

BUILDING TEACHER CONFIDENCE IN ADDRESSING INDIGENOUS ISSUES IN THE CLASSROOM

Rose-Marie Thrupp and John Hunt
University of the Sunshine Coast,
Stacey Cowell and Ben Crowley
Urangan State School, and
Leanne Whittaker, Sunbury State School
Australia.

Abstract

During the 2014 ICICTE Conference John Hunt (2014) described the pedagogical and technological requirements for the Wondervision Project, reporting on the project's first phase, resource development. This paper focuses on its second, data collection. It addresses three questions.

1. How have the resources contributed to teachers embedding Indigenous perspectives in the learning they design?
2. To what extent do the different resources in digital learning environments engender changing attitudes to learning?
3. How have these resources contributed to reconciliation with our Indigenous peoples?

This paper adopts a case study approach to two of the participating schools. The study identified a number of positive attributes created by accessing the range of resources, including the structure and content of the resources and the provision of resources for independent use by children.

Wondervision: The Project Enacted

Wondervision is a project of the University of Sunshine Coast, Queensland, Australia. Its purpose is to connect elementary school students with the Western Desert art collection curated by the university's Art Gallery. A significant direction of the project is the use of Information Communication Technologies (ICT) to engage students.

By late 2014, the research team had started to receive feedback from the schools participating in the Project. This feedback comprised artworks and video clips from elementary students. Two of the schools became the case study sites reported on in this paper. The researchers explored the usability of the resources available, how they were used and examined artefacts produced by the students. Of particular interest were the perceptions of teachers around how the resources had impacted on teaching about Indigenous issues and how ICT contributed to both usability and student learning.

Background and Theoretical Underpinning

The sharing of these cultural resources with schools had four purposes. These included: (a) building partnerships between the university and schools, (b) creating advantage for schools in accessing cultural resources otherwise not

accessible, (c) the cultural learning for children, and (d) enacting the university's Reconciliation Action Plan.

The program developed included the virtual gallery and a range of resources (digital and print) to support teaching in schools related to the virtual gallery, specifically, knowledge of Western Desert art and the cultural learning inherent in it. Multiple resources to facilitate connection between schools and the university were developed (Hunt & Thrupp, 2013a): e-books of digital task cards, printed task cards and consequently, a website hosted by the university Art Gallery. Task cards were developed for Prep to Year 4 and Year 5-7 students with a focus on promoting small group collaborative work investigating and reflecting upon the arts using Western Desert art.

Earlier research had established that Information Communication Technologies (ICT) - mediated learning provided considerable pedagogical advantage for students (Hunt, 2014). These advantages are detailed below. Students were seen to be:

- Accessing information, people and places (the remote gallery and curator)
- Making thinking visible (engaging with a virtual gallery and high resolution images of artworks)
- Co-researchers in the project (investigating the artworks and engaging with remote curator/s)
- Collaborating with each other and the remote expert (students as co-researchers and co-curators)
- Passionate about learning (evidenced by their personal artworks and their myriad of questions seeking further knowledge)

To engage learners in meaningful learning experiences, the authors turned to the work of Keogh and Naylor (1997). Their guiding principles for the development of resources as reflected in this study are:

- Contexts that establish a sense of purpose, relevance and connection in the learner's mind with the new learning of the unit.
- Learners need to be actively involved in activities: "hands-on and minds-on" (the intellectual component).
- Activities should be conceptually accessible to the learners, set in appropriate language, challenging but within reach.
- Activities should have a sense of "wow, let me have more of this" about them (the live presentations).

A developing understanding of what learning should look like for Indigenous students has also influenced the authors' work. It is not so different to what schooling looks like for other learners, except that a greater emphasis needs to be placed on Indigenous (or cultural) knowledge. Table 1 describes the authors' views, presented as a part of a review of schooling in a remote area of Queensland.

Table 1

A View of Indigenous PCK (IPCK)

Indigenous Knowledge (Australian Aboriginal peoples)

Culture:

- Both traditional and contemporary views are respected.
- Ways of knowing and valuing are paramount considerations.
- Historical contexts are understood and respected.
- Remote or provincial contexts are recognised and acted on.
- Views of childhood and its place in different Aboriginal groups.
- Place/role of the child is valued.
- Value of school learning and participation in a wider community is at the core of learning.

Pedagogical Knowledge

Approaches to learning based in the physical and cultural context of the community:

- A community-by-community approach.
- Pedagogy is prefixed and influenced by the language group/s and recognition that children are ‘English as additional language’ speakers.
- Cultural diversity, alignment of values and ‘ways of acting’ between groups are a feature.
- The child’s identity as a learner is understood and acted on – strength-based focus.
- The child is an emotional, social, physical and intellectual being.
- A holistic view of each child is the basis for designing learning to occur from “where the learner is.”
- There is an alignment of community and school values of what school learning is.

Content Knowledge

Australian curriculum embeds both declarative and procedural knowledge:

- Learning is situated in the context of the culture/community.
- Contextualised literacy and numeracy learning is evident.
- Particular attention is given to General Capabilities.
- Curriculum is designed on a non-graded basis for continuity for the learner.
- Curriculum fits the learner not learner to fit the curriculum.

Note: Adapted from Thrupp, Hunt and Barrie, 2012. *Re-envisioning learning at Doomadgee State School*. p. 15. Reprinted with permission.

The pedagogical considerations within the design of these resources included problem-based learning with a driving question, independent learning approaches with individuals and/or groups moving at their own pace, deep learning, literacy learning, self-direction and self-regulation, and multiple pathways to learning the same content, all within the same or themed context.

This project was designed to give teachers the ‘whole’ package and provide them with a resource and model to include Indigenous Perspectives in their classes; through art, students would investigate cultural ways of Indigenous people including beliefs and relationships.

The learning experiences are designed for children to engage with the thinking and life of the artist to understand their culture through art. Indeed, the students would become artists in this project. Some learning experiences are designed for children to use the techniques of these artists to reflect on their own culture. Other experiences are designed for students to use the techniques of the Western Desert artists to reflect on the culture and environment of Western Desert artists, enabling a comparison between artists to be made. The learning experiences provide a rich mix of locating and reading information, creating works of art, and analysing art works toward conceptualising wider learning than art. The learning focuses on art, history and geography, reading, writing and mathematics through engaging with art.

The Technologies

A range of digital technologies have been used to connect with the university’s art collection:

- Real time video streaming with a virtual curator (using FaceTime and mView Broadcaster)
- Interactive electronic books (hyperlinks and embedded video/audio)
- Interactive PDFs (hyperlinks embedded)
- Hard copy post cards and activities
- Small video clips with a cultural perspective and to broaden the scope of the arts curriculum: stories and storytelling, dance, art classes and bush tucker

This technical and pedagogical development phase of Wondervision has concluded. At this point, the resources have been reviewed and researched and are reported here as a case study.

Note: mView is a commercial streaming app for use on a range of mobile platforms. Its advantage is that a broadcast can be recorded. Its disadvantage is that audio is not duplexed; instead students can text messages to the remote expert via a text window in the app. This in itself is an advantage as students focus on the dialogue from the expert and must think carefully about questions they post to the text window.

The Methodology

A case study (and qualitative) approach has been adopted for this review with teachers' interviews and analysis of student artefacts being the prime sources of data. Our interest was in answering the broad question: *what is going on when these resources are being used?* This is developed further as a set of more specific research questions:

RQ1. How have the resources contributed to teachers embedding Indigenous perspectives in the learning they design?

RQ2. To what extent do the different resources in digital learning environments engender changing attitudes to learning?

RQ3. How have these resources contributed to reconciliation with our Indigenous peoples?

Stories Gathered: Data School 1

Teachers at school one planned an eight-week arts-based integrated unit of work for their Year 5 students. Sixteen percent of the school's student population and the school principal declared an Indigenous heritage (72 students of 449 students). The Indigenous liaison works within the school and coordinates an Indigenous playgroup. Planning was undertaken in full consultation with representatives of the local Indigenous people, the Butchulla, who are actively involved in the life of the school.

Elements of this plan included:

- Identifying the relevance of Indigenous studies: what do students already know?
- Exploring aspects of Indigenous culture with local Butchulla people: respecting the original local people.
- Interpreting local Butchulla art works:
 - Exploring symbols of the Western Desert and comparing to the symbols of the local Butchulla and creating their own symbols.
 - Making comparisons between local art and that of the Western Desert: X-ray and marine art versus a bird's eye view.
- Participating in National Aboriginal and Islander Day Observance Committee (NAIDOC) week celebrations, making cultural understanding relevant and participatory.
- Making links to geography (maps) and history (events of the past).
- Developing students as active citizens.
- Creating artworks for the classroom and school environment that integrate the techniques of Western Desert artists and Butchulla people. See Image 1.



Image 1: Art by the students of Urangan State School.

Using The Resources: School 1

The teacher used the digital books available from the project to plan class activities. Students did use the eBooks available but this was hampered by the lack of iPads in the school. However, the hard copy cards provided many opportunities for students to engage in research using traditional desktop computers and the Internet. The cards were used as a part of Literacy rotations in the class (integration), where students worked collaboratively in small groups to interpret and complete tasks.

Two local Butchulla people, a class teacher-aide and a classroom teacher, assisted with program delivery and worked with small groups to develop large artworks for the school foyer. See Table 2 for comments and pedagogical advantages.

Table 2

Teacher Comments School 1

Comments	Pedagogical advantage
The cards worked well for independent work in small groups, although they could be easily used for individual activity/in student language and hence, children-friendly text.	The pedagogy of collaboration was evidenced.
Having a Butchulla teacher-aide and fellow teacher helped me and gave a sense of pride to the aide.	Building teacher personal knowledge and cultural respect.
The resources helped to tackle a topic I had been avoiding as I did not have resources readily available: I was worried I would do something wrong.	Providing the 'whole deal', the one-stop shop for the teacher.
These resources gave me a good background knowledge.	Personal growth (content knowledge).
The virtual tour of the gallery was awesome.	Communication and collaborating over a distance.

Table 2 *Teacher Comments School 1 (Continued)*

Comments	Pedagogical advantage
The kids could see a purpose and wanted to do well.	Making the curriculum relevant and purposeful.
The kids were so switched on.	Engaged learners.
The Indigenous kids became “the experts”; “gave them an area, where they were the experts.”	Learning is situated in the context of the culture/community.
It was great to have an Elder come and speak to the class. I learned so much from her.	Connecting with community and culture.
The initial PD and ongoing support for the program sold me on this work.	Supportive environment.
The A4 cards were much more useful than the A5 cards.	This comment is about design, a lesson learned by the authors.
There wasn’t too much techie stuff to get lost with.	Catering for diversity and keeping it simple.
The idea of bird’s eye view was so useful in mathematics.	Integration and connectedness of curriculum.
These materials are real. The kids were working with real things about real people.	Connectedness of the curriculum, authentic.
The kids have started to understand that we are all the same.	Getting heads around stereotyping issues.

Teachers in this study used ICT in three ways: (a) for virtual tour of the Art Gallery using FaceTime providing access to full sized works in an Art Gallery context, (b) for e-book used on electronic whiteboard, and (c) for extended resources via URLs checked and provided

Stories Gathered: Data School 2

The Year 5 and 6 teacher at school two planned a six month Visual Arts Unit of work. This unit “fell into place” when the teacher attended the professional development for the Wondervision resources. As students had completed a unit on colours in term 1, this resource provided an obvious direction for further work. Sixteen percent of the school’s student population declare an Indigenous heritage (35 students of 209 students). Planning was undertaken with due consideration for the Butchulla people, the local Indigenous people, who are engrained in the life of the school.

Elements of this plan included:

- Exploring colours and combinations with an emphasis on warm, earthy colours using templates of Indigenous icons
- Investigating aspects of story in Indigenous art with children writing stories with icons
- Creating personal interpretations based on the techniques used by Western Desert artists to represent local environments

- Using an investigation-creation cycle as a basis of learning

Using The Resources: School 2

Feedback from one teacher at School 2 is in Table 3.

Table 3

Teacher comments School 2

Comments	Pedagogical advantage
The learning experiences provided for whole class activities for foundation work, which was then applied individually.	The pedagogy of collaboration was evidenced.
Materials gave me a structure with which to work that did not westernise important Aboriginal business (different reasons for art, stories are different, icons are different).	Learning is situated in the context of the culture/community.
The resources were sufficient for a whole semester of study.	Providing the 'whole deal', the one-stop shop for the teacher.
Some students really got the idea that there is meaning in the stories.	Ways of knowing and valuing are paramount considerations.
The kids loved the art works and learning experiences.	Engaged learners.
It was great to have a resource that enabled me to connect with a major value of the school (local Butchulla culture)	Connecting with community and culture.
The package of resources built foundation knowledge (of teacher)	A community-by-community approach.
The A4 cards were much more useful than the A5 cards.	This comment is about design, a lesson learned by the authors.

Descriptive Analysis

The Wondervision resource was the stimulus for investigation of the local Indigenous culture, using the art of the Western Desert in Australia. Furthermore, in both cases, these learning opportunities would not have been available to students without the package. Both cases involved classes and teachers in schools where the local Indigenous group, the Butchulla people, are heavily involved in the school, and building cultural knowledge integral to the school curriculum; thereby their involvement in this research was evident. The teachers in these schools are seeking ways by which to build their knowledge of Indigenous perspectives and contribute to the vision of the school in this regard. The case studies differed in that in the first case art was used as the integrative device for an integrated unit of work whereas case two was an art unit focused only on art.

Similarities between the cases included:

- Learning with authentic resources was supported by a comprehensive package.
- Resources:
 - Provided content knowledge for the teacher and thereby the confidence to engage in Aboriginal perspectives in way that was ethically sound.
 - Provided a unit structure with pedagogical advantage (e.g., collaborative approaches, active learning, problem-based learning).
 - Became a tool for both teachers and students.
 - Were well received by students and appropriate to their levels
- E-learning aspects were limited by the lack of available ICT in schools; both teachers identified use of printed materials in association with digital materials in some instances, in preference to digital materials.

In both cases a disadvantage was the lack of ICT access (i.e., enough iPads, and connections for FaceTime for the whole class in primary schools).

Conclusions

Clearly, the assumption is that these resources provide teachers with a structure, which they require to work in the area of Indigenous perspectives. Following are the findings related to each of the research questions.

1. How have the resources contributed to teachers embedding Indigenous perspectives in the learning they design?

The use of the Wondervision resources (Hunt & Thrupp, 2013a; Hunt & Thrupp, 2013b) provided the means by which teachers confidently and competently worked meaningfully with students with knowledge of Indigenous perspectives. Learning with Indigenous perspectives is a challenge for some Australian teachers as it has been embedded in the Australian curriculum (www.australiancurriculum.edu.au/). Teachers struggle with the knowledge required to provide content that culturally aligns with Indigenous perspectives. Consequently, teachers are looking for resources that provide depth and scope in learning for students by providing them with structure that enables effective learning design.

2. To what extent do the different resources in digital learning environments engender changing attitudes to learning?

There are limitations to the influence of digital learning environments on attitudes to learning. These limitations remain firmly embedded in the access to ICT available in our schools. While the Wondervision resources (Hunt & Thrupp, 2013a; Hunt & Thrupp, 2013b) are designed to extend learning beyond the four walls of the classroom into contexts such as art galleries, information banks, and Internet sites that elaborate learning, the full extent of this capability is yet to be in evidence in some schools.

3. How have these resources contributed to reconciliation with our Indigenous peoples?

Knowledge is the basis of reconciliation, and, certainly, the knowledge of these teachers and students has been widened and deepened for both the Western Desert people and the local Butchulla people. Understanding that there is not one Indigenous perspective but many and that there are many Indigenous peoples have resulted in major learning for teachers as a result of the project.

Acknowledgement of Country

The authors acknowledge the traditional custodians of the land on which they work and live and pays tribute to the strength and resilience of these people, past, present and future.



References

- Hunt, J. (2014). Exploring culture in a digital world. In L. Morris & C. Tsolakidis (Eds.), *ICICTE 2014 Proceedings* (pp.312-322). Retrieved from <http://www.icicte.org/Proceedings2014/HOME2014.htm>
- Hunt, J., & Thrupp, R. (2013a), *Western Desert art activities for years P-4*. University of the Sunshine Coast: Queensland, Australia.
- Hunt, J., & Thrupp, R. (2013b), *Western Desert art activities for years 5-7*. University of the Sunshine Coast: Queensland, Australia.
- Hunt, J., & Thrupp, R., & Barrie (2012), *Re-envisioning learning at Doomadgee State School*. Unpublished.
- Keogh, B., & Naylor, S. (1997). *Starting points for science investigations*. Cheshire, UK: Millgate House Publishers.

Author Details

Rose-Marie Thrupp

rose_marie_thrupp@icloud.com

John Hunt

Huntj1@usc.edu.au

Stacey Cowell

scowe14@eq.edu.au

Ben Crowley

bcrow31@eq.edu.au

Leanne Whittaker

Lwhit13@eq.edu.au