Student participants were enrolled in a Certificate in Professional Cookery programme. One researcher was based in the Educational Development Centre and the second in the School of Hospitality. A small group of participants was invited by the researchers to take part in the pilot. Numbers were limited to enable the researchers to work in depth with the participants, as a group and on an individual basis, as the literature suggests considerable time is needed to orientate storytellers to digital tools and reflective processes.

To ensure the privacy of participants, the researchers agreed for publication purposes to alphabetise everyone and only use their role, for example, Student A and Lecturer B.

## Digital Storytelling Process

Researchers and participants worked through an eight-step digital storytelling process adapted from Helen Barrett's digital storytelling model to create first–person narrated three-to-six minute stories. Each step has a distinct focus.

1. Brainstorm story ideas.
2. Develop a script of approximately 600 words using a storyboard (some storytellers interchanged steps 2 & 3).
3. Select and scan still and moving images to provide visual impact.
4. Record the story.
5. Load the story (narrative) and images into a software programme.
6. Add a music track to add emotional tone.
7. Refine and edit the story.
8. Present it to an audience.

# Research Process

Using a six-stage research process involving reflective conversations and storytelling strategies, researchers and participants explored how active involvement in the creation of digital stories could support and enhance vocational learning and literacy development.

**Stage 1.** An initial focus group facilitated by the researchers, using semi-structured reflective conversations, introduced participants to one another and the research process and orientated them to digital storytelling processes and technologies.

**Stage 2.** Reflective conversations facilitated by the researchers supported participants to identify their storylines and themes, mock up storyboards, develop draft narratives and select images and music tracks.

**Stage 3.** Presentations of draft storyboards to peers for feedback enabled participants to consolidate their storylines, themes, narratives, images and music tracks.

**Stage 4.** Creation of draft digital stories using digital storytelling software provided participants with opportunities to share their knowledge, skills and experiences and to learn from one another.

**Stage 5**. Presentations of digital stories to peers and engaging in self and peer review processes enabled participants to make final adjustments.

**Stage 6.** A second focus group, also facilitated by the researchers, using semi-structured reflective conversations, encouraged participants to reflect on their vocational and literacy learning experiences, identify significant moments and consider assessment possibilities.

# Findings

Used in tandem, these storytelling and research processes enabled participants to produce seven stories. On analysis, their stories had three themes: personal and professional journeys, creative practices, and learning and teaching philosophies. The collaborative methodology provided a foundation from which to build a storytelling culture and the technology offered a learning and teaching approach that could embed vocational learning and literacy development with course content. Three key findings emerged from the project.

1. **Digital storytelling supports vocational learning and literacy development.**

Participants developed richer understandings of digital, global, technical, visual and information literacy through the active creation of digital stories. Student participants drew on multiple senses and various learning approaches to create their stories and reported

vocational learning gains. Lecturer participants extended their ability to embed information literacy into their learning and teaching practices.

## 2. Reflective conversations encourage deep learning

Participating in reflective conversations prior to, and during, the creation of their stories helped all participants gain an authentic storytelling voice. These same conversations enabled student participants to recall key aspects of their learning journeys, value their achievements, widen their career ambitions and broaden their views of life-long learning. Lecturer participants improved their ability to select topics with strong underlying themes to turn into story resources. They also became aware of the possibility of introducing future students to reflective practice through digital storytelling.

## 3. Collaboration fosters empathy and transformative learning

Participants from both groups experienced transformative learning moments during the creation of their digital stories. They also made empathetic connections with project members. Student participants stated that working collaboratively with peers and lecturers improved their interpersonal skills and increased their confidence, enabling them to showcase their stories to peers and staff at the School of Hospitality end-of-year function. Lecturer participants reported experiencing professional development gains as they mentored others in their area(s) of expertise and advanced their multimedia skills through interactions with other team members, including learner participants.

# Implications

Both groups experienced challenges, although these differed in focus. Student participants required extra time to adapt to a reflective storytelling culture and substantial support to script their narratives. Lecturer participants wanted to explore various digital story software options before starting to work on their stories, which also proved time-consuming.

# Discussion

The three key findings of this pilot project support the studies of Brown et al (2005) and Riesland (2005) who maintain that collaborative ways of working with creative, reflective and experiential activities using digital technologies that employ multiple senses and value diverse perspectives, advances vocational learning and literacy development. The benefits of learning with and from others confirmed that reflective conversations and thoughtful

feedback contribute to the quality and enjoyment of digital learning experiences. Evidence to support each finding follows.

**Digital storytelling supports vocational learning and literacy development**

Participants had different reasons for joining the project. Student C thought it sounded *arty* and *was interested in learning the technical side of things like how to use MovieMaker*. Student A *wondered what story I could tell about food* and Student B signed on because *it sounded interesting*. Lecturer participants, along with the researchers, shared an interest in creative practices and wanted to explore the potential of digital storytelling as a vocational learning and literacy development tool, partially due to the involvement of three members of the research project in the 2007 Tertiary Education Commission (TEC) *Learning for Life* literacy initiative. Everyone expressed a desire to construct a storyboard and learn how to use moviemaking software packages (MovieMaker and Premier Pro), an animation product (CrazyTalk) and photography programmes (InDesign and Photoshop), experiences that contributed to participants' expanding technological literacy.

All participants were new to storyboarding, a film and scriptwriting technique that acts as a visual planner. A typical storyboard resembles a table, for example, four rows across, five deep, with ample room for images and minimal space for text, a strategy that encourages storytellers to select memorable phrases to augment their visual and sound tracks.

| IMAGE | IMAGE | IMAGE | IMAGE |
|---|---|---|---|
| TEXT | TEXT | TEXT | TEXT |

**Figure 2: Example of storyboard row**

The researchers facilitated reflective discussions until each storyteller had an idea to transfer to their storyboard. Some participants wrote (in pencil, directly on their boards) a brief description of the images they wanted to use. Others jotted down possibilities on Post-its and positioned them along the rows, later moving them around as their storylines developed and changed. As participants organised their images, they asked each other reflective questions. For example:

*What relationship do I want to convey between this image and my theme*? (Lecturer J).

*What message does this image send*? (Student A).

*What form of narrative tension would suit this image*? (Lecturer S).

Selecting images enabled participants to develop additional skills in structuring, ordering and presenting. As they justified their images to peers, participants expanded and deepened their visual literacy skills which Signes (2008) defines as "the capacity that someone possesses to be able to evaluate, apply or create visual concepts and meaning" (p.6). The storyboards continued to evolve as participants explored their ideas with the group and later scripted short narratives that connected to their images. The researchers invited participants to read their scripts aloud and to seek focussed feedback, a process that helped fine-tune their narratives. As Student B remarked *You need to write your story down, work on it, read it out loud, find out what the others think and rework it again and again.*

This reflective phase helped participants *gain an authentic voice* (Lecturer A). It also provided storytellers with opportunities to add depth and richness to their narratives through pitch, timing and tension. Scriptwriting in this collaborative environment helped participants develop their oral and written language skills, something they talked about in the second focus group.

> *Short, powerful statements work best, not boring, dragged out sentences* (Student A).

> *I learned to knock out what I didn't need to say* (Student C).

> *I learned to keep to the point ... to stick to one main thread, and to get a complex issue across in a way that would engage the viewer* (Lecturer M).

Because everyone shared their knowledge of different software packages, experience of web browsing and digital downloading, as well as their understanding of copyright licences, all participants enhanced their digital, global and information literacy skills. They also further developed their technological literacy capabilities through image scanning, digital editing and audio recording of narratives.

All participants called upon the expertise of the group when they encountered narrative challenges. Student participants appreciated support as they constructed their storyboards.

> *I'm not good at putting down on paper what's in my head but the group helped me find the right words* (Student A).

> *You learn better when you talk about things in a group* (Student B).

Lecturer participants also benefitted from group input. After making several versions of a story, Lecturer J was not sure *if they were any good because I was too close.* She found *trusting the feedback from the group helped.* For Lecturer M the *storyboard process was invaluable. I referred back to it the whole way through, right to the end.*

**Reflective conversations encourage deep learning**

All participants mentioned the benefits of participating in reflective conversations, a strategy the researchers used in every storytelling session. Student B found *talking triggered memories. It was also good to talk about the future, to talk about what else I could do in life.* This student also expressed surprise at *how much slang we students use* while Student C discovered that a classmate took leftover food home from the teaching kitchen, not because she was greedy, as she had previously thought, but because the student was on a restricted budget. Student B commented *our talks showed me how difficult student life is moneywise and with flatmates for those of us who have never lived this way.*

Sharing ideas, as well as giving and receiving constructive feedback, strengthened participants' digital storytelling experiences, as Lecturer A explains.

> *As a collaborative learning experience, it was fantastic. I had the opportunity to work with people who were creative and passionate about their subject matter. Creating a digital story provided me with a platform to tell the story of my teaching philosophy in an engaging way.*

By the end of the project student participants had also recognised the value of reflection. *There was time to process ideas and have conversations, to expand ideas. That helped set things in my mind* said Student B, a finding that supports Robin's (2006) assertion that "students who participate in the creation of digital stories may develop enhanced communications skills by learning to organise their ideas, ask questions, express opinions and construct narratives" (p.4). Student participants expanded their digital and information literacy skills as they developed their stories. For example, while constructing their storylines, they located, evaluated and synthesised information, as well as gave and received constructive feedback, which helped improve their own and their peers' narratives.

When asked by the researchers what the best thing was about making digital stories, Student B said *it used all my senses, which helped me learn.* Student C commented *we were doing it, we were actually putting something into practice, not being taught* and Student A remarked *I saw other parts of people's lives.* When asked what they found most helpful, Student B noted that y*ou learn best when you are having fun* and *it's amazing what you remember. It* [this project] *showed me how much I have changed over time, personally and*

*physically.* Student C realised that *you need to tell your story in your language, to feel that you are describing your world.*

Student participants also believed the project encouraged them to reflect on their learning journeys and to contemplate their futures. *The conversations made me think of what else was possible like studying further, jobs in a vineyard as a chef* (Student B). *It was really useful to do it as a part of a class because it made me think of other things, my future, maybe doing food photography* (Student C). Student A expressed gratitude *for the experiences I can now use. I remembered so much about my grandparents and the places they took me.* The same student insightfully remarked *images show you what people value, how they see the world.*

Student C, who exhibited highly developed competitive behaviours at the beginning of the project, gained a significant personal insight. *I'm a competitive person, but I enjoyed listening to other people, working as a team. It's not all about winning.* Student B agreed, saying *it could have been competitive but it wasn't.*

Lecturer participants also commented on the benefits of working collaboratively. *We worked in different ways, valued different things and wanted to tell different stories yet the team aspect proved motivating* (Lecturer M). This factor also resonated with Lecturer J. *We helped each other with ideas. Our discussions made me look at many options for my digital story and made me realise there are possibilities in both the meta and micro experiences in life.*

In conjunction with acknowledging and valuing the experiences and contributions of their peers, all participants reported an increased awareness of their personal and professional development. Student B commented that it *helps you get to know other people. It's good to learn how to get along with someone and not to push their buttons.* Lecture A had two significant insights: *It made me reflect on how I have changed as a lecturer over the years and realise that I am now very comfortable with my teaching approach* and, even more telling, *listening to the students comment about my teaching practice motivated me to continue to push the boundaries.* For Lecturer S, this meant *learning to think laterally, to use sound and imagery, to use digital stories as a demonstration platform for some theory-based sessions.* These comments highlight the benefits of establishing a collaborative environment that fosters reflective learning while respecting the diverse needs and backgrounds of learners.

**Collaboration fosters empathy and supports transformative learning**

In the final focus session, both participant groups reported that their involvement in the project had enabled them to experience high levels of cooperation and trust.

> T*he team aspect of the group was motivating. I didn't want to let anyone down* (Lecturer M).

> *I got to know people and learned to trust them* (Student A).

> *We felt like a team, we fed off each other's comments and ideas* (Student B).

> *I made meaning from both product and process* (Lecturer S).

Empathetic comments also emerged. Participants thought the study provided them with opportunities to see and value their peers in different ways.

> *Our discussions helped me understand everyone's different views and options; that they depend on your upbringing and living situations* (Student C).

> *It [the process] made me realise that all the lecturer participants had similar experiences even though we worked in different fields. The 'eureka' moment when we realised our own perspectives had changes was common to all stories* (Lecturer J).

These comments suggest creating digital stories has the potential to become a transformative learning experience, another area that warrants further investigation.


## Assessing Digital Stories

Although assessment is an integral part of the learning process, assessing emergent reflective experiences through traditional pre-planned learning outcomes, invariably proves unsatisfactory. This happens for three key reasons. Firstly, digital stories and other creative works invariably encounter subjectivity if assessed by traditional methods. Secondly, a growing body of research suggests only the person doing the reflection can truly determine the significance of the learning that occurs (Bourner, 2003; Jenkins & Lonsdale, 2007: McDury & Alterio, 2003; Robin, 2006). Finally, reflective learning is process-driven so a more meaningful assessment is to invite learners to select an aspect of their digital story journey and to write about it, guided by co-negotiated learning outcomes that have meaning to the individual storyteller. As Lecturer J remarked *it would be possible to assess how well the story was made and told but the story itself is the student's own experience and shouldn't be assessed.* Lecturer M agreed saying *I think this sort of reflection is best not assessed. The*

*mere fact that the student does it is enough. I did it for me, it was a fantastic reflective process, although I think others will enjoy my story too.*

## Recommendations

These following recommendations have two purposes: firstly, to support the integration of vocational learning and literary development with course content through the creation of digital stories and, secondly, to provide lecturers with guidelines to set up a storytelling culture.

- Show learners examples of digital stories that use multimedia, including static and moving images, music and narrative.

- Facilitate discussions about elements of these stories such as theme, impact and craft to orientate learners to a reflective way of thinking and working.

- Consider whether to assess the reflective process or the digital story and justify your preference to colleagues and learners. (We favour *assessing as learning*; therefore, we assess the reflective thinking process rather than assessing the highly individualised creative stories).

- Ascertain the digital skills of learners, value and utilise them.

- Explore a range of digital storytelling software options. (Moviemaker is free and easy to use).

- Build vocational learning and literacy skills of learners through reflective conversations and scriptwriting strategies related to course content and storyboard development.

- Allow plenty of time to move through each storytelling stage. Remember the learning is in the process. Have fun!

# Conclusion

This pilot study demonstrates how learners who design and create digital stories using reflective, creative and collaborative processes can advance their learning in multiple ways. Learner participants gained in-depth knowledge of their peers' values, experiences and perspectives and strengthened links between vocational learning, literacy development and course content. All participants widened their understandings of digital, global, technical, visual and information literacies. Everyone contributed to, and benefitted from, the high levels of trust, cooperation and empathy that developed in the group. In addition, every participant gained personal and professional insights, some of which proved transformative, such as learner participants experiencing sufficient confidence to lift their career aspirations and recognise the value of life-long learning. However, a larger study is needed to ascertain whether the time required for learners to create reflective digital stories brings about sufficient gains in vocational learning to warrant its widespread implementation.

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