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PERCEPTIONS OF LEARNERS, TEACHERS, AND THE COMMUNITY ON THE IMPACT OF MUSEUM PROGRAMS IN SUPPORTING SECONDARY SCHOOL CURRICULA IN THE FREE STATE PROVINCE

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Abstract

Museums possess significant potential to inspire, educate, and engage learners through interactive, object-based learning. However, their benefits remain underutilized in many secondary school contexts, particularly in under-resourced regions. This study investigates the perceptions of learners, teachers, and community members regarding the contribution of museum

programs to secondary school curricula in the Free State Province of South Africa. Employing a qualitative approach, semi-structured interviews were conducted with science teachers and Grade 10–12 learners from ten schools in the Xhariep District, along with selected community stakeholders. Findings revealed that while museum experiences offer substantial educational value, barriers such as logistical constraints, lack of awareness, misalignment with curricula, and socio-economic challenges hinder meaningful integration. The study advocates for strategic collaboration between museums and schools, improved outreach, and tailored educational resources to enhance accessibility and curriculum alignment. This study offers insights for educators, policymakers, and museum practitioners on strengthening educational outcomes through informal learning environments.

Keywords:

Museums, Informal Learning, Secondary Education, Curriculum Integration, Community Engagement, Experiential Learning, Science Education

1. Introduction

Museums are widely recognised for their potential to serve as dynamic educational spaces that support cognitive, emotional, and cultural development. Despite their rich educational value, many learners, teachers, and schools especially in underprivileged areas underutilise museums due to systemic barriers and limited institutional collaboration. This study explores the extent to which museum programs align with and support the secondary school curriculum in the Free State Province, with a specific focus on the perceptions of key stakeholders: learners, teachers, and community members.

Hooper-Greenhill (2007) emphasise that museums should focus not only on research and conservation but also on delivering learning outcomes that align with educational standards. In response, museum educators have increasingly sought to collaborate with schools, yet many challenges remain. These include difficulties in organising trips, lack of curricular alignment, time constraints, and socio-economic limitations that prevent equitable access.

2. Background of the study

The International Council of Museums (ICOM, 2010) defines a museum as a non-profit, permanent institution that acquires, conserves, researches, communicates, and exhibits heritage for purposes of education, study, and enjoyment. Museums serve as vital cultural institutions that provide access to tangible and intangible knowledge systems, facilitating a deeper understanding of history, science, and societal values.

Museums have a critical role in contextualising school-based knowledge, especially through interactive exhibits and visual resources. According to Akmehmet and Ödekan (2006), they provide opportunities for experiential and interdisciplinary learning, helping learners relate abstract concepts to real-world contexts. However, in South Africa, and particularly in the Free State Province, these resources are not fully leveraged, particularly at the secondary school level.

3. Literature Review

3.1 Informal Learning and Curriculum Support

Experiential and object-based learning in museums has been linked to improved comprehension, critical thinking, and motivation (Gray, 2002; Falk & Dierking, 2018). The integration of museum learning with formal curricula creates opportunities for students to explore complex concepts in accessible and engaging ways.

3.2 Science Education in Informal Settings

The National Research Council (2009, 2011) assert the role of informal learning environments in enhancing interest and understanding in science. Learners benefit from observing real-life applications of scientific principles in museums, which often provide interactive displays that align with educational outcomes.

3.3 Partnerships and Community Engagement

The success of museum-school collaborations hinges on strong partnerships involving teachers, museum staff, and communities (Krishnamurthi et al., 2014). UNESCO (2016) advocates for museums to be inclusive spaces, promoting lifelong learning, diversity, and critical reflection. Yet, inequalities in access, especially in disadvantaged regions, persist (Parry & Sawyer, 2021).

4. Theoretical Framework

This study is grounded in the following learning theories:

4.1 Constructivist Learning Theory

Learners construct knowledge through active engagement and reflection. Museums enable this by offering hands-on and contextualized learning experiences (Falk & Dierking, 2018).

4.2 Social Learning Theory (Bandura, 1977)

Emphasizes learning through observation and interaction, which aligns with museum visits involving peer discussion and guided activities.

4.3 Experiential Learning Theory (Kolb, as cited in Morris, 2019)

Learning through direct experience is foundational to museum education, encouraging exploration and deeper conceptual understanding.

5. Problem Statement

Despite evidence of the educational benefits of museums, secondary schools in the Free State Province make limited use of these resources. Research from the National Museum in Bloemfontein suggests that primary schools and early childhood institutions frequently engage with museum programs, whereas secondary schools lag behind. This gap raises critical questions about accessibility, relevance, and institutional collaboration.

6. Aim of the Study

To explore the perceptions of learners, teachers, and community members regarding the role and impact of museum programs in supporting secondary school curricula in the Free State Province.

This study contributes to foundational knowledge regarding museum-school collaborations. The findings aim to guide teachers in utilising museum programs to enhance learner performance, deepen cultural understanding, and develop critical thinking skills. It also offers strategic insights for museum educators and policy stakeholders.

7. Research Methodology

A qualitative, exploratory approach was adopted to gain in-depth insights into stakeholder perceptions. The study focused on Grade 10–12 Natural Science learners, their teachers, and selected community members from ten purposively selected secondary schools in the Xhariep Education District. Semi-structured, face-to-face interviews were conducted with learners, teachers, and community members during museum outreach programs. Interview questions were open-ended, enabling participants to reflect on their experiences, perceptions, and barriers to access.

8. Data Analysis

Thematic narrative analysis was employed, incorporating a constant-comparative method. Responses were organised by themes, categorised chronologically, and interpreted in relation to the theoretical framework.

9. Findings and Discussion

9.1 Learner Perceptions

Learners expressed genuine enthusiasm for museums and their potential to enhance science learning. However, most had not personally visited a museum due to financial constraints, transportation challenges, and limited exposure through schools. The lack of museum visits undermines the potential for experiential learning (Kolb, 1984; Falk & Dierking, 2018), which is known to promote deeper understanding through sensory and interactive engagement.

One Grade 11 learner noted:

“I’ve only seen the museum in pictures. I think it would be great to go there and see the things we learn about in real life, like fossils or science experiments.”

This quote underscores the value learners place on real-world learning opportunities, which align with the constructivist learning theory that emphasises learning through authentic contexts (Hein, 1998).

Another learner remarked:

“Our school doesn’t organise such trips. I think only learners in private or rich schools go to those places.”

This perception reflects systemic inequalities in access to informal learning resources, a concern echoed in South African education research, where rural and township schools often lack the infrastructure to support enrichment activities (Spaull, 2013; Equal Education, 2021).

9.2 Teacher Perceptions

Teachers universally acknowledged the educational value of museums in supporting the Natural Sciences curriculum. However, three major barriers emerged: curriculum misalignment, logistical challenges, and resource limitations.

9.3 Curriculum Misalignment

Several teachers expressed concern that museum content was not always aligned with the CAPS curriculum.

“The content is valuable, yes, but it doesn’t always match what I have to teach. Sometimes it’s outdated or too general.”

This issue is consistent with international findings that for museums to be effective educational partners, their programs must be intentionally designed to align with curricular goals (Tran & King, 2007; Griffin, 2004).

9.4 Bureaucratic and Logistical Constraints

Teachers also identified school policies, administrative burdens, and safety regulations as barriers:

“Planning a trip takes too much time. By the time you get approvals, the term is over or the learners are busy preparing for exams.” (Science teacher, School 7)

This aligns with Kisiel (2005), who found that institutional red tape often discourages field trip planning.

9.5 Resource Limitations

The most frequently mentioned barrier was lack of funding.

“We simply don’t have the money to take 60 learners to Bloemfontein. Transport alone is more than the school can afford.” (Teacher, School 3)

This finding reflects broader structural challenges in South African public education (van der Berg, 2008).

9.6 Community Perceptions

Community members, including parents, local leaders, and SGB representatives generally supported museum-based learning. However, socio-economic realities and cultural perceptions presented challenges.

“Many families here live hand to mouth. A museum trip is seen as a luxury, not a necessity.” (Parent, Community 2)

These insights echo literature on educational exclusion (UNESCO, 2016).

Some participants questioned museum inclusivity:

“Museums are important, but they feel like they are for a different class of people. Our children don’t grow up thinking museums are for them.” (Community elder, Jagersfontein)

This supports findings by Parry and Sawyer (2021), who assert that many museums globally continue to be perceived as elitist, unless deliberate efforts are made to engage local and marginalised communities.

Others advocated for greater outreach:

“If the museum can come to us, maybe with a truck or something, then our children can also benefit.” (SGB member, School 9)

Mobile museums and digital engagement have been identified as promising strategies for widening access, particularly in rural and resource-limited settings (Falk & Needham, 2011; Ballantyne & Packer, 2005).

9.7 Synthesis and Theoretical Implications

The findings affirm the relevance of constructivist, social learning, and experiential learning theories. Learners desire contextual, interactive, and social forms of engagement hallmarks of effective informal learning environments (Bandura, 1977; Kolb, 1984).

Despite the educational potential of museums, their underutilisation is a result of systemic inequities, institutional disconnection, and lack of infrastructure. Addressing these issues requires:

- Policy coordination between educational authorities and cultural institutions,
- Targeted funding for transport and outreach,
- And improved curricular alignment and awareness among schools.

Without intentional interventions, the transformative role of museums in supporting secondary education will remain largely untapped in rural and under-resourced communities.

10. Conclusion

Museums have the potential to greatly enhance secondary education by providing experiential learning opportunities that enrich the curriculum. However, this study found that access to such opportunities remains uneven across the Free State Province, primarily due to structural, logistical, and socio-economic barriers. Learners are eager for real-world engagement, teachers see pedagogical value, and communities support broader access, but systemic obstacles persist. Teachers need support in incorporating museum-based learning, and museum staff must adapt content and delivery to the realities of local schools. To unlock the educational power of museums, stronger partnerships are needed between schools, communities, and museum institutions; with intentional collaboration, museums can become powerful allies in transforming education in under-resourced communities.

References

- Akmehmet, Ş., & Ödekan, A. (2006). Museums as educational institutions: A historical perspective. Cultural Heritage Foundation.
- Bandura, A. (1977). Social learning theory. Prentice Hall.
- Falk, J. H., & Dierking, L. D. (2018). Learning from museums: Visitor experiences and the making of meaning. Rowman & Littlefield.
- Gray, P. C. (2002). Museums and education: Purpose, pedagogy, performance. Routledge.
- Hooper-Greenhill, E. (2007). Museums and education: Purpose, pedagogy, performance. Routledge.
- International Council of Museums (ICOM). (2010). ICOM definition of a museum.
<https://icom.museum>
- Krishnamurthi, A., Ballard, M., & Noam, G. G. (2014). Examining the impact of afterschool STEM programs. *Afterschool Matters*, 20, 15–22.
- Morris, H. (2019). Experiential learning theory and museum education: A practical approach. *Journal of Museum Education*, 44(3), 233–240.
<https://doi.org/10.1080/10598650.2019.1612632>
- National Research Council. (2009). Learning science in informal environments: People, places, and pursuits. The National Academies Press.
- National Research Council. (2011). Successful K–12 STEM education: Identifying effective approaches in science, technology, engineering, and mathematics. The National Academies Press.
- Parry, R., & Sawyer, A. (2021). Museums in the digital age: Changing meanings of place, community, and culture. *Museum & Society*, 19(1), 45–59.
- UNESCO. (2016). Recommendation concerning the protection and promotion of museums and collections, their diversity and their role in society. United Nations Educational, Scientific and Cultural Organization.