**Annelies VAN DE VEN & Sharyn VOLK**

# *Overcoming entry barriers: a mobile university museum as a vehicle for inclusion*

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## Abstract

Visitors researchs across museums has shown that the majority of visitors are (sub)urban and have a higher socio-economic status, age and education level than the population average. Though recent shifts to more visitor-oriented objectives have brought in a more diverse audience, the museum space unfamiliar for those hampered by the tyranny of distance. In response to this challenge, a pilot project was developed to bring museum collections and hands-on learning techniques to communities outside the existing museum demographic. The chosen targeted audience comprised over 300 students from five government-run secondary schools in the Goulburn Valley, an area of rural Victoria located several hours drive from Melbourne. Local census data indicate the lower socio-economic status of many of the families of this region, while educational statistics highlight learning problems and a lower university intake from these rural communities. The aim of our project was to examine the effects of these disadvantages on the ground and to assess how successfully we could deploy mobile museum learning strategies to ameliorate the educational and social conditions within these communities. As a result of our work, we noted improved critical thinking, greater cultural empathy and higher confidence levels. By presenting this project in this forum, we hope to highlight the need for greater mobility in how university museums engage with potential audiences.

**Keywords** : object-based learning, rural education, socio-economic disadvantage.

## Résumé

Les recherches menées auprès des visiteurs des musées ont montré que la majorité d'entre eux sont (sub) urbains et ont un statut socio-économique, un âge et un niveau d'éducation plus élevés que la moyenne de la population. Bien que les récentes réorientations vers des objectifs soient axés sur les publics plus diversifiés, l'espace muséal n'est pas familier à ceux qui sont gênés par la tyrannie de la distance. En réponse à ce défi, un projet a été mis sur pied pour faire connaître les collections muséales aux groupes qui ne font pas partie de la population muséale actuelle. Le public cible choisi comprenait des élèves de cinq écoles secondaires de la Goulburn Valley, une région rurale située à plusieurs heures de Melbourne. Les données du recensement local indiquent un statut socio-économique inférieur dans cette région, tandis que les statistiques sur l'éducation mettent en évidence

un faible taux d'admission à l'université. Le but de notre projet est d'examiner les effets de ces désavantages et d'évaluer dans quelle mesure nous pourrions déployer des stratégies muséales mobiles pour améliorer les conditions éducatives et sociales de ces communautés. À la suite de notre travail, nous avons constaté une amélioration de la pensée critique, de l'empathie culturelle et des niveaux de confiance. En présentant ce projet, nous espérons souligner la nécessité d'une plus grande mobilité dans la façon dont les musées universitaires interagissent avec les publics potentiels.

**Mots-clés** : object-based learning, éducation en milieu rural, désavantage socio-économique.

## Introduction

As university museums, we have a dual role: a public one and an academic one. We aim to reach a wide public while promoting research and education goals. However, as museums, we struggle to reach a broad range of audiences, minorities, and those with geographical, economic, and social constrictions. Audience research across museums has shown that most visitors are (sub)urban and have a higher socio-economic status, age, and education level than the average population. University Museums often suffer even more from these inequalities, as institutions existing within the research framework of academia. Though recent shifts to more visitor-oriented objectives have led to a few on-site changes in order to include a diverse audience, this still requires the visitors to venture into an unfamiliar museum space.

In response to this challenge, a pilot project was developed in Melbourne to bring museum collections and hands-on learning techniques to communities outside the existing museum demographic. The chosen target audience comprised over 300 students from five government-run secondary schools in the Goulburn Valley, an area of rural Victoria located roughly 200 km from Melbourne CBD. Local census data reveals the lower socio-economic status of many of the families of this region, while educational statistics highlight learning problems and a lower university intake from these rural communities.

The mission of our project is to examine the effects of these disadvantages on the ground and to assess how successfully museum learning strategies could be deployed to ameliorate the educational outcomes of students within these communities. In response, we deploy a mobile museum, using replicas and de-accessioned collections for object-based learning activities in the schools. The outcomes of these activities have been critical thinking, greater cultural empathy, and higher confidence levels. In presenting the project to the community of university museums, we aim to highlight the need for greater mobility in how our museums engage with potential audiences.

## Museum Visitors

Audience research across museums has shown that the majority of visitors are (GAZZERI & BROWN 2010, p. 6; CERQUETTI 2016, p. 34-35; HANQUINET 2016):

- engaging in a social activity – visiting with family, school, or another group;
- urban dwellers;
- educated at a post-secondary level;
- categorized in a higher socio-economic bracket; and
- likely to have visited museums before, especially as children.

These audience biases become further exacerbated over time as those who rarely or never visit museums consider these spaces to be exclusive and think that they will not understand or appreciate the displays. Recent shifts to more visitor-oriented objectives have led to several on-site changes to include a diverse audience (Falk 2016). However, we have a lot of catching up to do, and at least at the moment, the population demographic in many countries is changing. This issue is even more prominent for university museums, which can slip into the role of knowledge temples embedded in an elitist academic context (MacDonald 2016, p. 79). However, university museums are also uniquely positioned to bridge this gap thanks to a multifaceted approach focusing on education and engagement. The visitor indicators provided above highlight how important it is to bring children to museums in order to increase long-term cultural engagement. However, they are also significant in explaining wider trends of student aspiration. Museum visits as school excursions have been proven to have positive effects on learning retention and attainment. Learning experiences in museums become vivid, inspirational, and motivating through their tangible connections to different temporal, spatial, and cultural contexts. These visits additionally benefit students by encompassing a variety of learning styles and teaching across disciplinary borders. The visits also benefit teachers in providing flexible material avenues for teaching complex curricula. The exclusion of certain students from these non-classroom activities, due to socio-economic or geographical factors, therefore impacts their learning trajectory, allowing fewer opportunities for the development of lateral, interdisciplinary thinking.

## Our schools

In Australia, where our project is run, museum learning opportunities incorporate these same biases in terms of geography, socio-economic background, and education level. The Goulburn Valley community where we work is a prime example of this. The region, located roughly 200 km from Melbourne city centre, is one of stark economic disparity that can be seen through the socio-economic inequality across government, catholic, and independent schools (fig. 1). For the five government schools that we collaborate with – Shepparton High School, McGuire College, Mooroopna Secondary College, Kyabram Secondary College, and Numurkah Secondary College – museum-based education and hands-on learning opportunities are not the highest priorities. They are focused on addressing their students' basic needs as the remoteness of these schools means they have limited access to resources, not just books or facilities, but also qualified teachers and support staff, leading to inequalities in experiences and outcomes.[1] Parents of students in our schools are

[1] As a result, the government has decided to merge four underperforming schools into a single « superschool », which aims to consolidate resources into a single central system. As this was only implemented in 2020, the change is not included in this paper, but it will be reported on in later publications.

commonly engaged in one of the region's two primary industries: dairy farming or fruit growing. Students are often enlisted to help parents during non-school hours, and on occasion, students are held back from school in order to help on the family farm. These are challenges rarely considered by largely urban-based policymakers and have led to an underestimation of student motivation and intelligence.

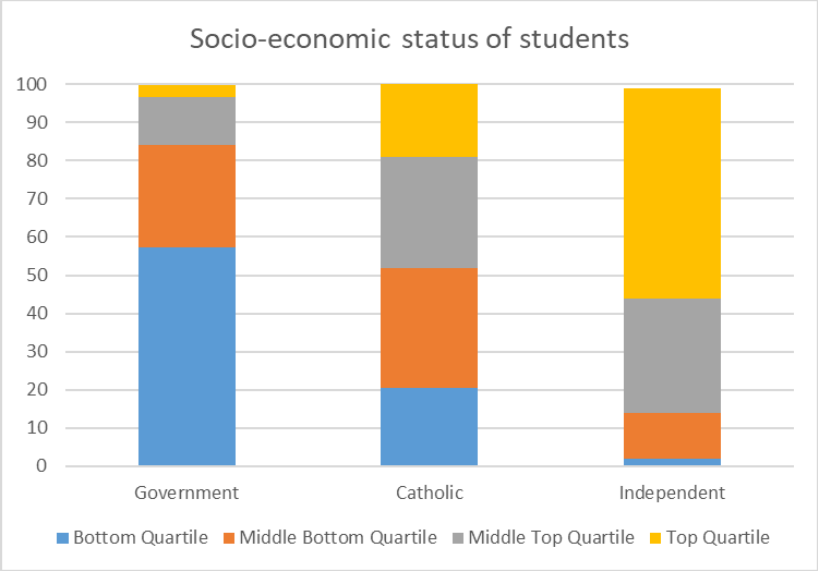


Figure 1 – Socio-economic status of students at different school types based on 2019 ACARA data for Shepparton, the regional centre of the Goulburn Valley.

These indicators of socio-economic inequality directly map onto educational attainment in the region. According to assessment and completion data, by secondary school level, rural students have an annual achievement rate that is 20% lower than their urban peers (LAMB *et al.* 2015, p. 3). Besides marking milestones like yearly attendance and drop-out rates, the report also takes into account the National Assessment Program – Literacy and Numeracy results, a standardized system for testing reading, writing, spelling, grammar, and numeracy that is undertaken on a national level for students in years 3, 5, 7 and 9. The results show that in 2019 our five schools scored below or substantially below the Australian average in each of these five categories for years 7 (age 12-13) and 9 (age 14-15). More worrying are the student progress results for our schools that show a decreased improvement in skills between years 7 and 9 in comparison to students with similar starting scores.

## The Mobile Museum

In response to these challenges, our project was launched in 2016. By bringing museum collections and hands-on learning techniques to students outside the existing museum demographic, the project provided an opportunity to wrangle with the effects of socio-economic disadvantages on the ground and assess how successfully museum learning

strategies could be deployed to ameliorate aspirations within these communities. The project was made possible by a deep long-standing commitment to relationship building between the community and the project team. In consultation with school leadership and humanities staff, we developed a program that could support and enhance the existing history curriculum, while providing cross-disciplinary elements that could be carried over to other classes. At the year level that our project engages with, year 7 (age 12-13), the history curriculum across the state of Victoria focuses on the ancient world and early civilizations, particularly Ancient Egypt. Key skills identified by the curriculum are chronology, using historical sources, identifying continuity and change, analyzing causes and effects, and determining historical significance.

In order to address our own project aims and the curriculum requirements, we deployed a mobile museum, using custom-made 3D prints of ancient Egyptian artefacts held in museums and de-accessioned collections from the University of Melbourne in hands-on learning activities. In addition to these resources, our mobile museum kit consists of activity sheets and presentations on terms like context and typology, as well as museum replicas, collections of everyday objects, archaeological tools, and, finally, modern bones and pottery. While most of our activities carry visual, verbal, and written elements, we focus heavily on tactile engagement. Our students are invited to engage manually with all objects in the collection. This is to build on the potential of museums as places for authentic encounters and object-based experiences without requiring a spatial shift (Paris 2002; Kenkmann 2010). The mobile format of our project allows students to gain familiarity with museum collections and activities, increases their fluency in museum literacy, and provides an important warm-up for many who may not feel at home in museum spaces.

Researchers have concluded that students who interact with museums demonstrate improvements in their critical thinking skills, display increased historical empathy, and develop higher tolerance and confidence (Greene *et al*. 2014; Altman 2015). Object-based learning, in particular, can bring complex ideas into the immediate experience of students, making them more relevant and relatable. As museum researcher Lainie Schultz highlights, « objects arouse students' curiosity, evoke memories and associations, and motivate them to ask questions and seek answers, thereby deepening their processes of learning » (Schultz 2018, p. 282). In addition to these benefits, schools serving disadvantaged students demonstrate the greatest improvement, as object-oriented methods support various learning styles, improving basic skills like literacy and numeracy through more interactive strategies.

**Our Activities**

All the activities developed as part of the mobile museum are easily portable, modular for different class sizes and durations, and each has a clear learning outcome. This is incredibly important in dealing with multiple different class groups and compositions within a single visit, as the activities can be adapted without detriment to the project aims. These key aims are:

- exploration of the scientific process through mock excavations, typological exercises using everyday objects, and hands-on archaeological artefact analysis;
- developing literacy through combined visual, auditory, and verbal identification exercises like our gods and goddesses matching game, which relies on recognizing corresponding written descriptions with images and replicas, and our « Tomb in a Box » which helps students to develop their story recall through reliance on physical objects and gamified recording sheets;
- learning to communicate effectively through story-telling activities, including our archaeological typology exercise using everyday objects such as shells and buttons to explore human stories, allowing students to transition from categorization to analysis and self-expression.

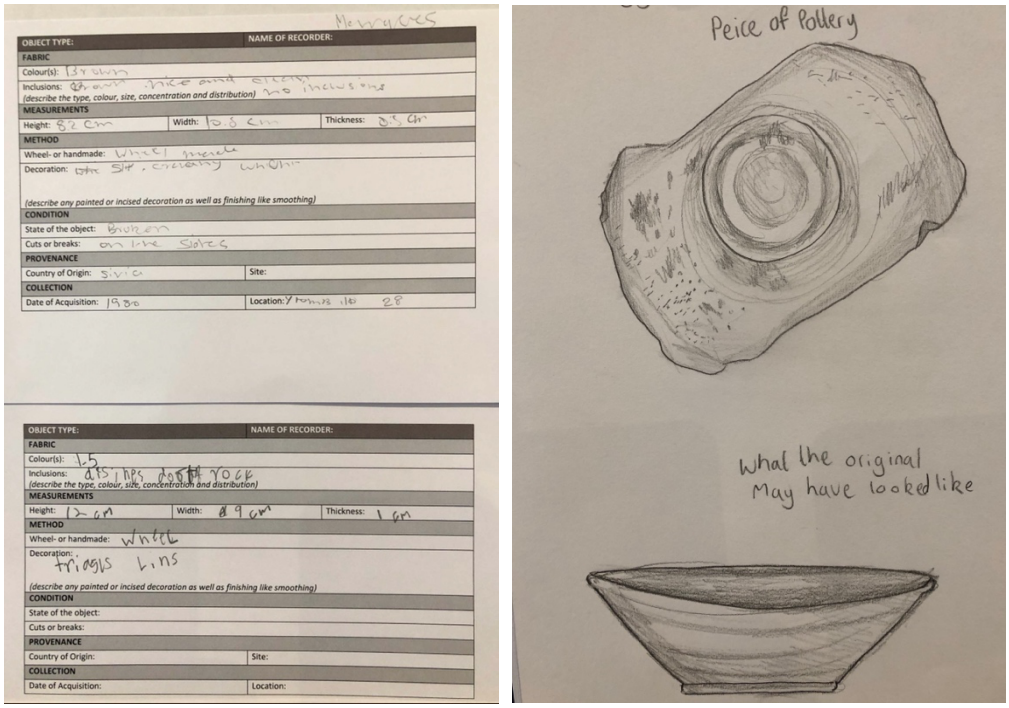


Figure 2 – Pottery recording sheets and drawings made during the 2019 school incursion. Photo: Annelies Van de Ven and Sharyn Volk.

Although all the activities delivered in our program carry equal curricular weight, we have chosen to focus on our pottery analysis activity in this paper. It combines many of the

important elements of our other activities – creativity, analysis, teamwork, literacy, communication – with something unique to the museum experience, the ability to access « authentic » artefacts and connect to them in a meaningful way. The exercise is based on the use of dedicated non-accessioned collections given to the University of Melbourne following excavations in Syria under the remit that they would be used for teaching. All of the pottery used within our outreach initiative has a clear archaeological context, having been excavated in fieldwork led by University staff members. This is important not only ethically to highlight the significance of recorded excavations for the development of archaeological knowledge, but also in the ability of this exercise to elucidate discussions of complex archaeological terms like context, stratigraphy, and typology. The students are asked to manipulate, observe, analyse, compare, and interpret the sherds. They are given classification sheets describing colour, shape, decoration, and fabric with which they can independently compare their sherds in order to consider the artefact's original manufacture, use, and deposition. To record their interpretations, they use archaeological drawing, artistic reconstruction, and simplified record sheets. We help guide their reflections and provide them with an extended vocabulary to express their observations, but ultimately allow them interpretive authority. Students are invited to share their analytical process and ultimate interpretations with the wider group. This builds confidence and communication skills and helps students be more open in discussing critical questions like: how did these objects come here? and how might they be relevant to us in the present?

**Outcomes**

The outcomes of these activities are clear from our own experiences in the classroom year after year, as well as from feedback given by students, teachers, and school leadership. Across year-levels, a number of significant changes were noted; among these were improved critical thinking, greater historical empathy, and higher confidence levels. Debriefs with teachers following visits attested to an increase in student interest in ancient history, particularly from those challenged by learning difficulties.

It is equally essential to the project that we are able to measure our impact in a significant and quantifiable way, so besides relying on observation and informal discussions, we also use surveys to evaluate student experiences. So far, the results have been highly encouraging, with over 70% of students indicating that they were more interested in the humanities following our intervention and over 75% highlighting an improvement in information retention.

Skills testing is done through the activities themselves, and, once again, the pottery exercise is key. While our classroom observations of student abilities are important to our estimation

of their progress, completed activity sheets provide a trove of information that can be analysed comparatively across schools and year groups: the recording cards, drawings, and descriptions created during the pottery exercise highlight different skills and aptitudes. Drawings do not just reflect artistic ability; they can indicate an attention to detail as well as how well students are able to read visual information. Written answers can give insights into literacy, spelling, grammar, and vocabulary. Students will also tend to focus on different recording methods; some measure and rely heavily on our comparative typologies, while others provide more personalized descriptions or interpretations. This allows insight into their ways of interacting with artefacts and can help us refine our activities, develop more clear instructions, and guide deeper discussions about how ancient objects speak to our own experiences and identities.

**Challenges and possible futures**

We continue to expand our mobile museum project. We have build on the skills developed through a collaboration with our senior students to create a mobile Goulburn Valley Museum that explores the multiplicity of local identities and allows students to inscribe objects with their own narratives. This will be used in an international exchange with communities of disadvantaged students in Egypt promoting cross-cultural empathy. This co-creative exercise provides an opportunity for students to explore how past and present interrelate within the context of their own lives.

Despite our optimism for the future development of our project, we still face challenges in achieving our set aims. One of the key issues highlighted by school leadership is the educational aspiration among students. Many students and their parents do not believe they can aspire to higher education, nor do they consider it especially relevant. One of the aims of our project is to open minds to the potential of further study, which continues to challenge us. Finding a way to address this together with parents is a top priority for the project's future.

An additional problem comes with the infrequency and brevity of visits due to funding constraints. We struggle to divide our time and meet the needs of all students and cannot provide extensive follow-up. One way in which we are addressing this is through offering teacher training in hands-on humanities, going through some of the key literature that has informed our work, and collaborating on developing activities that fit within rural classrooms. Teachers are important allies in making our project sustainable and, for our project to work, we need champions in the schools themselves. This can be challenging for rural schools like those in the Goulburn Valley that tend to have a high teacher turnover.

Obviously, this problem requires much more than a single project; there needs to be a change in educational policy and funding structure to reduce school stratification and segregation. But that does not mean that small-scale initiatives cannot make a substantial difference. We hope to highlight the need for greater mobility in how university museums engage with potential audiences by sharing this paper. As long as we are willing (and able) to take the time to get to know our communities and we remember that museums do not need to be confined within their own walls, we can contribute to the amelioration of disadvantage that continues to plague rural schools.

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## Biographical notes

Annelies Van de Ven is a post-doctoral researcher at the Université Catholique de Louvain (BE). Her project, in collaboration with the collections team at Musée L, is working to map the itineraries of archaeological material and knowledge in Belgian institutions through their associated archives. Alongside her research, she is committed to encouraging museum learning opportunities through initiatives like the « Goulburn Valley project ».

Sharyn Volk obtained her PhD at the University of Melbourne (AU) with a focus on the function of ancient Egyptian funerary figurines. As part of her research, she developed a new shabti typology for the New Kingdom, considering figurine shapes, attributes and decorative variety. In 2016, Sharyn founded the « Goulburn Valley project » establishing a connection between her own expertise in Egyptology and her passion for rural education.