

What do Teachers Learn on a school visit to a Museum? A Research Project at Sovereign Hill

In 2015, Sovereign Hill Education undertook a small research project to try to measure teacher learning in our outdoor museum. With over 11,000 adult days accompanying students at Sovereign Hill per year, the potential could be substantial.

We felt there were opportunities for teachers to learn not only about content but also about pedagogy and, perhaps, most importantly, about how their students learned outside their classroom. We were keen to find out if teachers learned by simply being in our museum (as museums are designed as places for learning, a certain amount of osmosis might occur) or if our education programs were a major factor. As Sovereign Hill has no special resources to conduct visitor evaluation, this research had to be undertaken within the existing resources of our education team.

Since conducting this research, we are more confident that teachers do actually learn content and pedagogy and they are also keenly interested how their students respond to our practise. Most importantly, the data appears to demonstrate the importance of our education programs as the platform for teacher learning. It has given us the confidence to engage in some deep conversations with teachers around our education programs.

Sovereign Hill is unique in being an outdoor museum, and we are conscious that this research reflects our unique context. We are sharing this research in the hope that other museums might be able to use a similar model to develop a substantial case that profound teacher learning occurs in all museums.

Note: This research was conducted in 2015 when AusVELS was the curriculum in this state. AusVELS is now replaced by the Victorian Curriculum.

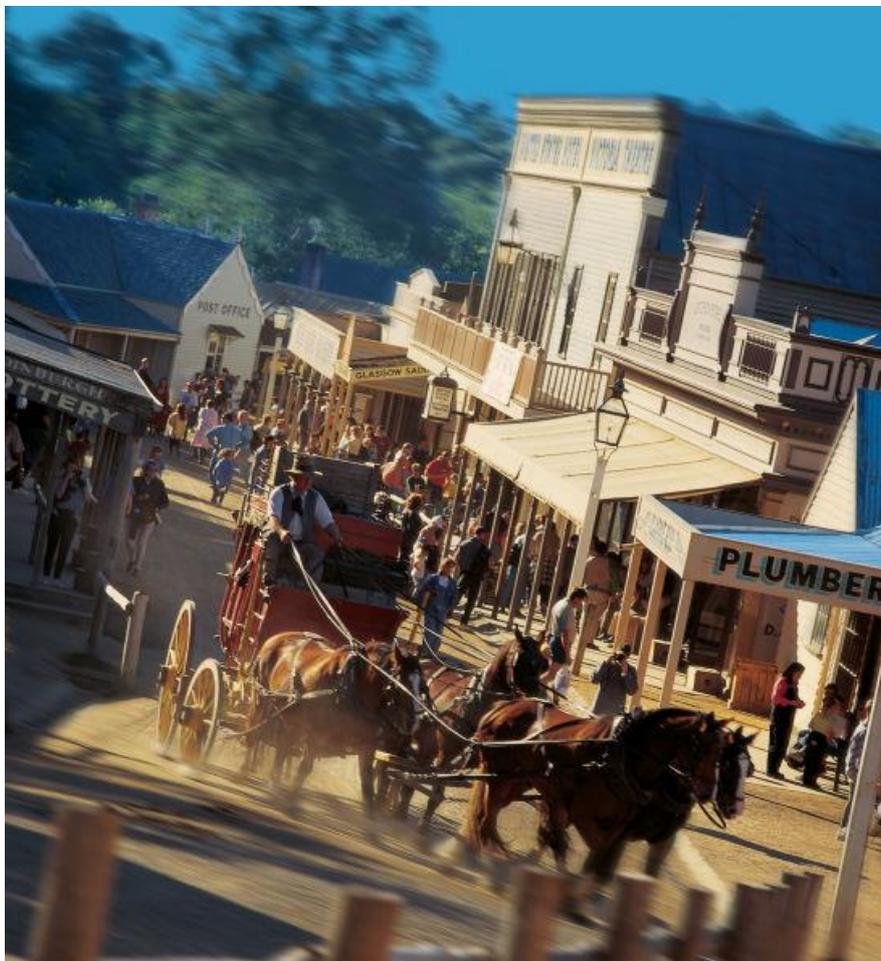
**What do Teachers Learn on a school visit to a Museum?
A Research Project at Sovereign Hill**

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Almost 12,000 teacher days are spent accompanying student visits to Sovereign Hill and Narmbool each year. While the primary reason for the visit is student learning, we believe teachers also learn at our museums.

This research project was developed to discover what teachers are learning during an excursion, and how this fits into their everyday teaching practise.



Research Methodology

Sovereign Hill Education uses iPads and Google Forms to collect teacher evaluations of our education programs. These forms are completed online at the end of education sessions. This has led to a 100% return rate compared to approximately 15% of an earlier evaluation using paper-based, mailed forms.

The same technology was also employed when researching teacher learning. The form that teachers completed asked about motivations for school visits and asked specific questions about teacher learning in reference to the Australian Professional Standards for Teaching (APST). Teachers were asked to respond on a rating system and to comment on their rating. The standards addressed are as follows:

Australian Professional Standard for Teachers	Question asked	Rating
1. Know students and how they learn	Have you learned anything by observing your students on this visit?	1.Learned nothing new – 5.Gained some new insights
2. Know the content and how to teach it	As a teacher, have you learned anything about teaching content on this visit?	1.Knew it all already – 5. Learned a lot I did not know
3. Plan for and implement effective teaching and learning	Have you picked up any teaching ideas or strategies?	1.Nothing new – 5.Got some new ideas

Data was collected about year levels taught and how often teachers have visited our museum. If teachers wished to receive a Professional Learning Certificate with a copy of their comments/reflections, they provided their email address and name in the Google Form. This incentivised teachers to reflect on their learning and to complete the form thoroughly.

This study was initially trialled randomly from September to November 2014 and for the month of October 2015 at the Sovereign Hill Outdoor Museum. The study did not include groups visiting Narmbool nor the Costumed Schools Program. By this time of year, teachers generally knew their students very well and this may be reflected in responses to APST 1.

In total, 129 responses were collected by 31 October, 2015. The vast majority of responses (125, or 97%) were from primary school teachers.

36% of respondents (46) were first time visitors, 56% (54) were on their second or third visit and 8% (29) considered themselves “Old Hands” at this excursion. This presents an interesting profile. 92% of respondents were on their first, second or third visit, suggesting that a large number of new teachers are being exposed to potential professional learning opportunities each year.

Limitations

As teachers completed the form at the end of education sessions while their children were still engaged in learning, responses were often rushed. We believe this approach has pros and cons. On the positive we gained more responses that were raw and often almost ‘stream of consciousness’. These ‘first thoughts’ often appear to be honest. On the negative, responses were not as well-considered as they could be, and occasionally demonstrated a lack of comprehension about the question asked.

Representative Comments

This is an important experience for students to understand and consolidate learning that is happening in the classroom. Giving students hands on experience to relate to.

Great experience for kids. Safe environment. Aimed at appropriate level and keep children engaged.

We are studying Gold and find hands on activities ideal as learning experiences.

It is an outdoor education experience that is aligned to the Ausvels (sic) History curriculum.

We decided on an excursion to Sovereign Hill to provide students with an authentic learning experience of life in the 1850's. We were also teaching students about immigration at school.

We are learning about Australian History in class and as we are high EAL (English as a Second Language) school. Giving children a hands on experience with a lot of visual learning is very important.

It ties in wonderfully with the Year Five curriculum and the children learn first-hand about life in the past and especially on the goldfields. Excellent learning takes place all around the children.

Common Themes. What are teachers telling us about why they come to Sovereign Hill?

The idea that a visit to Sovereign Hill is closely tied to curriculum is the major theme expressed by teachers. 90 of 129 responses (70%) specifically mentioned links to the school's curriculum. 29 of the remaining 39 responses used the word "learn" or "learning" or "experience". There are constant references to units of work and specific inquiries into Australian history and immigration. Some teachers visit as a "tuning-in" exercise at the beginning of their unit while others use it as part of their inquiry or to consolidate previous learning. Teachers appreciate the unique learning environment of Sovereign Hill. There are repeated references to the unique learning "experiences" provided and "immersing" students in history.

Findings

The Importance of Education Sessions

Statistical Response

“How important is the education session in your visit?”

(Range 1. Not very Important – 5. It is the main reason we come)

This question averaged a 4.3 out of 5 which is the second highest score just behind the importance of the whole visit. The four secondary schools scored this as a 5 while primary schools scored 4.3. There was no difference between first time visitors, second/third time visitors or “Old Hands”, all scoring 4.3. This suggests an 86% agreement with the contention that Sovereign Hill’s education sessions are a very important part of the decision to visit.

Representative Comments

Perhaps more enlightening are some of the representative comments made by teachers. They suggest teachers do gain insights into their students both academically and socially.

Social skills (25 comments in total)

Always interesting to see students away from the normal classroom environment.

School camps provide extra opportunity to see other sides of our students. They provide students with a great chance to develop independence and to strengthen their social relationships.

Seeing the students interacting with the public and each other in a new environment has been very informative.

I was impressed with all of the students, particularly some of the quieter ones who really joined in well and asked and answered questions.

Gained some more insights in to how they work in a team situation.

I have been able to observe social skills including cooperation, confidence and getting along as well as listening skills.

I'm a special ed teacher and I've now got my eye on a couple of kids after having seen the way they have interacted on this camp. It's also good to see who has leadership skills.

It's great to see them mixing in different ways and sharing what they know.

Knowledge (19 comments in total)

Some students have shown more prior knowledge than I realised. Many have expressed interest for further learning.

Their knowledge was surprising. They remembered a lot from school.

Learning (17 comments in total)

Interesting to see how they process what they see and hear. Lovely to see the group able to put into words and relate information we have taught in class and integrate this new experience.

See strengths in students that don't display these at school.

Insights to how the kids learn and quiet (sic) often what they know or have picked up.

Interesting to see their reaction to new things/ how much they know about what we learned in class etc.

There was some fabulous lateral thinking going on with the artefacts!

I have also been able to see them gain a deeper, tangible understanding that are difficult to convey within a regular classroom.

Playing a game to teach content is excellent way to transfer knowledge.

Engagement (30 comments)

I was impressed with all of the students, particularly some of the quieter ones who really joined in well and asked and answered questions.

Interesting to see the engagement of some students not always renowned for it.

Engagement of props and costume is a great way to engage children in story.

Even our challenging students have behaved extremely well and have enjoyed the experience.

Students who really thrive and become engaged by seeing and doing.

Students were highly entertained by the simple toys which surprised me as and many of them are high users of technology for entertainment.

I have noticed which students have a real interest in History.

Common themes

When watching demonstrations, experiencing mine tours, or being involved in education sessions, teachers have a rare opportunity to observe their students in a more objective capacity. Only 3 teachers commented that they feel they already have a good insight into their students, (*My knowledge of students has just been confirmed really*). The vast majority were ready to articulate new and interesting insights into their students' academic and social behaviours.

It appears that a visit to Sovereign Hill helps teachers to know students and how they learn. Teachers particularly learn about student engagement and social skills in a setting outside the classroom.

Word Count

The most commonly used word in answering this question was I (31). Other common words include: about (19); students (16); learnt/learned/learning (16); session (15); information (12); gold (11)

While the use of the word "I" suggests teachers were reflecting on their own knowledge of content, the high use of the word "students" might suggest that they were commenting more on student content knowledge. It might be assumed from this word count that most information was attained during education sessions.

Representative statements**Teacher Content knowledge - general comments**

I have learnt a great deal because this is the first time I have taken my students to an education session.

A wonderful educational professional experience.

Some interesting facts and dates.

Good to hear the facts less often put into history books.

This allows me to gain more knowledge and a deeper understanding of certain concepts.

Learn new things every time.

I have already been to this session.

Because I have been before I knew most of what the toys and games session taught. I just hadn't used the term artefacts before with my class but will follow this up.

As a specialist, I learnt a lot during my visit. Things I never (sic) knew about. I found it very interesting and engaging.

Some of the information. The education session was new, we had a wonderful presenter.

Fourth year in a row and still learning small extra facts.

Each time I come I learn information which forms part of my teaching.

Teacher Content Knowledge - specific comments

We have studied gold but I didn't know it could be heated to a gas if we could get it hot enough. Many of the clothing based vocabulary. Some information on the artefacts. As a first year teacher it was great.

Some of the reasons beyond the gold rush and crowded nature of the streets eg Irish and Scottish farmers.

Have a greater appreciation for life and more specifically the education system in the 1850's.

Learnt about travelling through Bachuus Marsh and more information about why they travelled from Geelong to Ballarat. A lot of other little snippets of info and stories that I can add into my future lessons.

I learned that most of the diggers on the gold fields were British, and therefore the soldiers who were meant to be protecting British citizens, were actually fighting them.

Learning about the history of the Eureka Stockade and how all the miners and police/government fought over licences and diggings etc.

Student content knowledge

A wonderful experience for students to realise the different people and attitudes on the gold fields.

Very interesting to receive knowledge in a setting that is appropriate to the time.

Great experience that students loved and were fully engaged in. The presenter was extremely helpful, friendly and knowledgeable.(sic)

How to teach the content

Discovered some great ways to help students understand what life on the goldfields would have been like.

Teaching history in an interactive way engages the students and it is so much fun!

The experiential learning has been valuable for our girls.

The Gold Game is excellent. The children not only have fun but develop an appreciation of 'the economics' involved on the goldfields

Great history teaching tips!

General Themes

There was some concern that this question was poorly worded and would not measure whether teachers have been able to learn more about the content they teach but would instead focus on how to teach that content. While many teachers answered this question in reference to their students (33 responses), the majority commented about their own learning (63 responses). Most were somewhat general in their comments but many articulated new content they had learned. A number of teachers stated that they had been to Sovereign Hill on numerous occasions but very few said they knew it all. It is apparent by the answers that most teachers were referring to education sessions when discussing content knowledge.

Representative statements

Engagement (9 comments)

I loved the way the teacher engaged the students! Fantastic!

Watching students enjoy the games shows them they don't need computers to entertain themselves.

Many of the students are thoroughly engaged and connect to this inquiry through the use of practical and realistic opportunities.

Activities and Teaching Techniques (51 comments)

There are some great new ideas or activities for further learning.

Children loved having a hands on all activities.

They enjoyed the role play and asking questions.

Bringing historical artefacts to the classroom so the children experience history without the use of technology.

I like the use of pictures to tell a story and the mystery boxes where the children had to create their own stories

Have a great visual hook to get the children's attention.

Playing games to teach the students historical content as well as empathy with the conditions of the times.

The artefact activity. I will be sharing this with the rest of the staff at Seabrook as it links with the PYP curriculum framework.

Use of effective story telling and getting students involved makes learning the history far more interesting and engaging

The painting was very interesting and engaging for the students. (This refers to Visual Thinking Strategies technique)

Using the money and roles to help students better understand and empathise with the life of the prospectors on the Gold Fields.

Having more resources if possible for students to touch feel use

Absolutely love how engaging the presenter was with the variations in her voice.

Keep relating content to real life.

A reminder of the importance of primary and secondary resources and getting the children to use the (sic) to deduce information rather than just being dependant on Google

I can see that getting students involved in taking on a role and representing that role, in the midst of sharing information is a very helpful teaching strategy.

After explicit instruction, acting can break up the activity before more teaching can happen.

General Themes

Teachers appear to be looking for activities and strategies that deeply engage their students. They often referred to the use of games, artefacts and artworks as good activities. In terms of teaching techniques, respondents picked-up on effective story-telling, the use of artworks (and the Visual Thinking Strategies approach), using money and role play, tactile experiences, teacher voice modulation, the use of primary and secondary sources and specific instruction.

Conclusions

What have we learned by this survey?

1. There is a strong rotation of teachers visiting Sovereign Hill each year meaning large number of new teachers are being exposed to potential professional learning opportunities in our museum. (36% of respondents (46) were first time visitors, 56% (54) were on their second or third visit and 8% (29) considered themselves “Old Hands” at this excursion)
2. A visit to Sovereign Hill is a very important part of the school year for most excursion groups (92%)
3. A concrete connection to the school curriculum is the main motivation for teachers bringing students to Sovereign Hill. (70% specifically mentioned links to the curriculum they are teaching at school.)
4. Sovereign Hill’s education sessions are regarded as a very important part of the visit. (86% agreement that it is the main reason they come)
5. Even though these surveys have been conducted in Term 4, teachers gain new insights into their students while visiting (78% agreement that they gained new insights into their students). Teachers were able to observe and comment on student social skills (25 comments), knowledge (19 comments), learning (17 comments) and engagement (30 comments).
6. Teachers learn new content when visiting Sovereign Hill (78% agreement that they learned a lot they did not know) and many are able to articulate specific information they did not know beforehand.
7. Teachers learn new teaching strategies and activities when on excursion. (There was 68% agreement that teachers have picked-up new teaching ideas and strategies from a visit).

We believe that these findings more than justify a visit to Sovereign Hill with students as a valuable Professional Learning experience for teachers.