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Output Details

Can the pedagogic framework of vertical projects in architectural education enrich learning by simulating professional architectural practice whilst simultaneously supporting research informed teaching?

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300 Word Statement

Using a series of best practice case studies and projects this portfolio outlines the Manchester School of Architecture's innovative approaches to vertical projects which it advanced between 2015-17. Previously the School, one of the largest in the UK and ranked 11th in the world, has not used scholarship to externalise the pedagogic theories and methods that play a key role in achieving its exceptional graduate outcomes, student experience and progression metrics across both its undergraduate and postgraduate programmes. This portfolio's original and significant contribution to scholarship is its explanation of how these fine-tuned models differ from conventional peer learning due to their multi-disciplinary nature, use of external networks, connection to research informed teaching and simulation of architectural practice. The scale, intensity and complexity of these activities is

exceptional – between 450 and 880 students can be involved at one time over one or two weeks, working with up to 50 collaborators. This portfolio provides an insight into the thinking, strategy, advantages, outcomes and possibilities of this alternative approach. The portfolio emphasises the research's rigour by providing pedagogic analysis and evaluation of research-informed learning through multi-level group work. Its methodology involved monitoring the planning, delivery and evolution of selected design case studies to assess how collaborators have used student work to achieve social impact after a project's conclusion. Pedagogic theories underpin and contextualise student evaluations of their learning through reference to relevant key texts by leading scholars from within and beyond the discipline of architecture. These

observations are evidenced by linking to production information documents and social media posts by students during their project's delivery. This methodology and its rigour was further tested and acknowledged through two peer-reviewed publications and presentations at international conferences.

Research Process

Can the pedagogic framework of vertical projects in architectural education enrich learning by simulating professional architectural practice whilst simultaneously supporting research informed teaching?

Test

Research Context:

Wider pedagogic research context.

Increasing numbers of Higher Education Institutions are creating alternative and often vibrant opportunities for collaborative work outside the campus (Troiani and Dutton, 2019). Often supported by business strategies to align Universities with current markets, these offer students real-world experiences within education. Specific to architectural education, this presents the opportunity for educators and practitioners to redefine the role of the Architecture School and University in society.

This novel approach changes where and how students learn: students abandon the traditional studio and instead negotiate

workspace within a new context, often alongside practitioners whilst undertaking live projects together. Once removed from an academic setting, project timescales slow down, extend and make room for critical thought (Mountz et al, 2015) and projects can be revisited annually.

Institutional context: vertical projects at the Manchester School of Architecture.

The MSA incorporates intense short vertical projects at regular intervals through the academic year for all levels and modes of study on its BA (Hons) and Masters programmes. As examples of mixed-level learning, studio-based vertical projects can provide an effective vehicle for peer-to-peer learning through

design-based learning (DBL). Aligned with this approach, the School created a new pedagogic model that combines peer-to-peer learning, vertical projects and outreach activities to create a learning environment that sits between academia and practice to simulate professional activities.

This portfolio specifically focuses on one example: the Manchester School of Architecture's Events programme which, between 2015-17, Jolley transformed from a local, staff-led initiative into a regional and internationally recognised student-initiated enterprise that remains central to the School's networks, curriculum and the students' graduate prospects. This was achieved through 68 projects supported by over 150 collaborators working with 1400 students.

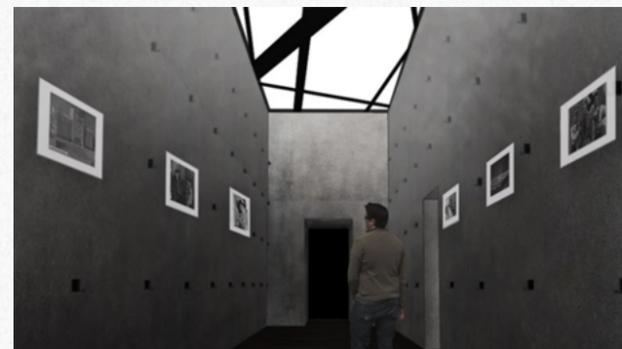


Fig 1. Merz 15 exhibition space, 2015. Link to [exhibition event page](#).



Fig 2. Sketch + [Build], 2017. Link to [SKETCH + \[BUILD\] web page](#).



Fig 3. Wax in Flux, chemical workshop, 2015. Link to [Group 11 MIF web page](#).

Research Methods

Since 2015 Jolley developed a parallel pedagogic research project to monitor how changes to the Events model improved good teaching practice. Achieved by collecting and analysing collaborator and students' reflective feedback, this determined the model's effectiveness; the value of the resulting educational ecosystem; the impact on student skills and knowledge acquisition as well as the benefit to communities and culture. Dedicated student blogs were central to this activity and their content was evaluated to understand the following questions.

- **Student experience:** how does vertical teaching enhance learning?
- **Academics in the real world:** can we design a unique pedagogic framework to deliver live projects in academia and simulate architectural practice?
- **Academic exile:** how do we create a pedagogic framework to support live research projects for staff to facilitate research-led education?
- **Incubator:** how can collaboration beyond the university deliver community-focused architectural projects with long-term social value or offer life-long education opportunities?

The student blogs that were critical to the research process are:

- Link to [2015 Student blog](#).
 - Link to [2016 Student blog](#).
 - Link to [2017 Student blog](#).
-



Research Methods



2015: Observation.

Cross atelier and external interdisciplinary collaborations encouraged to explore projects from opposing architectural agendas.

Analysis of existing and potential pedagogic framework and alignment with contemporary scholarship to identify potential.



2016: Refinement.

Alignment of the timeframe to the key RIBA stages of work.

Introduction of session plans to structure undergraduate tuition by year 5 – learning by teaching others.

Blog and film day refined to encourage individual student reflection and contribution to debate at a range of scales: as a team member, year group and the wider community.

Monitoring of changes to the pedagogic framework by noting the students' reflection on their learning.



2017-present: Reflection and project.

Projects must have a social, technological or cultural purpose.

Students encouraged to revisit previous projects or initiate new agendas that may have longevity.

From 2017 Jolley has revisited and traced the progress of and reflected on all projects – observations and conclusions were disseminated as scholarship in 2017 and 2019 as presentations at international conferences and peer-reviewed articles.



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- The organisation of a biennial international festival as a vertical project in architectural education to highlight the importance of sketching as a communication tool.
- KL SketchNation (Kuala Lumpur, Malaysia), Manchester Urban Sketchers and the Manchester Student Society of Architecture initially collaborated in 2015 to celebrate 150 years of the Manchester Society of Architects.
- The festival simultaneously engaged two international communities, including the public as well as students, and encouraged long-life learning as well as critical reflection skills.
- Manchester's programme included sketch-jams, symposia, a workshop at Chorlton Arts Festival and an exhibition.
- In Kuala Lumpur a sketching walk marked the Event. Instigator Hakym Ahmad continued his research as *The Sketch Nation: Architectural Appreciation through the means of Urbansketching* and he runs workshops in Malaysian architecture schools focusing on the empowerment of arts through sketching.
- Simone Ridyard published a selection of the Manchester sketches in *ARCHISKETCHER: A Guide of Spotting and Sketching an Urban Landscape*.

Selected student observations:

"We were able to see some great sketches from the urban sketchers and learned some great skills from them. One of the urban sketchers taught me to focus on the general atmosphere of the space and indicate materials with watercolour. Also it is important to keep the sketch simple and clean so it is easier to read. He told me to sketch quickly and frequently. This will help to find my own personality and style of the drawing I produced. A day well spent in Old Quadrangle + Manchester Museum with some of the urban sketchers from Manchester Urban Sketching group. It was amazing to see how a sketching event can bring people from all walks of life together."

Sketch Fest web pages:

- Link to [Sketch Fest 2015 group 15 web page](#).
- Link to [SKETCH + \[BUILD\] 2017 group 8 web page](#).
- Link to [KL Sketch Nation website](#).
- Link to [Hakym Ahmad event activity page](#).
- Link to [MSA Event 2017 //08 SKETCH + \[BUILD \] project video](#).

Fig 4-5.
Sketch Fest 2015 group 15.

Fig 6-8.
SKETCH + [BUILD] 2017 group 8.



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Temp Fest delivered two temporary pavilions for public events during Events 2017: the globally acclaimed Manchester International Festival (MIF) and the seventh year of Threshold, an independent arts and music festival in Liverpool.

Link to [MIF and Threshold's project design project files](#).

Link to [Temp Fest event web page](#).

Link to [Temp Fest project film](#).

Student reflection:
'I gained considerable experience working to a real budget and client, something that is often lost in regular studio work. Seeing the final project built was also incredibly rewarding.'

Fig 9.
Threshold music festival, Liverpool, pavilion.

Process of discovery



Case study: Temp Fest, 2017.
Academics in the real world



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2015: A scheme in collaboration with the Littoral Arts Trust to produce feasibility studies for the preservation and restoration of the internationally significant Merz Barn in Langdale, Cumbria and its surrounding buildings to provide an art gallery and artist accommodation. The feasibility studies and visuals were subsequently used by the Littoral Arts Trust for publicity and to support Arts Council Funding applications.

2016: The Galerie Gmurzynska, Zurich, donates £25,000 to the Littoral Arts Trust to support conservation work the Merz Barn, Cumbria, co-inciding with an exhibition by Zaha Hadid.

Link to [Merz 15 group 14 web page](#).

Link to [Merz 17 group 7 web page](#).

2017: Feasibility studies for a Merz Museum and the Merz Shed at Langdale through Events 2017.

Link to [Architect's Journal web coverage of Merz Barn](#).

Link to [Merz Barn project web page](#).

Work with the Merz Barn continued in 2018 and 2019.

Fig 10-12.
Merz 15 project, 2015.

Fig 13-15.
Merz 17 project, 2017.

Process of discovery

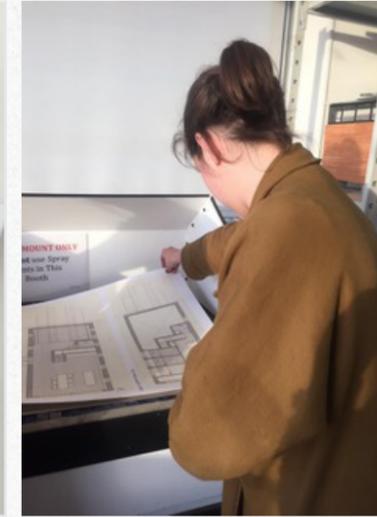
Case study: Merz 15 and Merz 17 2015 & 2017. Academic exile

"The development work with MSA students really got us to the point of developing the concept around the hut, taking the early idea of a Shepherds hut and expanding this so that we were able to put out a brief that engaged an established artist / architect in the project to create something truly striking and ambitious and making great use of opportunities with form and materials. The prototypes created by MSA students have been present throughout the process in the run up to creating the brief, were put out on social media when we launched the brief and were also a point of reference for Nick Wood during the R+D process. We feel that our interest in interdisciplinary practice was further enabled and extended by the work that we did with the MSA students to open up a dialogue between our artistic practice and architecture. This was the subject focus during the launch event for the hut back in May, and of ongoing interest, providing the young people that we engage with a route into talking about architectural practice as they come into contact with the hut." In-situ

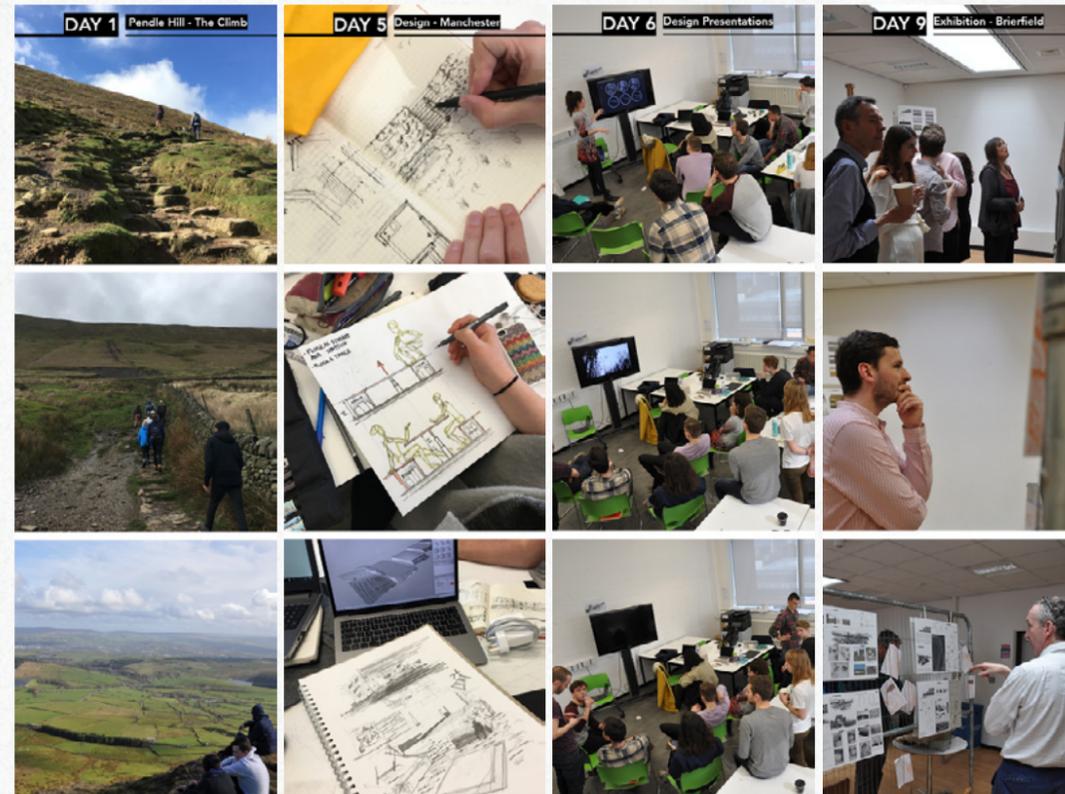
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In 2017 In-Situ invited Events students to contribute to the Pendle Hill Heritage Lottery Fund Project by designing a studio shepherds hut and shelter. Both projects sought to reconnect people with their landscape and their past, to safeguard the area's wildlife and heritage and to improve people's access to this popular countryside area.

The mobile hut was designed to be multi-functional shelter: for example an information point for local walkers, events or a mobile studio for artists. After the project's conclusion, In-Situ developed a brief, illustrated by the students' designs ideas, for a national design competition for a mobile hut on Pendle Hill. 'How About Studio' received the commission and the students' work provided a reference point throughout design development work. Following construction in summer 2019, the hut provides a space for residents to meet artists and view their work. Estimated hut engagement: August - December 2019: 295 interactions through community events around Pendle, in Clitheroe, Nelson, Brierfield, Colne, Downham, Whalley, and Barley.

The drystone shelter was constructed in line with the students' design and receives 300,000 visitors per year.

Link to [Northlight Mill Garage Re-Imagine project group 20 web page](#).

Link to [Forest of Bowland project group 19 web page](#).

Link to [Forest of Bowland project group 19 Pendle Hill film](#).

Fig 16.
Feedback from client at In-Situ.

Fig 17.
In-Situ // MSA Shepherds Hut & Pendle Hill Shelter Exhibition booklet.

Fig 18.
Northlight Mill Garage Re-Imagine project group 20 photos, 2016.

Fig 19-22.
Forest of Bowland project group 19 photos, 2017.

Research Insights

Student experience: how does vertical teaching enhance learning?

By observing and analysing the blogs' content to compare students' experiences in different years, Jolley, V. S. & Sanderson, L., (2017) concluded that the combination of peer learning and vertical teaching mirrors team dynamics in an architectural firm or a construction design team and parallels an architectural assistant's training in practice. Specifically they highlighted the importance of learning communities, the development of graduate skills and techniques to encourage reflection. They actively encouraged working with international transdisciplinary collaborators and, as projects evolved over several years, allowed design team members (students, academics, industry experts and practitioners to change. Through experimental partnerships, projects advanced in directions not initially imagined at concept development and concluded as unexpected opportunities further explored in later years.

Link to [Events // A Decade of Student Led Collaborative Projects paper](#). Pages 117-125.



Fig 23. The design studio at the MSA during Events weeks.

1.5 PERFORMANCE

PAPERS: FULL PAPER PEER REVIEWED TRACK

Events // A Decade of Student Led Collaborative Projects

VICTORIA JOLLEY, LAURA SANDERSON, HELEN ASTON.
Manchester School of Architecture

ABSTRACT

Now in its 10th year, the Manchester School of Architecture's annual Events programme has completed over 200 diverse live projects across the city and beyond. Collaboration drives each project's delivery, content and resolution. Now an annual focus, this fuels the programme's success by requiring students to step outside the protected environment of the School to engage in outreach projects. In this respect Events sits between academia and professional practice providing students with different design-team experiences as they progress through their architectural education.

For two weeks each year approximately 400 students from three different levels of architectural education unite through 20 simultaneous projects to work with local and international communities from beyond academia such as architectural practices, arts organisations and research groups. Working with a collaborator, the brief for each Event is prepared by groups of three or four students in the postgraduate Master of Architecture course and delivered to groups of approximately 16 undergraduate students from the BA (Hons) course in Architecture Years 01 and 02. Activities during Events are researched, designed, planned and taught by postgraduate (Year 05) students who are then assessed on their project management and delivery.

Although the programme's delivery has evolved over its lifespan, each year it has consistently provided a 'seed bed': an opportunity to explore, exchange and promote ideas across trans-disciplinary networks. Whilst doing so, this creates an opportunity for students to foster new contacts as well as demonstrate professionalism and ability to manage creative enterprises from conception to completion.

Through a series of case studies, this paper will introduce Events and outline how the School coordinates and supports multiple student-led collaborative projects on an annual basis and at a mass scale. A pedagogic evaluation will be presented focusing on student experience, diversity, problem-based learning and reflective practice. This will be demonstrated through a discussion of the programme's evolution over ten years through three distinct phases and will illustrate the transition from staff to student-led activities; the encouragement of student reflection through digital media and the students' selection of collaborators with an emphasis on employability and job running.

KEYWORDS student-led projects, student experience, collaboration, problem-based learning

117

Fig 24. Events // A Decade of Student Led Collaborative Projects by Victoria Jolley, Laura Sanderson and Helen Aston. Proceedings from Architecture Connects, Association of Architectural Educators 4th International Peer Reviewer Conference, 2017. p.117-125.

Research Insights

Academics in the real world: can we design a unique pedagogic framework to deliver live projects in academia and simulate architectural practice?

A pedagogic model was developed to enhance professionalism and complement the UK PSRB prescribed course by embedding professional studies into the curriculum through live projects and encouraging autonomy. These characteristics align with Architecture's Benchmark Statement and the General Criteria for ARB Part 2 prescribed courses whilst nurturing independent learners. Specifically, this:

- Increased the School's reach by facilitating and supporting international collaborations and travel or online parallel events.
- Created a learning environment that sits between academia and practice by allowing Masters architectural students to run their own live project for a real client whilst sharing knowledge and skills with undergraduate students. This allowed students to transform their declarative knowledge into a physical output, mirroring practice and demonstrating in depth practical understanding.
- Introduced design stages and processes commonly encountered in practice to structure students' project delivery such as risk assessments, schedule of works and cost plans. Equally session plans were introduced to structure curriculum delivery and project management.



Fig 25. Students working in the B.15 workshop, 2017. Link to [workshop photographs](#).

Research Insights

Academic exile: how do we create a pedagogic framework to support live research projects for staff to facilitate research-led education?

Working 'off campus' to pursue global research opportunities enabled the support of staff to develop research through teaching whilst achieving social or scholarly impact. In doing so Events, became an interface between the Manchester School of Architecture, communities, practice, professional bodies and architectural education committees with students acting as agents, taking ownership of a research question, which they respond to by learning through doing. Publications by staff transfer these creative acts into scholarly activity and this enabled others to evaluate and build upon the results (Sample, 2013).

Tenkjaren sitt vindauge ut på tur

■ ■ Geni på fleire fagfelt ■ ■ Wittgenstein gjennom arkitektur ■ ■ Britiske studentar på Skjolden

Kjernen: Ein indaugskarm frå Wittgenstein sitt hus ved lidvatnet i Skjolden kal ut til dei tre krestadene tenkjaren er tettast knytt til.

London og Manchester, to reiserjansane britiske universitet, samt Technische Universität Berlin, skal i tur og ordan søtta den langt fysiske komponenten.

ørst til Bergen

Vindauget er på veg frå Skjolden til Bergen, derifrå skal det skje til England og Tyskland, ette er for å etablere Wittgenstein sitt fysiske netverk, seier lærar N. Rostvik, professor i arkitektur ved universitetet i Bergen og Stavanger.

Sot helg lønns han til Skjolden spissen for ei gruppe britiske arkitektstudenter, heimebyrnde ved dei to nemnde universiteta, Bergen og Wien, Wittgenstein sin lunde, er også del v universitetsnettverket som skal synggjere meirerens ytrearbeid innan arkitektur, ingeniørfag, kunsthistorie og filosofi.

for ein praktisk

idelig Wittgenstein (1889-1951) var ein geni på fleire omne. Han er best kjend som ein store tenkjaren frå det 20. århundret, mannen som sat i 8 time bus i Skjolden og skreiv factus Philosophicus.

Ferant å vera knytt til Cambridge og Oslo, studerte han på ingeniørfag i Berlin og flygling vitenskap (aeronomics) i



Fig 26. International press coverage: Sogn Avis newspaper, 10th May 2016.

Research Insights

Incubator: how can collaboration beyond the university deliver community-focused architectural projects with long-term social value or offer life-long education opportunities?

Opportunities were pursued capable of accommodating 'slow scholarship' to make space for critical thought. Reiteration and repeatedly revisiting and advancing projects allowed new collaborators to join a project to offer a new perspective or set of ideas. Over time this created research 'sandboxes' through collaborative trans-disciplinary networks (Layden, 2010).

The pedagogic model began to nurture supportive outward-facing networks between students, academic staff, external organisations, specialists and potential employers (Fung, 2017).

A perpetuating education 'ecosystem' unfolded where students formulated further research questions, often explored through independent study once the vertical projects conclude, and this in turn influenced their career pathways and networks.



Fig 27. Community consultation, Northlight Mill Reimagined, 2016. Link to [consultancy photographs](#).

Dissemination

1. Peer-reviewed publication

In-print.

2017.

Jolley, V. S. & Sanderson, L., (2017). 'Events // A Decade of Student Led Collaborative Projects'. At Association of Architectural Educators Conference 2017: Architecture Connects. Oxford Brookes University.

Link to [peer-reviewed conference proceedings](#).



Fig 28. Association of Architectural Educators Conference proceedings 2017: Architecture Connects. Oxford Brookes University.

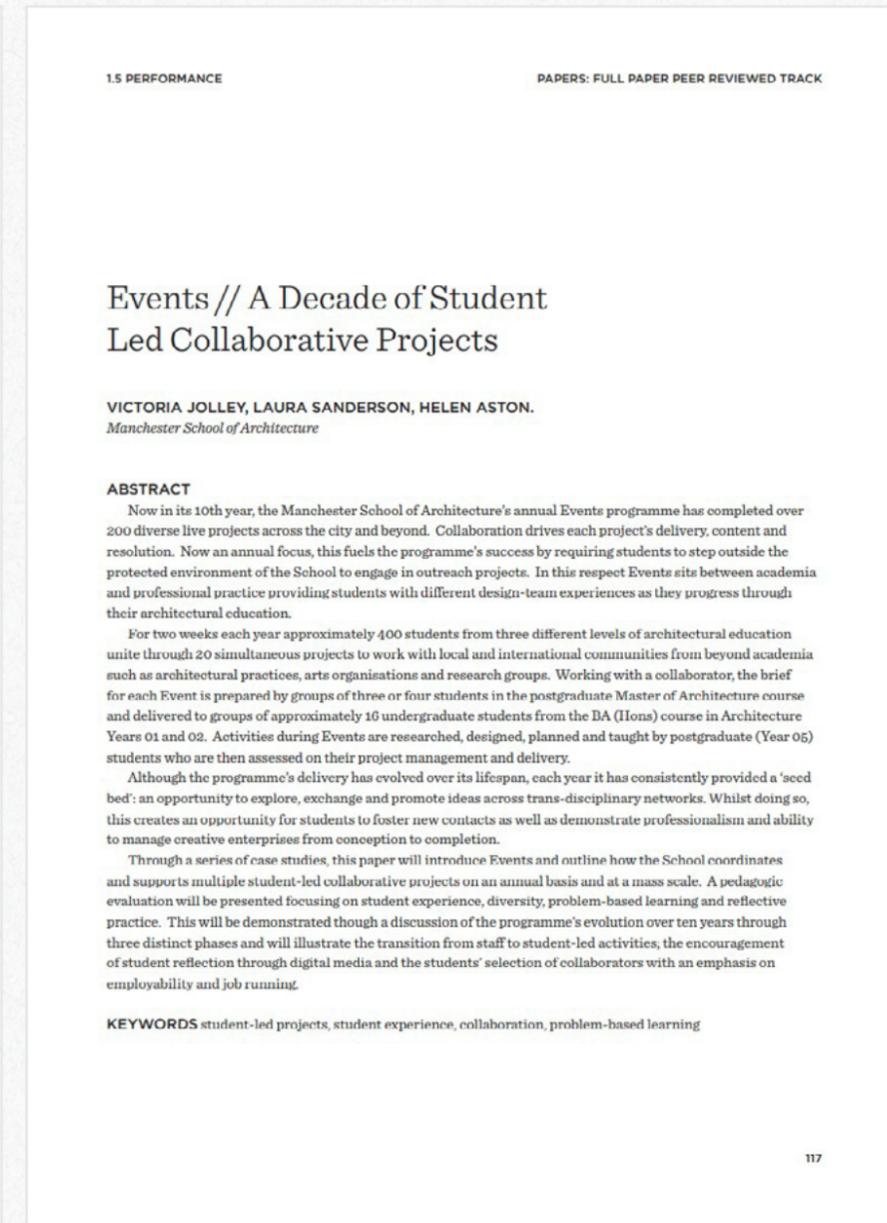


Fig 29. Jolley, V. S. & Sanderson, L., (2017). 'Events // A Decade of Student Led Collaborative Projects'. Association of Architectural Educators Conference proceedings 2017.

Dissemination

2. Peer-reviewed publication

Antwerp, Belgium/In-print.

26th - 27th June 2019.

Jolley, V. S. (2019), 'Synthesis: vertical projects and multi-disciplinary external collaborations in architectural education', Association Collegiate Schools of Architecture /European Association for Architectural Education Teachers Conference, Antwerp, Belgium, 27th - 29th June 2019.

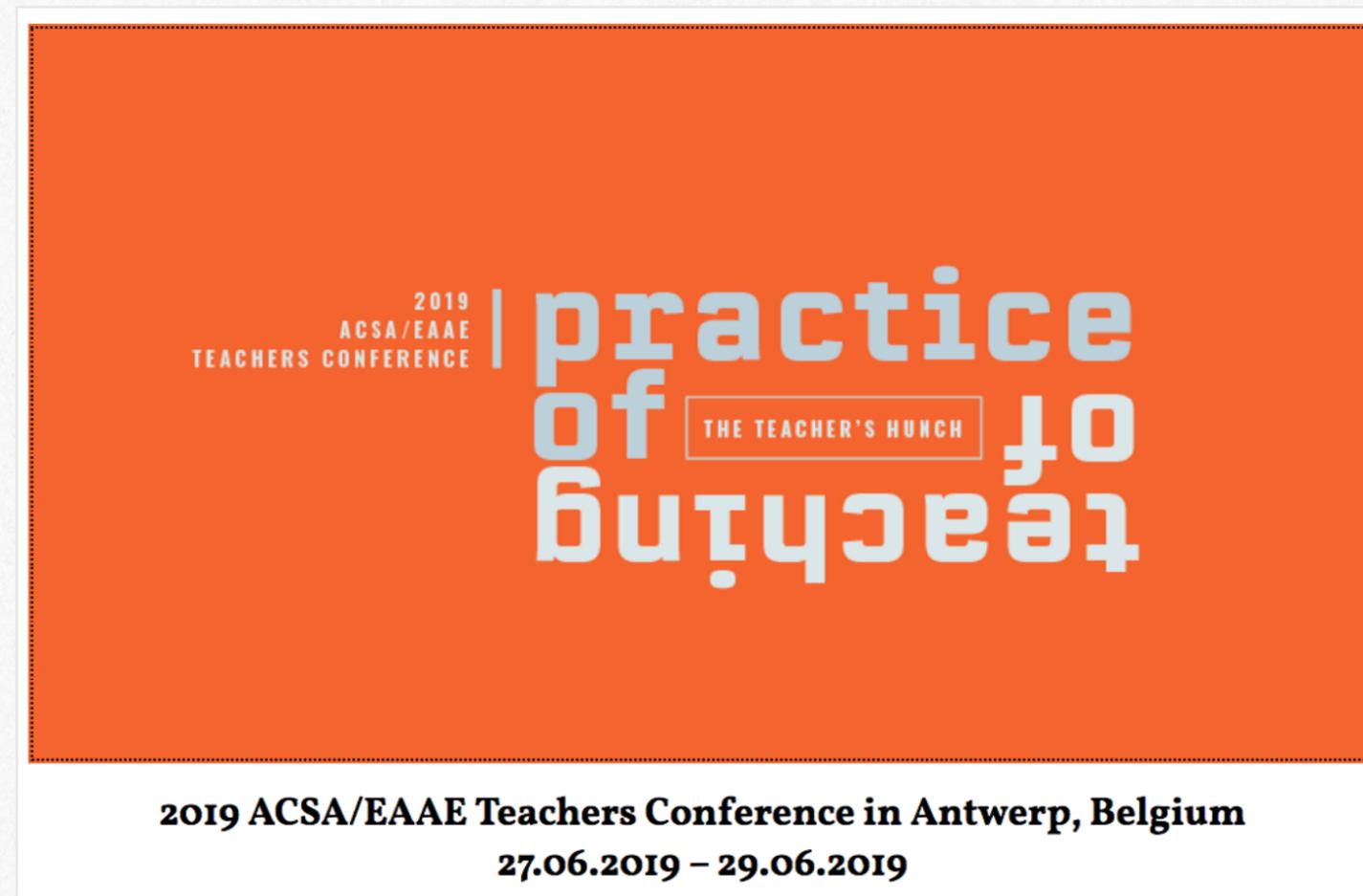


Fig 30. Association Collegiate Schools of Architecture /European Association for Architectural Education Teachers Conference, Antwerp, Belgium, 27th - 29th June 2019.

Dissemination

3. Web coverage

Online/In-print

2019.

- Pendle Hill Mobile Hut paid opportunity listing, Curators Space website. Link to [web page](#).
- 'In-Situ commissions mobile art hut to tour Pendle', *Marketing Lancashire*, 14th February 2019. Link to [news article](#).
- 'In-Situ's (sic) launches new mobile art project inspired by Pendle Hill' by Laura Longworth, *Pendle Today*, 19th February 2019. Link to [news article](#).
- 'Mobile hut to show short films and art celebrating Pendle Hill' by Neil Athey, *Lancashire Telegraph*, 22nd February 2019. Link to [news article](#). (Note: also republished in the *Lancaster and Morecambe Citizen*)
- 'Pendle Mobile Hut to be unveiled at special art event at The Garage' by Laura Longworth, *Pendle Today*, 21st May 2019. Link to [news article](#).

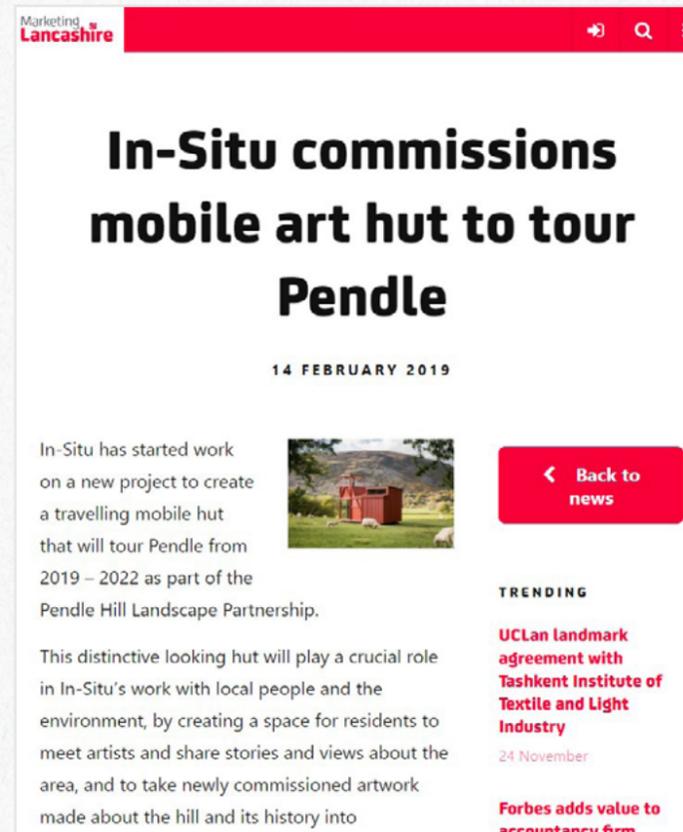


Fig 31. In-Situ commissions mobile art hut to tour Pendle, *Marketing Lancashire*, 14th February 2019.



Fig 32. In-Situ's launches new mobile art project inspired by Pendle Hill by Laura Longworth, *Pendle Today*, 19th February 2019.

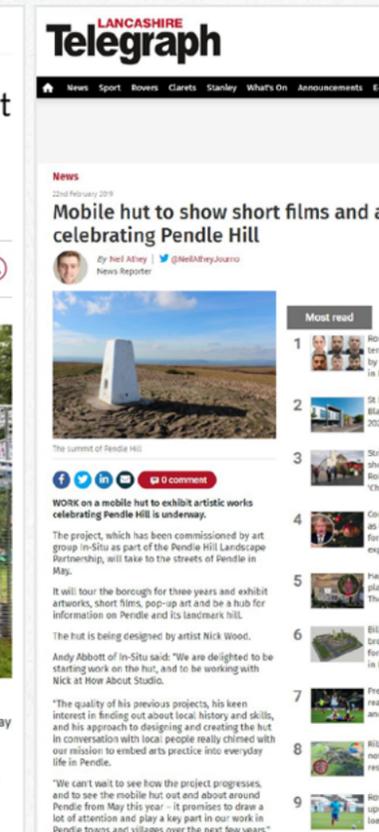


Fig 33. Mobile hut to show short films and art celebrating Pendle Hill by Neil Athey, *Lancashire Telegraph*, 22nd February 2019.

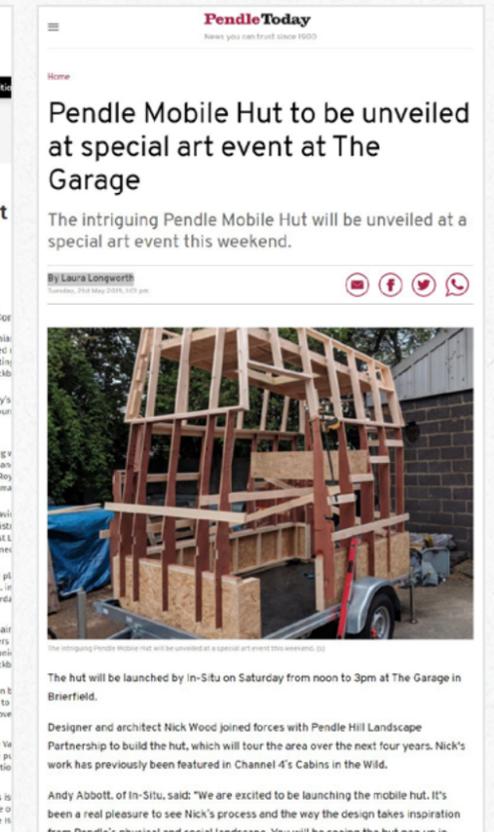


Fig 34. Pendle Mobile Hut to be unveiled at special art event at The Garage by Laura Longworth, *Pendle Today*, 21st May 2019.

Dissemination

5. Conference paper

Online.

2nd December 2020.

Victoria Jolley & Laura Sanderson, MSA Catalysts: Advanced Peer Learning through Vertical Group Projects.

TEACHING-LEARNING-RESEARCH: DESIGN AND ENVIRONMENTS, Architecture Media Politics Society (AMPS).

Link to [conference web page](#).

Link to list of [conference Zoom presentations](#).

Link to [conference paper Zoom recording](#).

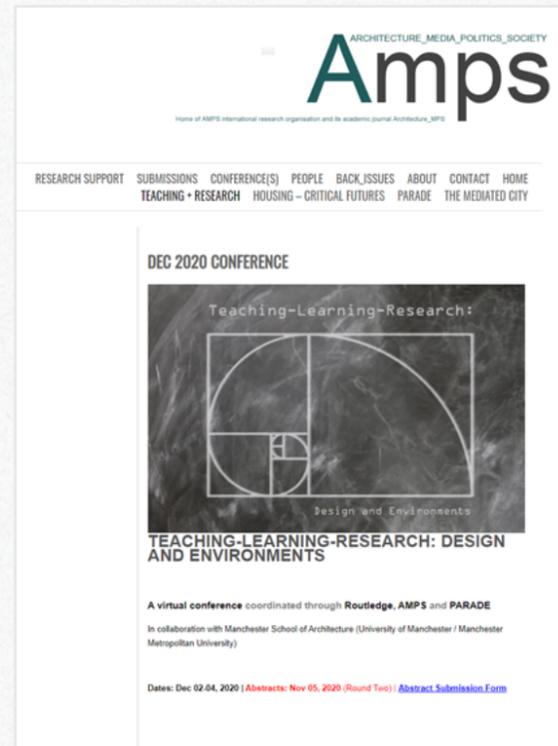


Fig 38. TEACHING-LEARNING-RESEARCH: DESIGN AND ENVIRONMENTS conference web page, Architecture Media Politics Society (AMPS) website.



Fig 39. TEACHING-LEARNING-RESEARCH: DESIGN AND ENVIRONMENTS Zoom presentations.



Fig 40. Zoom presentation recording, Victoria Jolley & Laura Sanderson, MSA Catalysts: Advanced Peer Learning through Vertical Group Projects. TEACHING-LEARNING-RESEARCH: DESIGN AND ENVIRONMENTS. 2nd December 2020.

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