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LITEMA ARTIVISM: COMMUNITY-ENGAGED SCHOLARSHIP WITH INTERNATIONAL ONLINE LEARNING

REVIEW ARTICLE[1]

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ABSTRACT

The misconception that online learning and teaching for the building sciences is ineffective has been proven wrong. A blended learning technique, combining service-learning activities and research (community-engaged scholarship) with Collaborative Online International Learning (COIL), has shown great learning and teaching possibilities on an international digital platform. This article considers how community-engaged scholarship and COIL can support an international learning experience celebrating rural art and architecture in central parts of South Africa. The research used a qualitative participatory action research approach and social learning theory framework. Combining practical outcomes in service-learning activities with collaborative international desk research provided a new perspective of *litema* wall-decorating art in rural parts of the eastern Free State province. These activities developed into a collaboration opportunity as a COIL exchange. A novel conceptual service-learning approach requires good communication and networking, clear agendas, as well as dedicated staff and students. The study merged service-learning activities by South African architecture

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students at the University of the Free State with literature from American art history students from Colorado State University through COIL that resulted in a collaborative exhibition of research findings. The study follows the United Nations' Sustainable Development Goals (SDGs) of quality education and gender equality, as well as the "Art-Lab for Human Rights and Dialogue" that intervenes ethically for human rights as "activist" acts of care for rural domestic art.

ABSTRAK

Die wanopvatting dat aanlyn-leer en onderrig vir die bouwetenskappe ondoeltreffend is, is verkeerd bewys. 'n Gemengde leertegniek, wat diensleeraktiwiteite en navorsing (gemeenskapsbetrokke vakkundigheid) kombineer met Collaborative Online International Learning (COIL), het wonderlike leer- en onderrigmoontlikhede op 'n internasionale digitale platform getoon. Hierdie artikel kyk na hoe gemeenskapsbetrokke vakkundigheid en COIL 'n internasionale leerervaring kan ondersteun wat landelike kuns en argitektuur in sentrale dele van Suid-Afrika vier. Die navorsing het 'n kwalitatiewe deelnemende aksie navorsingsbenadering en sosiale leerteorie-raamwerk gebruik. Die kombinasie van praktiese uitkomste in diensleeraktiwiteite met 'n samewerkende internasionale literatuurstudie het 'n nuwe perspektief van *Litema*-muurversieringkuns in landelike dele van die Oos-Vrystaat-provinsie gebied. Hierdie aktiwiteite het ontwikkel in 'n samewerkingsgeleentheid as 'n COIL-ervaring. 'n Nuwe konseptuele diensleerbenadering vereis goeie kommunikasie en netwerkvorming, duidelike agendas sowel as toegewyde personeel en studente. Die studie het diensleeraktiwiteite deur Suid-Afrikaanse argitektuurstudente aan die Universiteit van die Vrystaat saamgesmelt met literatuur van Amerikaanse kunsgeskiedenis-studente van Colorado State University deur middel van 'n COIL wat gelei het tot 'n samewerkende uitstalling van navorsingsbevindinge. Die studiebenadering volg die Verenigde Nasies se Volhoubare Ontwikkelingsdoelwitte (SDG's) van kwaliteit onderwys en geslagsgelykheid en die "Art-Lab for Human Rights and Dialogue" wat eties ingryp vir menseregte as "kunsaktivistiese" dade van sorg vir plattelandse woonhuiskuns.

1.   INTRODUCTION

Community-engaged scholarship combines teaching, research, and community service by a faculty member or group, while service learning is the strategy that integrates meaningful community service with instruction, reflection, evaluation, and reciprocity (Gregory & Heiselt, 2014: 405-406). The challenge in some disciplines is that community-shared activities can often be a one-sided act of goodwill from the students with hardly any interaction, reflection, or reciprocity. Students are made aware of the importance of reciprocity during service-learning activities, in order to enhance the quality of the learning experience for all participants (Petri, 2015: 94-95).

In architectural education, the challenge will be to ensure that students learn from other lived worlds, in order to sensitise their future efforts to design solutions for the built environment, especially in rural areas. Informal urban areas deserve academic attention, but more needs to be written about service-learning experiences in rural areas (Harris, 2004: 41).

The Department of Architecture at the University of the Free State (UFS) used a model in past community development engagement (see Figure 1). The Department of Architecture has used this model since 1996 to support new skills for participants and students through service-learning.
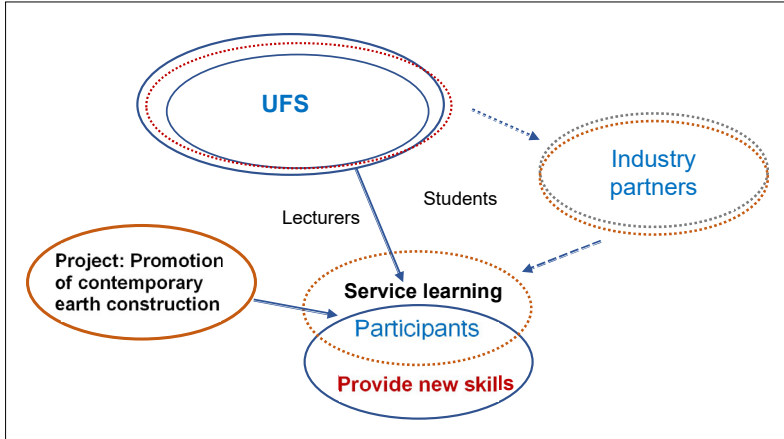

Figure 1:   The previous model: Providing new skills through service-learning
Source: Authors

A recent conceptual method transformation in learning and teaching at the UFS' Department of Architecture provides new insight into participants' perceptions of engagement between students and communities (see Figure 2). It was, however, extended to rural areas where natural earth-building skills are often practised. Through acts of reciprocity, the service-learning experience is not associated with charity; it is a shared experience with transformation (Pompa, 2002: 68).

This new model was used for the first time in 2021 for the Architecture of Care and Engagement (ACE) project, which consists of service-learning activities modelled on a novel approach that acknowledges and celebrates existing (*litema*) skills through service-learning. This approach provides reversed roles between community participants and students, offering unique learning opportunities about art, architecture, and culture in a less intimidating and formal teaching environment. This new model forms a new conceptual framework for service learning to explore the challenges relating to service-learning at the UFS.
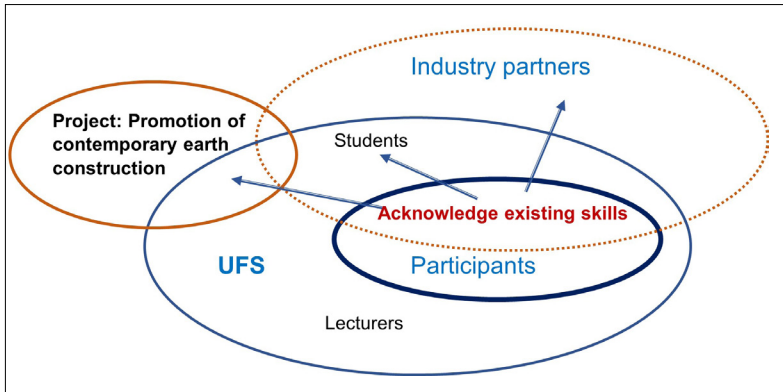
Figure 2:   New model: Acknowledging and celebrating existing (*litema*) skills through service-learning

Source: Authors

The new model method mainly relies on increased financial assistance and addresses organisational constraints and challenges. Despite these challenges, it is vital in a de-colonised service-learning curriculum and it supports four concerns of UNESCO's Art-Lab for Human Rights and Dialogue. The first is the effect of art-based practices on human rights and peace-building, and the second is to provide a platform for underrepresented voices within dominant cultural narratives. The third concern is facilitating conversation among experienced trainers in artistic interventions in delicate situations, culture experts and practitioners, journalists, and researchers referred to as 'artivists'. The last concern is encouraging Ethical Artistic Practice in the Assistance of Human Rights and Dignity (WSF, 2022). UNESCO Art Lab (WSF, 2022) asks lecturers, practitioners, and researchers: "What is the actual space left for artistic research in the scientific world"?

The challenges led to the research question of how service-learning and international student collaboration can celebrate *litema* wall decoration to support art and activism, while keeping the sustainable development goals in mind. Using this new model, this article reacts to global acts of care that reflect changes in curriculum-based service-learning to include three approaches. First, to adapt teaching so that students learn from the community as a bottom-up learning approach. Secondly, to combine service-learning and international student collaboration. Thirdly, to provide a new perspective on *litema* literature on earth-constructed homesteads and wall decoration in the Free State province.

2. LITERATURE REVIEW

To understand the new model of architecture learning and teaching and international online collaboration as acts of care for marginalised communities, it is important to introduce traditional South African art and architecture, research challenges, and the literature gap on *litema* perceptions.

2.1 *Litema* and rural art

Various studies extensively recorded the contribution of South Sotho women in designing and preserving domestic areas in rural regions of the eastern Free State and Lesotho (Casalis, 1861; Tyrrel, 1971; Knuffel, 1973; Motsepe, 1999). The earliest evidence of this tradition was recorded in 1812 (Campbell, 1815). These records illustrate that decorative art was and still is central to the role and significance of women in the rural built environment. The importance, meaning, and methods used in the creation of *litema* (pronounced: di-te-ma) have been explored in a few studies by scholars (Gay, 1980; Van Wyk, 1998) and reflections from a photographer (Changuion, 1989) in the late 20th century. South African architect and academic Franco Frescura (1985) made substantial contributions to the practices of decorative wall art of South African cultural groups such as the South Ndebele and the Vendas linked to a socio-cultural order and representation.

The acknowledgement that Ndebele artist Esther NN Mahlangu received for her mural work in their vernacular dwellings highlights the importance of Ndebele art and architecture as South African heritage on an international stage. Van Vuuren (2015: 141-143) cautions against artistic image stereotyping. He emphasised the Ndebele artistic image and stereotype in the mid-1950s that affected Ndebele groups by forced removals, causing a 'disjunctive alienation' of Ndebele images and artifacts from advertising and marketing experienced from 2000 till 2005. This led to the current manifestations of an appropriation of traditional architectural expressions found in tourism-industry products. Most of the Ndebele women remained anonymous and forgotten. One of the most significant differences from Ndebele patterns is that the South Sotho *litema* practice is a seasonal, temporary expression of identity and culture, often repeated twice a year prior to and after a rainy season (see Figure 3). The *litema* artists utilise four primary techniques of engraving, creating relief mouldings, mosaics, and painting murals. The geometric patterns appeared inside dwellings, and only in the 19th century did they appear on the exteriors of dwellings (Frescura, 1985). Creating *litema* is rooted in the frameworks of lineage and tradition in a multifaceted way (Riep, 2014: 28). The methods and designs used are often passed down from generation to generation. Many

women will learn the art of creating *litema* murals from their mothers at a young age. It is argued that the decorative art of the Ndebele relates to the compositional and geometric *litema* tradition, while attempting to construct a different order and pattern of wall decoration (Van Vuuren, 2015: 140).

The design patterns used by artists have developed into their interpretations beyond traditional South Sotho *litema* designs, as documented by Benedict Lira Mothibe, an art lecturer from the National Teachers' Training College of Lesotho, in a 1976 publication (Beyer, 2008: 2-25). This was remastered in 29 *litema* designs at the time, all named in patterned diagrams in *Litema – Mural masterpiece: A design manual* by Carina Mylene Beyer (2008). In 2003, Mothibe further contributed with a booklet donation of documented *litema* designs to the Central University of Technology (CUT).

The temporal and seasonal wall decoration holds memory, identity, and culturally significant architecture (Figure 3).

Figure 3:   An example of a *litema*-decorated wall art on a rural house in the eastern Free State province landscape in central South Africa

Source: Image by Authors, 2006

South African architect and academic Heinrich Kammeyer (2010) collected fieldwork data on *litema* existing skills in 1999. The unpublished thesis on South Sotho women and their vernacular architecture investigated the making of homes as artifacts. Kammeyer visited a small selection of homesteads in the eastern Free State province's Ficksburg district. The fieldwork did not include interactive workshops or an outcome to celebrate *litema* skills. Furthermore, the doctoral study by Riep (2011) from 2004 to 2010 investigated the stylistic characteristics in the presentation of southern Sotho identity, and only a small section of *litema* was covered during his

investigation. This low occurrence of contemporary *litema* research points to the relevancy of the Architecture of Care and Engagement (ACE) project conducted by the Earth Unit in the UFS' Department of Architecture.

2.2 Service-learning in architecture

Hollander (2010: ix) describes service-learning participants as the bearers committed to "a revolutionary redefinition of the nature of scholarship and institutional transformation". Service-learning develops citizenship (Deely, 2015: 4-5). It is also a "complex and dynamic pedagogy, which may have a profound impact on the learning of those involved" (Venter, Erasmus & Seale, 2015: 148). Architecture learning and teaching are also complex.

Architecture is fortunate, since physical outcomes can result in built forms useful as shelters and improved physical structures to make the built environment better. The bigger challenge for architectural academics is to stand back and first acknowledge a community's existing building skills. To do this will practically imply spending more time in a community to establish trust and then to build a short-term relationship before a sustained relationship can develop over time. This long-term relationship can only develop with commitment from the faculty and staff. Furthermore, if students are fully immersed in the community, service-learning can make a tangible contribution to the quality of rural life (Harris, 2004: 41).

This transformation with service-learning in architecture curricula at the UFS is well-established (Bosman, 2009, 2012, 2022; Nel & Bosman, 2014). The experimental research of the ACE project on architectural place-making (phenomenology) supports and celebrates the role of women in the rural Free State province. The ACE project addresses the ownership of artistic expressions, while highlighting local traditional place-making and art-conservation efforts. The ACE project hypothesis is that conserving earth-constructed homesteads and conventional wall decorations of *litema* art will empower rural women artists from the Free State province.

The ACE project aims to build sustainable relationships and a mode of interaction to voice the artists responsible for existing and current practices of *litema* in central South Africa. The ACE falls under a larger long-term research project titled, The social-ecological significance of earth construction in Southern Africa, which was ethically cleared (UFS-HSD2021/1745/21), in 2021, by the UFS.

2.3 Collaborative Online International Learning

Online learning has evolved pre-COVID (Bhagat, Wu & Chang, 2016: 350-351) and especially rapidly post-COVID as a worldwide platform. During the first part of 2021, while doing an independent COIL exchange

with a different UFS student group, Bosman explored the possibilities of COIL to support the ACE project. COIL falls under the social-constructivist educational approach, is a relatively new method, and literature is still emerging (Guth & Rubin, 2015). Higher education institutions can provide opportunities to students for intercultural collaboration experiences designed to solve problems in architecture. These experiences afford participants the opportunity to boost their confidence and communication skills (Gutiérrez-González *et al*., 2022: 20). Furthermore, COIL provides learning social interaction and is the keystone of developing intercultural competence (Guth & Rubin 2015; Hackett *et al*., 2023: 1). COIL exchanges illustrate the potential to achieve individual course objectives, while evaluating international student groups (De Santi *et al*., 2022: 3).

Criticism against the traditional and physical international exchange opportunities for mainly postgraduate students is valid for its elitist, expensive, and complex nature (Leal, Finardi & Abba, 2022: 241-242). COIL for both under- and postgraduate students hopes to achieve more cross-cultural student engagements and foster intercultural awareness, teamwork skills, and problem-solving abilities related to diversity, equity, and inclusion (De Santi *et al*., 2022: 3). The COIL activity, strategised as an instructional technique, facilitates an intercontinental conversation in a virtual environment between students and educators in remote positions. The method enables them to connect, despite geographical, time, cultural, and linguistic barriers (De Santi *et al*., 2022: 4). Higher education institutions not only identify the most vulnerable in society, but also endeavour to build resilience with the related pillars of teaching and learning, research, and community service (Olawale *et al*., 2022: 14-15). The global community is furthermore committed to using the 17 Sustainable Development Goals (SDGs) with the three university pillars.

In this study, ACE provided the conceptual framework and COIL provided the theoretical framework for the exchange. COIL allowed for the theoretical framework that investigates perceptions and relationships between the existing literature on *litema* practices to be compared to the ACE findings. A lack of recent literature led the researchers to contact and collaborate with David Riep, an American art historian from Colorado State University, who investigated *litema* symbolism during the fieldwork for his PhD in South Africa (Riep, 2011). The link with Riep was crucial. His work on South Sotho's traditional artefacts was a good fit with the involvement of his art and art history students, which started with a semester on *Art and environment in the arts of the African continent*. The COIL exchange began in February 2022.

3.   METHODS

3.1   Research design

This article reflects on how service-learning and international collaboration can celebrate *litema* wall decoration artists to support the architecture of care as an act for global change. Using a qualitative research design, participatory action research (PAC) was used to gain insight into the perceptions of artists and students on the architecture of care as an act for global change. PAC combines research and action, using surveys and fieldwork to collect data (Katoppoa & Sudradjatb, 2015: 121). In this study, three stages in the research process were used. Service-learning fieldwork and research combined with a COIL exchange, with the outcome of a public exhibition on two continents, promoting and celebrating the skill of rural *litema* artists, involved researchers, and participants, collaborating to understand *litema* wall decoration artists to support the architecture of care as an act for global change.

3.2   Stages

3.2.1 Stage one: Service-learning fieldwork and research

The ACE project was based on a PAC design (IDS, 2023) and utilised critical theoretical constructs based on the Social Learning Theory (the concept of modelling or learning by observing behaviour) (Badura, 1977). The process is modelled on past experiences of the Earth Unit, where artisans and artists were purposely sampled and surveyed with semi-structured interviews. The ACE project purposefully identified *litema* artists and their homesteads and mapped for future follow-up visits to sustain relationships with the artists. The semi-structured interviews were conducted in Se-Sotho, Isi-Zulu, or Setswana. The voices of the women artists were transcribed into English. The artists are proud of their practice and cultural heritage and prefer to be acknowledged and identified.

The fieldwork for the ACE project began in early 2021 to document the mural arts and architecture of rural South Sotho artists and record the experiences of both students and artists. Potential homestead workshop locations for the ACE project were identified in February 2021. By May 2021, the transportation, accommodation, and workshop logistics were completed. In June 2021, Bosman, David Van der Merwe, Mabe of the EU, and Venter from the UFS' Centre for Development Support conducted three tours to farms in the eastern Free State. The three sites included homesteads at Duikerfontein Farm (near Paul Roux), Clear Water Farm (near Warden), and Sekgutlong Farm in the Slabberts district south of Bethlehem.

Figures 4, 5, and 6: Different fieldwork activities during Stage One at Duikfontein Farm, Paul Roux district

Source: Images by Authors, 2021

The three different field trips had the same programme. Forty-two students were divided into three groups to spend three days participating in various activities of the fieldwork assignment. Activities included supervised tasks, gathering raw materials, surveying existing homes, and preparing surfaces for movable plaster panels, forming part of the exhibition. On arrival, a short introductory meeting presented the aim of the fieldwork activities to artists and participants. The introduction highlighted how the fieldwork is an active effort to build sustainable relationships between the UFS and artists. During the fieldwork, when participants could not understand each other's languages, they communicated through body language and facial expressions. The applied model of fieldwork method is well-developed in anthropology, but seldom used in architecture for teaching and learning. Social interactions between participants spontaneously developed over the three days. The focus was on a shared experience, in which 36 women and six men were asked to teach the art of traditional South Sotho *litema* wall decoration to 42 second-year architecture students (Figures 7-9).

Formal discussions and interviews were arranged in various languages, including Sesotho, IsiZulu, and English, although language barriers proved challenging. Qualitative data was gathered from purposefully selected and identified artists (n=11) and anonymous reflections from the second-year students (n=31) who participated in the engagement activities over three days, in three groups, on three farms. The semi-structured interview schedule contained 30 questions on the background of the litema practice, the future expectations of the artist on her practice, and symbolism and emotions associated with the practice. The interviews captured artists' perceptions of current *litema* practices, cultural significance, origin, and socio-ecological position in contemporary rural homesteads in central South Africa. Upon completion of the interviews with the artists, the recordings were transcribed into English for analysis. The interview data of the artists were coded holistically around the physical aspects of their practice, the

symbolism and meaning of the practice, and the artist's experience working with staff and students.

Student fieldworkers provided valuable service-learning reflections from the three groups visiting the farms. Students had to reflect on 18 questions structured around their expectations and the integrations of the ACE activities within their course, but most of the questions were on rural housing conditions, social and cultural exchange, engagement, and activities they enjoyed the most or the least. The students' reflections were coded holistically around themes that identified their expectations, experience, and emotions during the fieldwork. The holistic coding of themes from transcriptions and reflections provided analysed categories, using the constant comparative approach (Petri, 2015: 98).

Figures 7, 8, and 9: Different fieldwork activities during Stage One at Sekgutlong Farm, in the Slabberts district

Source: Images by Authors, 2021

The first stage of the research served as a preliminary exploration, upon which an international student online collaboration could be added.

3.2.2 Stage two: COIL exchange

Stage Two combined the service-learning of the ACE with COIL. During the time when the service-learning fieldwork of the ACE project started, Bosman (De Santi *et al*., 2022) explored a different COIL exchange, supported as the ikudu Project, funded by the European Union's Erasmus Plus, in partnership with four other South African and five European partner universities. Upon completing the service-learning fieldwork experiences by UFS students, Bosman, Riep, Mabe, and Roberto Muntoreanu developed a 12-week COIL programme. The same architecture students who did the ACE research project fieldwork and service-learning in 2021, now ten months later, participated in the COIL exchange from February 2022 to May 2022.

The research team joined their outcomes with David Riep from the Colorado State University (SCU) through a COIL exchange to contribute to the gap in more recent literature on *litema* perceptions. Riep's (2011,

2014) experience and knowledge of *litema* symbolism, cultural connections to heritage, ancestral connections, and South Sotho rites of passage make him an appropriate partner for this COIL experience. The COIL activity aimed to foster a sense of international solidarity among students from different parts of the world through an integrated educational experience. The students were allowed to develop their intercultural awareness and collaborative skills. Students had to complete an assignment (Figure 10) that resulted in a poster series for an exhibition.

Theme:
Explore the relationship between art and environment in the arts of the African Continent.

Background:
This Collaborative Online International Learning (COIL) experience will be conducted over eleven weeks between Art History students from the Colorado State University (CSU), the USA, and Architecture students from the University of the Free State (UFS), SA.

COIL Partners:
- **David Riep** PhD. Associate Professor and Area Coordinator, Art History, Department of Art and Art History, Associate Curator of African Art, Gregory Allicar Museum of Art, Colorado State University, USA David.Riep@colostate.edu
- **Phadi Mabe** PhD. candidate, Lecturer, Department of Architecture, University of the Free State, South Africa. MabePME@ufs.ac.za
- **Gerhard Bosman** PhD. Associate Professor, UNESCO Chair: Earthen architecture, construction, and sustainable development, Earth Unit: Department of Architecture, Faculty Natural and Agricultural Sciences, University of the Free State, South Africa, bosmang@ufs.ac.za

Brief:
You will be assigned groups to prepare a case study exhibition based on a lived experience by UFS students that participated in a three-day workshop assignment during June 2021 in rural parts of the Free State Province in South Africa. During these workshops, UFS students prepared decorated plaster panels of Sesotho litema and marela wall art decoration, photos, and videos. The UFS will explain and share their material and experience of this celebration with CSU students in groups. As a group, make use of the gathered information on Google Drive to prepare the following aspects 1) a poster and plaster panel exhibition on the UFS campus 2) a digital exhibition:

1. UFS students begin by writing a short descriptive background of the site, landscape, and cultural group (maximum 500 words – to be confirmed).
    1. UFS and CSU students then position the group's exhibition with a developed and provocative title (maximum seven words) and a descriptive sub-title (maximum 12 words) based on a theoretical understanding of how the landscape and environment information continues to shape the artist's real-world experience of this decorative art form. Please read sections on "care in architecture" on pp. 38, 41, and 43 of this article by Dr. Hendrik Auret: https://www.academia.edu/43770542/Care_Place_and_the_Sophia_Gray_Laureates_Architecture_as_an_art_of_care
2. UFS students continue with a concise edited narrative of the artists that prepared the murals and panels. Have a brief background of the site, context and process, a discussion, and a short conclusion (maximum 1000 words - to be confirmed). Add names and photos taken of the artists and students on the site that worked on these panels.

Figure 10:   The COIL assignment handout for UFS and CSU students

The COIL exchange consists of three parts: an icebreaker introduction, the assignment of comparing preliminary findings for a poster exhibition, and the reflection and assessment of the task. Students from both institutions were assigned to three working groups that completed a literature review of selected articles, ethnographic case studies, and selections from socio-religious sources. This short analysis and in-depth reflection of all participants in the fieldwork were presented as themed posters. The third-year architecture students from UFS shared their field notes, videos, photos, and drawings from the previous years, while the art history students of CSU compiled the text narrative. Under the guidance of Muntoreanu, 10 CSU graphic design students designed three compilations of poster templates based on the provided images of the UFS students. One template was selected with an overall theme.

3.2.3 Stage three: Public exhibition

Stage three was preparing the panels for the public exhibition. The UFS under- and postgraduate students from CSU wrote the text and visual narrative on the *litema* walls and plaster panels that reflected homestead walls during the fieldwork (see Figures 5 and 9). The reflection was creatively captured through a collaborative production of graphically informative posters on two continents to promote new research through knowledge exchange of cross-cultural perspectives. Padlet, Google Drive, and Blackboard as collaboration platforms allowed for real-time student engagement across two time zones (Figure 11) and allowed students to set the classroom culture for the exchange collectively. The exchange drew upon the strengths of both institutions, by combining architectural fieldwork experiences with art historical research and analysis to create a body of artistic research from rural indigenous knowledge systems.

	Name	Monday	Tuesday	Wednesday	Thursday
2	Tanner Holbrook				
3	Mitchie Kellogg	12:00-22:00 MST			
4	Michelle Malenfant	10:00-12:00 MST (UTC-7) 16:00-22:00 MST (UTC-7)	17:30-22:00 MST (UTC-7)	15:30-22:00 MST (UTC-7)	17:30-22:00 MST (UTC-7)
5	Sam Homan		17:30-22:00 MST (UTC-7)	17:30-22:00 MST (UTC-7)	17:30-22:00 MST (UTC-7)
6	Madi Kelley	11:30-13:45 MST	11:30-1:30 MST 16:00-17:30	11:30-13:45 MST	11:30-1:30 MST 16:00-17:30
7	Alanis Hernandez				
8	Glory Kamthunzi	UFS 18:00-21:00 (UTC +2)			
9	Elena Huff Solano	12:00 - 16:00 MST	16:00 - 18:00 MST	12:00 - 16:00 MST	16:00 - 18:00 MST
10	Chris Van Heerden	UFS 18:00-21:00 (UTC +2)			
11	Tinica Grassman	UFS 18:00-21:00 (UTC +2)			
12	Emihle Bunu	UFS 18:00-21:00 (UTC +2)			
13	Megan E du Toit	UFS 18:00-21:00 (UTC +2)			
14	Michail Cloete	UFS 18:00-21:00 (UTC +2)			
15	Lutho Mkukwana	UFS 18:00-21:00 (UTC +2)			
16	Nadine Te Water	UFS 18:00-21:00 (UTC +2)			
17	Haley Hagerman	1300-1400 MST		1300-1600 MST	
18	Anika Bothma	UFS 18:00-21:00 (UTC +2)			
19	Sofia Hernandez				
20	Leo Mtshali	UFS 18:00-21:00 (UTC +2)			
21	Lihle Makapela	UFS 18:00-21:00 (UTC +2)			
22	Kelsey Gruber				
23	R. Mutheiwana	UFS 18:00-21:00 (UTC +2)			
24	Ava Kerzic				

Figure 11: The Google Drive file shows Group 1 and the online time availability of all collaborators from two time zones.

4. FINDINGS

4.1 Stage one

Quantitative reflections were holistically coded to establish current perceptions of the engagement activities. Figure 12 shows the reflective feedback of the students from the three farms (PR, S, W).

The main research question: How can student care and engagement enhance or establish pride and accomplishment for builders of traditional earth constructed houses or litema artists, to support culturally significant architecture in the rural parts of the eastern Free State province?

1. **Community service-learning:**
   1. Before the tour, what were your expectations of community service-learning to complete this assignment as part of the CONS2 module?

PR	My expectations were that we would help the people construct new homes, and that we would work long hours.
PR	I had no expectations. I was just keen on learning.
PR	My expectations for the tour were to engage with the community and learn different methods of sustainable design.
PR	I had no expectations going into the tour.
PR	I had no expectations.
PR	Engaging with the people of the community, but wasn't sure of what we were going to do exactly but maybe work on their homes and do some kind of physical labour.
PR	I expected to learn how to build an earth-constructed house from the foundation up to the roof. I was prepared for long days of hard work.
PR	To build mud huts.
S	My expectations were that the community we would visit would look similar to those informal settlements in cities. I was surprised by the tranquil and natural beauty of the site we visited.
S	I expected that we would learn more about earth construction and the traditional ways of how these communities would do these activities, and to also help them complete their homes by building certain aspects thereof with them.
S	My expectations were that we were going to help improve their lifestyle through helping them build and safe and structurally strong house.
S	I thought we would just go and follow instructions on how to complete tasks.
S	I thought we would only look and see what they did to construct their houses.
S	I wasn't expecting anything great. I figured we would just be standing around in the blazing sun and doing something to help the community while we are being taught about their culture.
S	I believed that the informal settlement would look a lot like the informal settlements we see in city areas. I was pleasantly surprised with the beauty, peace, and harmony of the one we visited.
S	I expected to basically help the inhabitants of the site perform their cultural rituals and, in turn, learn more about their heritage.
S	I expected to have a fun experience serving the community.
W	I thought that we would be watching them work and taking notes on how they do it.
W	Big expectation, I was very interested in learning how they build and what their lifestyle was like.
W	Engaging with the community. Learning through practical activities. Giving your effort, time, and care voluntarily.
W	I believed that we would have a great time learning about how '*litema*' works and what it meant for each of the ladies to paint and design their homes.
W	I thought it would focus much on the history of the construction methods.

Figure 12: The first of 18 thematic reflections on the expectation before the ACE 2021 fieldwork started

The reflective feedback of the students (Figure 12) shows very positive experiences with temporal relationship experiences over the three days spent with the women artists. Of the (n=31) anonymous reflection feedback that was received – in terms of their expectations – a student wrote:

> "I expected to basically help the inhabitants of the site perform their cultural rituals and, in turn, learn more about their heritage."

On a question of whether the assignment as a learning experience has been meaningful or successful, one student commented:

> "Yes. It was a very effective way of learning. We got to mix the materials used on the houses ourselves and felt the textures with our own hands. We also experienced the more difficult aspects and learned from our own mistakes."

Most of the students were negative about the dates of the three tours at the end of the first-semester programme. Students did not like the cold

conditions, and most of them did not like to work with cow dung for the plaster and paint mixes.

In terms of whether they had a positive or negative social or cultural engagement with the participants, one student commented:

> "Yes, I think … important is the fact that I have a better picture of what it means to have culture. South African people have a unique and unprecedented way [of] living and working together. Even though we as students did not speak or understand the Sotho language, we found ways of laughing and spending quality time with the homeowners."

The interview data of the artists were coded holistically around the physical aspects of their practice, the symbolism and meaning of the practice, and the artists' experience working with staff and students.

Preliminary findings of transcribed semi-structured interviews of the artists (n=11) showed that the practice of creating *litema* wall decoration is rooted in the frameworks of lineage and tradition in a multifaceted way.

Artists shared many practical aspects of their practice, such as: where they collect the raw material; how they prepare the material; the quantities and proportions of manure with soil; the application process and method; the design of the patterns, and the frequency of the application were discussed in detail.

In terms of symbolism and meaning, some of the artists' comments revealed that identity and culture are expressed through the hands and eyes of individual women's perspectives:

> "According to our culture! It's us … it's our spirit, like, showing people how proud we are of our houses and our culture. That is how we prefer to build our house and how to make our house beautiful. That is why we do it … every year! Because it's our pride."

> "So, everything about this house is basically the pride of being Sesotho."

> "Sometimes we do the patterns. Sometimes we do … something we feel. Like now we have done the stars there, you see. The stars you see."

> "The message about these patterns is that nobody does them anymore. This is a message to say that our heritage is beautiful. Also, cleanliness is supposed to be sustained. Yes. It leaves a message that since it is clean and beautiful, anyone may be interested in having a house like this, even if they don't normally

ever do it. Beauty is acceptable and cherished and wanted by everyone."

In terms of a connection with ancestors and a personal lineage, the women's views were more nuanced than the limited literature suggest:

"… when I do litema, I would have an honouring celebration and go to the graveyard where they [ancestors] lay, and talk to them."

"Usually, the grandmothers and grandfathers are fond of these houses, because they are the same houses they normally lived in, in the past. Now, they draw close to you if you've got these houses. Because they need them."

"It has to do with our ancestors because it is part of the Basotho culture that we grew up with."

"I'm going to teach her [my daughter]; this is my life's knowledge".

For all the artists, the experience of the shared practice with students was described as joyful and sharing that reflected the positive engagement and care of the fieldwork approach. On all three farm sites, the activities created a mood for celebration. At Duikersfontein near Paul Roux, one artist described the workshop and fieldwork as follows:

"the thing that happened just now, is more like letsema, … you call upon the people and prepare meals. After that, the people begin working when they did all the work, then they feast."

During the workshop activities of the ACE project, the artists were comfortable and eager to teach their art to other young women of different cultural groups. The learning occurred through the design and replication and the creative-making process. Figures 13 and 14 show the final walls and panels during the handing out of certificates.

Figures 13 and 14: Some *litema* walls and a plaster panel example produced during the fieldwork

Source: Images by Authors, 2021

The findings show that the symbolism and meaning of *litema* as a practice are more complex and nuanced than the literature suggests.

4.2 Stages two and three

To promote active engagement during online learning exchanges, students' perceptions towards this mode of learning and teaching should be determined (Bhagat *et al.*, 2016: 350). The student self-reflection of the COIL exchange was compiled from the three groups on Google Drive. Various discoveries were made when reflecting on the COIL exchange (Stage two). The COIL exchange shows that practical challenges can be overcome over a 10-week online educational experience. Findings from the COIL illustrate that digitisation of the educational experience is transforming the typical classroom. The COIL emulation of a global classroom illustrates that students are prompted to become more aware of intercultural diversity, inclusion, and problem-solving abilities related to diversity and equity.

The graphic design students at CSU provided the final poster templates for the exhibition (Stage three). A student-led selection process by all collaborators resulted in one template to be used to prepare 19 posters. CSU's UFS and art history students develop the narrative and images with photos for the posters. Academic writing with the practical aspects of service-learning develops critical thinking (Deely, 2015: 4).

The title of the poster exhibition is *Daughters of Litema: Revering temporal rural earth art, Free State province, South Africa.* The student groups had to prepare subtitles to capture the site qualities of the environmental and social landscapes of the farm sites. This formed the organising structure of the narrative, which was arranged into three parts: The rural *litema* house: The families through the eyes of engaged students; Women in art: The passage of time in South Sotho culture, and Voices beneath the mountain: Curators of the process as ritual.

Figure 15 shows one of the 20 plaster panels with the student and the artist who inspired its design. These posters were combined with 20 plaster panels produced the previous year during fieldwork in 600x600mm and 1200x600mm formats. These posters and plaster panels celebrate the role and skills of the female artists and their student collaborators.

Figure 15:   An example of a tag next to the plaster panels exhibition that acknowledges the artists and the student collaborators

Source: Image by Authors, 2021

5.   DISCUSSION

This article focused on artistic research that can bring about change through real-life rural engagement and celebration, by challenging the staff's traditional academic approach to fieldwork and service-learning. The approach is rooted in rigorous, creative research, driven by imagination, and aimed at changing attitudes for staff, students, and communities. This effort was focused on addressing dignity and care through art and engagement, rather than simply science, in order to bring about change.

5.1   Stage one: Service-learning fieldwork and research

The service-learning approach can provide a new place of interaction in a less intimidating environment, while providing contextual learning experiences for students.

A new model of doing service-learning presented the opportunity of taking students on field trips to do service-learning activities. Following this new model, the roles of students and instructors were swapped. The students travelled to the artists who were at ease in their well-known environment. The students were out of their comfort zones instead of the participating community.

Students used PAC and social learning approaches, not commonly used in architectural training, to celebrate the skills of rural women artists and document their *litema* practices, which are slowly disappearing from the Free State landscape. Documenting *litema* art is a deliberate intention of creating a slow resistance to the inevitable dissolution of cultural practices. These experiences have strengthened and confirmed the cultural importance of *litema* and have shown the possibility of intergenerational knowledge and skills transfer. The art is kept alive and provides more resistance to the evolutionary disappearance from the Free State landscape.

The research paradigm of the ACE project reflects the ethos of teaching architecture and engagement as acts of care in the theoretical framework at the UFS' Department of Architecture. Second-year students are introduced to issues such as care and community. According to Heidegger (1927), the ecstasies of care are explained as understanding, attunement, and being-with. These notions are supported by Norwegian architect and critic, Norberg-Schulz's (1980) language of architecture in terms of orientation as topology, identification as morphology, and memory as typology.

The study promotes indigenous building practices elsewhere in South Africa, since it addresses the loss of local heritage, while reflecting on the use of local materials, the cultural significance, symbolism, and the identity of the rural South Sotho communities. Students' engagement in a real-life situation outside the classroom provides an informative environment, where students can build relationships as acts of care towards people- and nature-centred relationships. Van Vuuren (2015) argues that the different Ndebele homestead earth buildings and murals reflect rational decisions made in different situations. The ACE preliminary findings reflected on culture but especially the identity of the artists in reaction to personal taste, own interpretation, and a close link to the availability of either natural coloured clays or to buy industrial pigments. One artist commented on this:

> "Sometimes we look at these Masolanka blankets, or maybe the books we view. Sometimes we just depend upon our creativity, on our creative minds. But most times we look at books or the patterns on the blankets." (Moloi, 2021: personal communication).

5.2 Stage two: COIL exchange

The research explored the synergetic potentials of art, architecture, service-learning, and sustained relationships with communities.

Colorado State art students collaborated with South African architecture students' qualitative reflections and qualitative data collected during fieldwork from rural women who installed *litema* wall decoration art as a temporal home decoration. Through a COIL experience, the South African students learned more from recently recorded notions on the symbolism and cultural significance of this art form that is slowly disappearing from central South Africa's rural parts. This transformed use of service-learning and COIL method supports the United Nations' (2023) SDGs such as quality education (4), gender equality (5), and partnerships for the goals (17), while also presenting the participants' perceptions and research findings.

The COIL exchange necessitated that all students understand their responsibilities, which required consistent reminders. To facilitate this, lecturers had to create clear guidelines and outline specific objectives and deadlines according to the time zone of each institution. In addition, the information and instructions for the joint task or assignment needed to be made available to the students before starting the ice-breaking activities. Lecturers also required access to student work-in-progress on Google Drive to check student progress and intervene with guidance if any groups fell behind with assigned tasks.

Clear and consistent communication was crucial during the COIL exchange. It was essential for outlining project expectations and deadlines

and was accomplished through reminder e-mails. Communication helped prevent confusion if a deadline needed to be adjusted. WhatsApp was a useful tool for both the lecturers and the student groups. The seven-hour difference between Colorado and the Free State became a challenge, slowing decision-making if messages were replied to many hours later. However, this was a worthwhile challenge, as the main aim of a COIL is for the students to engage interculturally and cross-culturally, where students must get out of their comfort zones and engage with their peers.

Developing a detailed assessment rubric was also important and was provided to all students prior to the start of the COIL exchange. The rubric made students aware of the outcome and assessment. The lecturers explained the rubric criteria carefully and reminded students of the content, proof of the process followed, and the suggested completion time frame. It was a challenge to finalise the text for the poster exhibition, as insufficient time was allocated for editing the three groups' text narratives into a coherent storyline.

For teaching staff and COIL instructors, this kind of community engagement and cultural exchange asks us to be prepared to explain to students that one learns from diversity in which identity, culture, and language present a multitude of reactions and behaviours when addressing issues or solving problems. The reflective feedback and self-assessment provided by students at the end of the collaboration offered great insight into the student's experiences. The students' assessments will help faculty guide relationships among future student groups, academic institutions, and communities, with which sustainable relationships can be nurtured.

5.3   Stage three: Public exhibition

The dissemination COIL (Stage two) made provision for the exhibition (Stage three) consisting of posters with text narrative and photos of activities and plaster panels prepared after *litema* practices were completed on the earth walls. In some cases, the plaster panels reflect the same *litema* designs on the dwellings where the female students worked with the *litema* artists (homeowners). Figure 15 shows a tag accompanying the plaster panel with the student, the artist, and her work that inspired the panel design. This is a visual dialogue between the artists and the memory of the student's experience during the workshops of June 2021. A maximum of 20 panels can be exhibited with the posters to celebrate the role and skill of the female artist who worked together with female students.

The past model used to address problems in architectural service-learning can be viewed as a top-down approach (see Figure 1) that does not support the United Nations' SDGs. The use of COIL, as combined in the case of the ACE project, opened new partnerships and sustained relationships

between UFS' architecture students and *litema* artists for follow-up workshops and engagement.

Recently, international collaborations have rapidly changed. COIL should focus on how students manage time with deadlines, challenges with digital platforms, and interactions with different time-zone challenges. The study shows that a COIL assignment can result in high-standard posters to the extent that they can be exhibited in a gallery or exposition.

The poster and plaster panel exhibition, produced in collaboration, was exhibited during a high-profile event attended by international research and science organisations, heads of state, and South African members of parliament. From 6 to 9 December 2022, the exhibition was presented at the World Science Forum (WSF, 2022), Science for Social Justice exhibition in Cape Town at the Cape Town International Conventions Centre. In May 2023, a duplicate exhibition opened at the Gregory Allicar Museum of Art of Colorado State University. David Riep curated the exhibition. This exhibition, with colour photos of the plaster panels, shows accompanying tags of artist names and student collaborators. The COIL experience and the celebratory exhibition present the intergenerational transfer of knowledge to help keep this art form alive and provide a slow resistance to its eventual disappearance from the Free State landscape.

6.   CONCLUSION

The ACE research project aimed to celebrate the existing skills of *litema* artists. The problem of combining the research with service-learning provided a new conceptual model for future service-learning and community-engaged scholarship architecture activities conducted by the UFS. This focused on a new method where students had to travel to rural areas to learn from their *litema* practice rather than the artists trained in upgraded earth-building techniques, as was the case from 1996 till 2018 at the UFS. Within these challenges, a new conceptual model for architecture service-learning was tested. Research with service-learning fieldwork activities created a flipped classroom, where the students and artists became the instructors. With continued financial support, this study opens the way to a more authentic relationship centred on connection, involvement, and participation, while exploring new architectural learning and teaching methods. The literature gap on current *litema* perceptions furthermore developed into the COIL exchange to partner with David Riep on his experience and acquired knowledge on *litema* symbolism. The ACE data and the literature by Riep (2011) gave new insight into the perceptions around rural *litema* practices and their significance. As a long-term effort, COIL sessions with international partners can promote the advantages of contemporary earth construction. Furthermore, the COIL approach asks

of students and lecturers to rethink traditional approaches to learning and teaching that support sustainable development goals (SDGs) such as quality education (4), sustainable cities and communities (11), gender equality (5), and partnerships for the goals (17). Research focusing on SDGs supports quality transformed education to accelerate curricula transformation with new learning and teaching methods.

Exploring all possible ways and opportunities to get students out of classrooms to participate in service-learning has many challenges. Still, it can create unexpected quality learning opportunities in real-life situations. Marginalised communities to reach out to can easily be found in urban and rural areas. The research shows that multidisciplinary partnerships make a difference regionally while thinking at an international collaboration level. To establish new partnerships, all possible network opportunities should be explored and pursued for international collaboration. Students, lecturers, as well as art and earth-building practitioners can contribute as 'artivists' to encourage ethical artistic practice in the assistance of human rights and dignity. These acts show care and dignity in celebrating *litema* art and architecture in the rural part of central South Africa.

ACKNOWLEDGMENTS

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