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Towards a live project framework for community engagement in South Africa: an architectural education perspective

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Abstract

Live projects have a long-standing history in architectural education (Brown, 2012). The practice of live projects has increased substantially over the past 20 years and is currently being adopted in many other disciplines (Live Projects Network, 2019). Live projects can be defined as projects that “comprise the negotiation of a brief, timescale, budget and product between an educational organisation and an external collaborator for their mutual benefit. The project must be structured to ensure that students gain learning that is relevant to their educational development”. Internationally and locally, live projects have also increasingly become vehicles for meaningful community engagement (Harriss, 2011).

Often, live project literature focuses predominantly on project descriptions. In such cases, the project stories are told without critique and primarily from the author’s perspective, without positioning the projects “within a wider theoretical, historical or cultural context” (Anderson, 2017: 1). However, during the past few years there has been an increasing attempt at more in-depth reflection on, and analysis of, live project practices, principles and methodologies (Morrow, Chhaya & Pomal, 2014). Anderson and Priest (2012) have been instrumental in developing several tools for classifying, analysing and discussing live projects. Through the Live Projects Network, they have published a spectrum of live project factors (Live Projects Network, 2019) and Anderson has also continued to develop a live project taxonomy (Anderson, 2017). In developing the taxonomy, Anderson found that the “expertise of the live project participants is capable of overcoming contextual resource limitations” and that the

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taxonomy itself “allows us to identify the ways in which live projects are influencing contemporary ... education, research and practice” (Anderson, 2017: 1).

On a similar trajectory to live projects, community engagement initiatives in South African higher education have also seen exponential growth over the past two decades. However, definitions, practice and administration of community engagement projects still vary greatly (Bhagwan, 2017) and are often “uncoordinated and ... the result of individual initiative, rather than of strategically planned, systematic endeavours” (Council on Higher Education, 2010: iii).

Being enthusiasts of both live projects and community engagement projects, the authors want to explore existing live projects that are embedded in community engagement activities through the lens of Anderson and Priest’s spectrum of live project factors (in Harris & Widder, 2014: 47). The context of the selected projects is positioned in architectural education in South Africa. The aim is to see if the spectrum of live project factors highlights specific pedagogies, practices and expertise (Anderson, 2017) within these local projects. The projects will be identified from existing live project literature, with specific reference, but not limited to, the Live Projects Network.¹

KEYWORDS

live projects; community engagement; architecture; engaged scholarship

19.1 BACKGROUND AND RATIONALE

The two authors of this chapter have worked together on architectural live projects since 2011. Live projects are used in architectural education as spaces for the application of knowledge and skills in real-life environments. Students work collaboratively on projects to solve community problems, which often result in the establishment of a physically built structure in those communities. Examples of such live projects include new or improved classrooms for schools, food gardens and food market buildings.

In 2012, the authors established the Design Build Research Studio (DBRS) at the Department of Architectural Technology at the Cape Peninsula University of Technology. Through the DBRS, the authors conceptualised and executed a number of projects that are theoretically positioned as live projects. The DBRS live projects were also predominantly situated in local communities that have pressing social and economic needs.

The authors are interested in exploring the possible resonance between architectural live projects and community engagement projects in the South African context, and the lessons and practices that could be transferable between these two practices. In this chapter, architectural live projects in South Africa are mapped and analysed using a spectrum of live project factors as well as a live projects taxonomy developed by Anderson and Priest (2015). The aim is to identify any specific patterns, pedagogies,

practices or expertise (Anderson, 2017) that emerge within community-oriented, architectural live projects in the South African context.

19.2 ON LIVE PROJECTS

19.2.1 Three perspectives

The exploration commences with a discussion on live projects in architectural education, which can be organised along three main perspectives. The first is the position to challenge the traditional teaching methodology of the architectural studio, where students work individually on projects that are not situated in the real world. Live projects take students out of the studio and into communities, where they work collaboratively on solving real-world problems. The potential for a different and relevant kind of learning is what motivates academics to introduce such live projects (Morrow & Brown, 2012).

The second perspective is the innate belief that architects can change the world through their profession. One world-changing strategy would be to “connect our students to communities, cultures, people and places within our cities, and to define the social responsibility and role of the architect and architecture education in the future” (Vlahos, 2000: 95). Internationally and locally there is a distinct movement towards aligning architectural education strategies so as to address the needs of communities (Canizaro, 2012; Delpont, 2016; Feuerborn, 2005; Perold, 2018; Wu, 2007).

The third perspective seeks to develop alternative modes of practice, not in education but in the professional space (Tovovich, 2010). Live projects have the potential to introduce and inspire students to become involved in more socially responsive architectural practice once they have completed their studies. The traditional architectural educational studio simply does not support an alternative to conventional architectural practice and “the contested socio-economic context within which the architectural profession operates in South Africa” (Perold, 2018: 16). The emergence of the concept of an alternative practitioner, also referred to as a public or citizen architect, has been developing in both architectural education and architectural professional practice over the past two decades.

When viewed from these three perspectives, live projects in architectural education are positioned on the boundary between designing individually and producing collaboratively, between working for profit and working for people, and between education and professional practice (Delpont, 2016).

19.2.2 International adoption

One of the seminal live project educational spaces is the Rural Studio in Hale County, Alabama. Rural Studio is part of Auburn University and was founded around 30 years ago. In the United States, the term “design-build project” is predominantly used to describe what the authors refer to as live projects. However, design-build projects typically have a built artefact as the outcome of the project. The term “live projects” originated in the United Kingdom in the early 2000s. Live projects include design-build projects, but are not limited to projects that have a built artefact as the outcome.

Live projects have been adopted enthusiastically in architectural schools across the globe in the past two decades. Live projects originated in architectural education and have also been adapted into other disciplines as the principles of live projects are readily transferable.

19.2.3 Theory and support

One of the first conferences where projects similar to live projects were studied was the Designing/Building/Learning conference organised by the Hammons School of Architecture at Drury University in 2001. Hammons is a comparatively small architectural school in Springfield, Missouri, and the fact that this conference was held in such a remote location resonates with Anderson's statement that "many schools of architecture that have been high profile or early-adopters of live projects are located on the peripheries of power in relation to the centres conventionally holding the architectural, cultural or political elite ... such locations include the rural and the global South" (Anderson, 2017: 2).

In a reflection on contributions to this conference, the organising committee said that what "remains clear is that design-build [live project] activities continue to resist theorising and critical discourse" (Erdman et al., 2002: 175). Since this conference was held, many papers that describe the execution and stories of live projects have been published, but these are often self-reflective and without real critical examination (Delpont, 2016). During 2006, the Sheffield School of Architecture in the United Kingdom also developed the first guide to architectural live project implementation in higher education institutions (Sara, 2006).

As live project implementation grew further, so did scholarly sharing, support and publications. In the past decade, there have been several calls for theoretical and critical reflections on live project practices (Anderson & Priest, 2012; Brown, 2012; Delpont, 2016; Perold, 2018), including that of Ruth Morrow quoted in the book *Architecture live projects: pedagogy into practice*, who states that there "is a need to create an operational and theoretical framework" for live projects (Harriss & Widder, 2014: 21).

There has also been an increase in more theoretical and critical live project investigation in the form of conferences, publications and theses. Two international networks that focus on collating live projects were also established during the past decade. The Live Projects Network (Anderson & Priest, 2015) is focused on "enabling new collaborations and stimulating discourse and best practice" (Harriss & Widder, 2014: 49). DesignBuildXchange (<https://www.dbxchange.eu>) is a similar platform where live project academics, students and practitioners share information regarding literature, projects, collaborations, funding, best practice and more. These steadily growing online communities have made a substantial contribution to the development of live project theory and methodology.

19.3 ARCHITECTURAL LIVE PROJECTS AS A FORM OF COMMUNITY ENGAGEMENT IN SOUTH AFRICA

In South Africa, many architectural education projects that adopt the live project methodology have been completed during the past decade. While some of these projects were executed by European and American higher education institutions that do outreach work in the global South, many live projects that involve community engagement originate from local architectural schools. Community engagement in higher education has a wide and varied range of forms and definitions. Generally, live projects in architectural education that engage communities, and specifically the projects that are referred to in this investigation, would fit into the description of community engagement as a practice “at the more traditional, micro level of small-scale activities, [where] universities link with local community residents to contribute to a specific area of need” (Preece & O’Brien in Preece, 2016: 105).

Our exploration is from the perspective of community engagement as a practice where students are presented with the opportunity of engaging with real-world problems in local, predominantly underprivileged, socially and economically challenged communities, and then provide such communities with something that can be to their benefit. The authors also draw on the Department of Education’s White Paper (DoE, 1997), which “reconceptualised community engagement not as a discrete entity, but integral to and embedded within teaching and research” (Bhagwan, 2017: 172).

A project that the DBRS conducted in 2016 provides an example of a typical live project. The authors collaborated with a non-profit organisation, Violence Prevention through Urban Upgrading (VPUU), which had recently completed the construction of a neighbourhood centre in Lotus Park, an informal settlement in Gugulethu. The live project entailed the design and building of a small timber pavilion next to this centre, to provide shaded seating for an existing netball court. Based on discussions with residents who volunteered to take part in the live project, a number of possible interventions were proposed. These were developed collaboratively in groups consisting of students and residents, working in the studio as well as at the neighbourhood centre. Concept designs were presented to residents and the students then proceeded with the technological design of the chosen intervention. Construction work was split across two groups, with one working on-site under the supervision of a local contractor, doing excavations and preparing for the concrete to be cast, and the other working in an off-site workshop to prepare and test-assemble the timber structure. Due to unforeseen delays on-site, in the following year the assistance of another construction company was obtained to complete the intervention.

According to Bhagwan (2017), in a study that set out to gain a conceptual understanding of community engagement in higher education in South Africa, the definitions, practice and administration of community engagement projects vary greatly. Bhagwan further posits that, while many community engagement projects are directly related to teaching and learning, there is no clear evidence that community engagement leads to research output. He states that not all of those who practise community

engagement “have recognised the importance of knowledge production and a deeper form of engaged scholarship” (Bhagwan, 2017: 181).

Bhagwan has developed a “conceptual understanding of community engagement in higher education in South Africa” (2017: 171) which resonates with the authors’ own understanding of community engagement in architectural education. Bhagwan puts forward four themes that underlie community engagement in South Africa. The first of these is context: both that of the higher education institution and the community. As the manner in which higher education institutions “think about or conceptualise communities influences the objectives that will be pursued through those relationships” (Moore in Bhagwan, 2017: 176), it is important for us to have defined a specific view of what community engagement means in the context of architectural education. The second theme is process, with a particular emphasis that “students should be taught what social justice and social responsibility are” (Moore in Bhagwan, 2017: 178). The third theme centres on a mutually beneficial relationship that should be “underpinned by strength, resilience and existing knowledge of community partners and participants [and that it] differs from a service [learning] model which is based on deficits, needs and dysfunction” (Moore in Bhagwan, 2017: 179). Bhagwan’s last theme is that of knowledge production, with a focus on the co-creation of knowledge and the acknowledgment of, and engagement in, indigenous knowledge.

Over the past two decades, live projects in general and community engagement projects in South Africa have been on a comparatively similar trajectory. Both practices experienced exponential adoption and growth in higher education institutions. In both practices, there have been calls for theoretical underpinning, research and reflection, which have been addressed to some extent. In both practices, the development of theoretical models and methodologies is still ongoing. Writing about the taxonomy of live projects that she has developed, Anderson states that the “purpose of this taxonomy is not to freeze or stifle the evolution or creation of new live project strategies and outcomes, but to record a contemporary snapshot in the hope that live project activity will continue to evolve” (2017: 14). At the same time, a recent study funded by the National Research Foundation that focuses on “community engaged teaching and learning” identifies “a need to explore how teaching and learning pedagogies that include experiential, practical and community engaged types of learning may be clustered into a conceptual framework that is inclusive” (Julie et al., 2019: 1).

19.4 NOTEWORTHY FINDINGS FROM LIVE PROJECT RESEARCH

Noteworthy findings from live project research include the pedagogical value of live projects and the development of alternative professional practices. The pedagogical value of live projects includes a substantial number of aspects that are not entrenched in the traditional architectural studio. These include learning in an authentic environment, learning in context and learning with real dimensions of complexity as well as with holistic problems, with real-time feedback and the need for flexibility and open-endedness. Live projects also teach students about motivation and responsibility.

ity, and have embedded opportunities for real collaboration, both in terms of design and execution of projects (Abdullah, 2011; Canizaro, 2012; Delpont, 2016).

Community-oriented live projects introduce students to a different way of practising architecture. Such live projects take students into the real world, teaching them interdisciplinary skills and the possibility of social entrepreneurship. Alternative architectural practice – also referred to as public interest design, social architecture, citizen architecture or public architecture – has developed “in response to changing global economic and social circumstances and through a consciousness of responsibility” (Delpont, 2016: 308). Social entrepreneurship and alternative architectural practices have the potential to address some of the most pressing social and economic challenges in South Africa. The emergence of live projects that address community engagement in local architectural schools is a response to the recognition of “the role that the profession has to play in engaging with informal spatial practice” and the belief that “live projects are an effective vehicle to experiment with new modes of practice, particularly co-production and collaborative design together with residents” (Perold, 2018: 66).

19.5 A SPECTRUM OF LIVE PROJECT FACTORS AND A TAXONOMY OF LIVE PROJECTS

Anderson and Priest, both live project enthusiasts and researchers, have developed a spectrum of live project factors in which they identify “six factors needed to make a project ‘live’” (Anderson, 2017: 3). These six factors are external collaborator, educational organisation, brief, timescale, budget and product. Each of these factors are assigned a number of characteristics “to allow for the wide variation in approach” of live projects (Anderson, 2017: 3).

The six factors and characteristics are mapped with the addition of two classifiers – student level and group size – to contextualise the students involved (Figure 19.1). This mapping provides the opportunity to “begin to identify commonly occurring live project models that have developed in response to particular conditions” (Anderson & Priest in Harriss & Widder, 2014: 48).

As Anderson and Priest (Harriss & Widder, 2014: 46) explain:

As the points along each of the spectra move closer to the centre, projects get closer to a profile that is more typical of a professional project in relation to budget, external collaborator, brief and level ... some of the more radical contemporary models of practice would break this mould and move outwards from the centre ... all projects – studio, live and professional – will occupy the full spectrum in terms of timescale, product, and group size.

In an earlier version of the spectrum of live project factors, the factor “external collaborator” was described as “client”. The change to “external collaborator” was made in order “to acknowledge non-architectural live projects and reflect the collaborative ways of working, modes of mutual exchange” (Harriss & Widder, 2014: 46). External

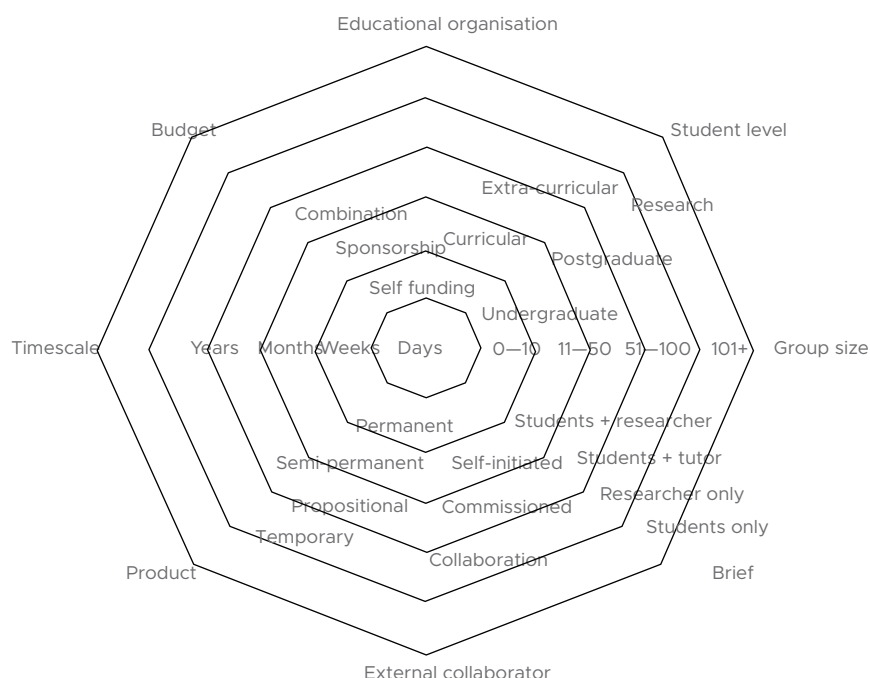


Figure 19.1 A spectrum of six live project factors and their characteristics

Source: Anderson (2017: 5)

collaborators could also include “non-commercial and often community-led bodies who collaborate in live projects” (Harriss & Widder, 2014: 46). This response indicates the transferability of live project methodology to other disciplines, and the move away from the “conventional client relationship and model for the commissioning of projects” (Harriss & Widder, 2014: 46).

Anderson used the spectrum of live project factors to analyse “154 contemporary live-project case studies located in 28 different countries that have been drawn from the online Live Projects Network between April 2012 and January 2016” (Anderson, 2017: 1). Her aim was to find “an objective method to analyse live projects that includes the peripheral and promotes diversity and evolution” (Anderson, 2017: 1). In her study, Anderson employed both quantitative and qualitative analyses.

The quantitative analysis reviewed relationships between the factors of the spectrum to explore the diversity of live projects. Two of the important findings are that there is “a strong connection between live projects and contexts with significant levels of need (particularly economic, social justice and wellbeing)” (Anderson, 2017: 11) and that “participants’ [in reference to the live project educators] expertise and aspirations enabled projects to transcend contextual or physical resource limitations” (Anderson, 2017: 12). Anderson’s findings are elaborated on in relation to those of the authors in the explorative discussion that follows later in this chapter. In the qualitative analysis, Anderson reviewed participants’ expertise in live projects, which she then mapped in a taxonomy according to four pedagogical and practice aspirations:

design, social, professional and educational. The taxonomy identifies seven types of live project expertise which emanate from different combinations of the four aspirations (Anderson, 2017: 13).

19.5.1 Methodology

In this chapter, community-oriented live projects in architectural education in South Africa are explored. The selected projects were drawn from two international databases, the Live Projects Network and the DesignBuildXchange online platforms. Both databases contain a variety of live projects; however, not all of them involve community engagement. All of the South African community-oriented live projects from these databases were selected. The authors further referenced their own live projects (some of which are represented on the Live Projects Network) as well as other published live projects in South Africa. In total, 28 projects were identified, all of which were executed during the past fifteen years. Of these projects, sixteen were initiated and executed in South Africa by international educational organisations: ten were conducted by local educational organisations and two were a collaboration of international and local higher-education institutions. (For the purpose of this exploration, the latter two projects were included under local projects.)

Anderson and Priest's spectrum of live project factors forms the basis of the exploration, and the 28 live projects were mapped according to the six factors described in the spectrum. During the course of the exploration it became evident that it is useful, in the local community engagement context, to discern between projects initiated and executed by international and local educational organisations. It is also important to note the role of any intermediaries (e.g. non-governmental or community-based organisations, as well as enterprises) in liaising between the educational organisation and the community concerned. To this end, two additional factors were introduced into the spectrum: origin and intermediary. The expanded spectrum of eight live project factors, still with the addition of two classifiers – student level and group size – is indicated in Figure 19.2.

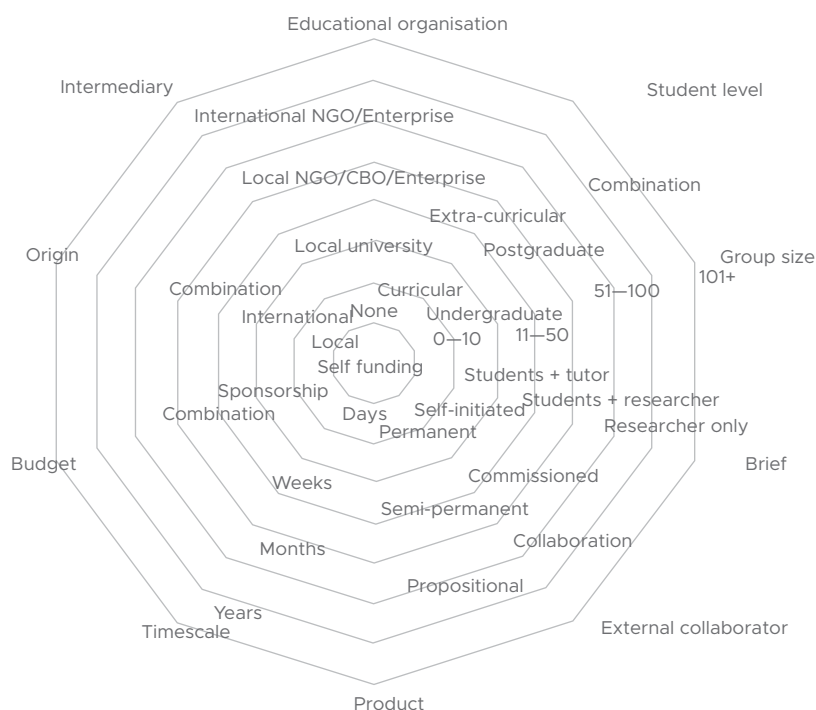


Figure 19.2 An expanded spectrum of eight live project factors, with the addition of two classifiers – student level and group size – and their characteristics

Source: Adapted from Anderson (2017: 5)

19.5.2 Exploratory discussion and findings

The exploratory discussion is organised according to the expanded spectrum of eight live project factors, with the addition of two classifiers: student level and group size. The mapping of the 28 live projects is indicated in Figures 19.3, 19.4 and 19.5.

Figure 19.3 shows all of the projects mapped onto the expanded spectrum of eight live project factors, while the live projects initiated and executed by international and local educational organisations are mapped onto the spectrum separately in Figures 19.4 and 19.5. In the discussion of live project factors mapped from the authors' data set, Anderson's 2017 study, in which she employed the spectrum of live project factors for an in-depth quantitative study, will also be referred to.

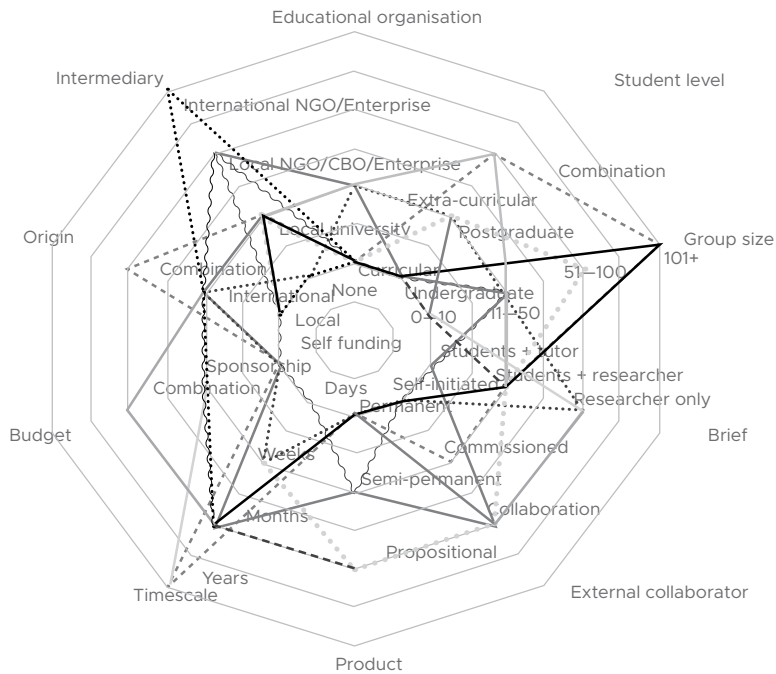


Figure 19.3 South African live projects involving community engagement, mapped onto the expanded spectrum of live project factors

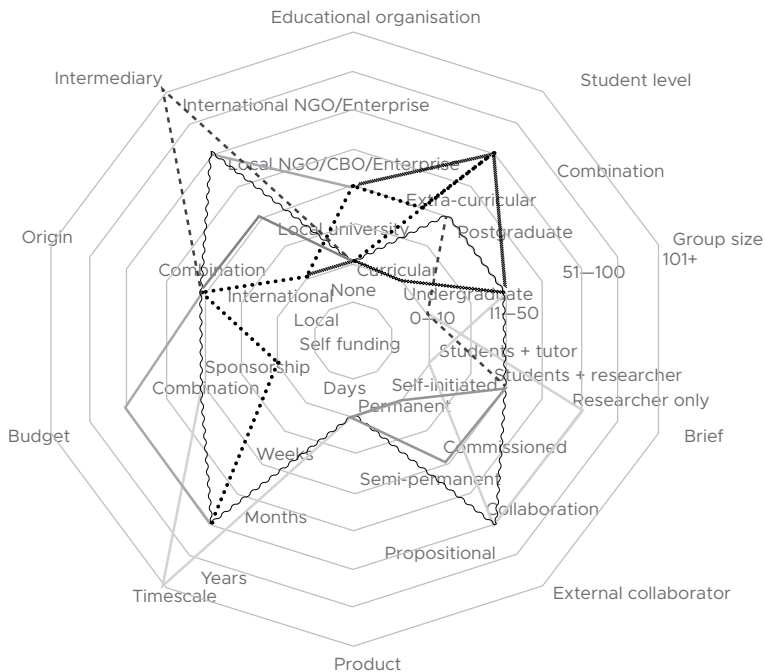


Figure 19.4 South African live projects initiated and executed by international educational organisations

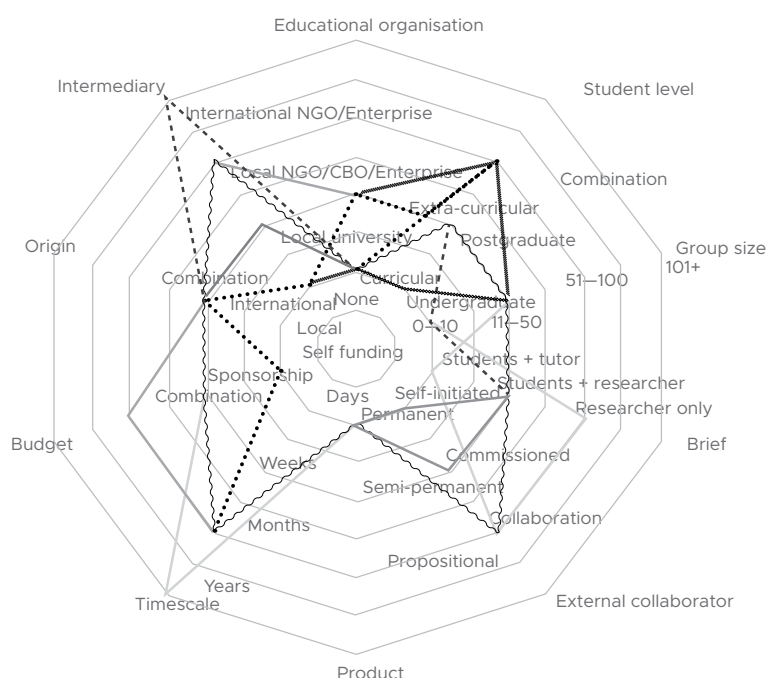


Figure 19.5 South African live projects initiated and executed by local educational organisations

19.5.3 Educational organisation

In Anderson's study, about two-thirds of projects were curricular, compared to four-fifths of projects in the mapping of South African live projects. This is a potential indicator that live projects have become embedded in the ethos of architectural education at the educational organisations that were mapped. The proportion of curricular vs. extra-curricular live projects in South Africa did not differ significantly between international and local educational organisations. Anderson finds that client-funded or sponsored projects are more likely to be extra-curricular than self-funded projects. This indicates that creating opportunities for live projects in the curriculum has the potential to accommodate ad hoc community engagement projects proposed by clients or sponsors in a more organised manner. Conversely, allowing opportunities for live projects in the curriculum will also require educational organisations to actively seek out community engagement partnerships to populate the curriculated live project slots in the curriculum.

19.5.4 Student level

International educational organisations tend to select postgraduate students to participate in live projects in South Africa (two-thirds of projects mapped), whereas the opposite is true for local educational organisations. Considering the fact that students require a level of maturity to take part in a live project abroad – particularly when embedded in a community engagement context – the preponderance of postgradu-

ate students in the live projects initiated by international educational organisations makes sense. Three-quarters of the live projects executed by educational organisations in South Africa involved undergraduate students, with two-thirds of the remainder being projects where undergraduate and postgraduate students were combined. In the authors' experience, live projects – particularly when they include the realisation of a physical product – are an effective vehicle to convey basic technical skills and material consideration to undergraduate students while creating an awareness of the social impact of architecture. The majority of undergraduate projects in South Africa might also point to a flexible undergraduate curriculum that stands in contrast with its more rigid postgraduate counterpart. An argument in favour of including more postgraduate students in community-oriented live projects would be that they might already possess the requisite skills and awareness to engage with community members in an effective manner.

19.5.5 Group size

Most groups in the data set were between 11 and 50 students in size (four-fifths of projects mapped), with the remainder equally split between small (1–10) and large (51–100) groups. The largest group size (101+ in the case of only two projects) was the result of multiple educational organisations collaborating over a number of years. For international educational organisations, groups of between 11 and 50 students make sense from a logistical point of view (with regard to travel and funding in particular). For local educational organisations, this group size speaks to class sizes and the logistical challenges of accommodating larger groups in a community context. Where the product of a live project is propositional, accommodating a larger group size is less of a challenge as the majority of the work can be done in the facilities of the educational organisation itself. If the product involves activity on-site, a larger group becomes problematic. A small group, meanwhile, can operate in an on-site community engagement context efficiently and without considerable co-ordination.

19.5.6 Brief

In just over two-thirds of projects mapped, the brief was defined jointly by a researcher and students. Briefs defined by the researcher alone accounted for one-third of the projects by local educational organisations, which could point to the extent to which live projects inform research in South Africa. The strong correlation between researcher and brief is also indicative of the extent to which teaching and research – particularly regarding community engagement – is integrated. The three cases where students and their tutor defined the brief implies that these three projects were well integrated into the teaching methodology, residing in the realm of pedagogy rather than that of research. In the context of community engagement, it is appropriate that the majority of briefs are defined in part by researchers, as they are more likely to have established relationships with community members, either directly or through their supporting local organisations.

19.5.7 External collaborator

Just over two-thirds of the projects were collaborations and not self-initiated or commissioned, which indicates a good integration of live projects into the pre-existing work of local organisations and/or enterprises. In the interpretation of these findings – particularly relating to the low proportion of commissions (only 7%) in the local context – the authors concur with Anderson that, while there are a number of educational organisations with a “maturing track record and expertise” (2017: 6), there is substantial scope for growing engagement with local government and enterprises so as to solicit commissions for live projects. In the data set for local educational organisations, one-third of the live projects were self-initiated. The authors interpret this as indicative of the embeddedness of local educational organisations in their communities, and the agency to identify and initiate community engagement projects. Having said that, one of the most important factors in expanding both live projects and community engagement is the establishment and fostering of relationships with external collaborators. In order to do so, educational organisations will have to improve their visibility as entities that have the capacity to conduct successful community-oriented live projects.

Product

The majority of live project products were permanent in nature: of all of the local projects mapped, only one-quarter had semi-permanent or propositional products. All the projects by international educational organisations had products that were permanent, indicating access to sufficient funding to establish such durable products. Both projects with semi-permanent products are located in informal settlements, which resonates with the tenuous nature of informal settlement upgrading interventions. Nonetheless, as a form of community engagement, such live projects build solidarity with vulnerable communities and enable local educational organisations to play their part in grass-roots activism. The same is true for projects with propositional products, the majority of which are related to the development of settlement upgrading masterplans or the development of self-build housing typologies. Furthermore, there is a direct correlation between project budget and the ability to establish a permanent product.

Timescale

Two-thirds of the live projects mapped had a timescale of months, which is similar to the findings of Anderson’s study. For international educational organisations it is not feasible to undertake a live project in South Africa without sufficient time for preparation, planning and design before the project is implemented on-site. According to Anderson (2017: 7):

[t]he academic calendar has a strong influence with most cohorts needing to complete a project or phase of a project within an academic year. Analytical projects take months rather than days acknowledging the depth, research element and participatory techniques that universities can bring to these projects that are not always possible in commercial practice.

In the case of local educational organisations, there is an equal distribution of live projects with a timescale of weeks and months. The local timescale is possibly indicative that although live projects are mostly integrated into the curriculum, there is an inability to allow sufficient time for live projects and community engagement in the academic year.

Budget

In Anderson's study, the distribution of client-funded and self-funded projects were roughly similar, together constituting three-quarters of project funding, with sponsorships constituting the remaining quarter. Anderson interprets this as "suggesting that support from industry, government and the profession may be underexplored" (2017: 6). It is surprising that extra-curricular projects were more likely to be client-funded or sponsored than self-funded. The data set indicated an equal distribution between self-funded and sponsored live projects on the part of international educational organisations, while live projects executed by local educational organisations were all self-funded. In the authors' experience, such (local) funding is often gleaned from research and/or subsidy funding, which places a constraint on the scale and type of product that can be produced. Nonetheless, in the authors' opinion, budget is not a limiting factor for community engagement, as the establishment of networks and development of propositional products while engaging in skills transfer and capacity building is often more valuable than a permanent, built product.

Origin

Just under three-fifths of the projects in the data set were executed by international educational organisations. This is evidence that there is potential for live projects as a form of community engagement in South Africa, and substantial scope to increase the number of community-oriented live projects by local educational organisations – alone or in combination with international educational organisations. In so doing, it would be possible to expand organisations' community engagement as well.

Intermediary

In half of the live projects that were mapped, local organisations played an intermediary role between the educational organisation and the community (where the community would be seen the external collaborator). This resonates with the authors' experience that it is crucial to engage with local communities through local, non-governmental or community-based organisations that have an ongoing presence in and knowledge of the community. This ensures that the live project is mutually beneficial and that the positive outcomes that result in the community are sustained beyond the end of the project itself. Such intermediation also guards against educational organisations conducting extractive research at the expense of the local community, while enabling co-production, partnership, skills transfer and empowering community members.

19.6 EXPLORING THE PEDAGOGIES, PRACTICES AND EXPERTISE EMBEDDED IN COMMUNITY-ORIENTED LIVE PROJECTS

The mapping of the 28 community-oriented live projects onto the spectrum of live project factors has enabled the authors to explore the pedagogies, practices and expertise embedded in it. In relation to pedagogy, the mapping resonates with the first perspective on live projects that was discussed – which challenges the traditional teaching methodology of the architectural studio. In situating live projects in communities, the role of intermediaries (such as VPUU in the Lotus Park project) in navigating the relationship between educational organisations and local communities has come to the fore, to the extent that the authors included it in the expanded version of the spectrum of live project factors. The importance of intermediaries also relates to Bhagwan's themes of community engagement (2017), in particular those of process and mutually beneficial relationships. The inclusion of the origin of the educational organisation (whether local or international) indicates a limited degree of collaboration between local and international educational organisations at present. This shows a considerable potential for these educational organisations to develop live projects collaboratively. The second and third perspectives on live projects – the innate belief that architecture can change the world and the development of alternative models of professional practice – are also evident from the explorative discussion. Many of the projects achieve permanent products that benefit the local community in the absence of sponsorship and external funding, providing evidence of the agency that architectural students have in creating social value in a sustainable manner.

Practices of collaboration, negotiation and intermediation also permeate the live projects that were explored. These practices challenge both conventional architectural practice and the pedagogies that are employed to prepare architecture students for their future careers. Situating live projects in the real world also engages Bhagwan's community engagement themes of context and knowledge production, drawing attention to the nature of relationships between higher educational organisations and local communities as well as the co-creation of knowledge and expertise that occurs in community-oriented live projects. The pedagogical and practice aspirations identified in Anderson's taxonomy of live projects (2017) combine in different ways to define specific types of expertise: social-design, professional-social-design, educational-professional and so on. The exploration of locally specific, community-oriented live projects indicates that these types of expertise inform not only architectural practice, but also community engagement. As such, the authors contend that the expanded spectrum of live project factors is a suitable point of departure for the development of a live project framework for community engagement in architectural education in the country.

Questions that remain include the manner of interaction between the educational organisation and the external collaborator as well as the intermediary. How do they work together and make decisions? Is it a form of co-design, participatory design or informed decision-making? Another question relates to the value derived from the

live project by the educational organisation, the intermediary and the community. Besides the product that is delivered, what are the possible social, economic or other values that result from the live project? Where in the exploration do the authors include the intermediary and the origin on the spectrum of live project factors to inform a local community-oriented, live project framework? Answering these two remaining questions will require an approach similar to that which informed the development of Anderson's taxonomy.

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ENDNOTES

- 1 See the Live Projects Network (<http://www.liveprojectsnetwork.org>) and DesignBuildX-change (<http://www.dbxchange.eu>) online platforms.