Case study: The Nest Project: Initial lessons from a student-led large-scale estate project

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Abstract

The Nest Project is a student-led and student-initiated project to construct a sustainable building on a UK university campus. This case study reflects on the project leaders' experiences working in partnership with their university, the challenges they faced and recommendations to implement student-leadership in higher education.
Notably, strong staff-student relationships were key to the project's progress whilst raising awareness that students could have a direct and top-down influence on their university was crucial to allow the project to become established. In the case of the Nest Project, a lack of awareness of legitimate pathways for genuine student leadership was the most significant challenge faced by the project leaders.

Introduction

The Nest Project is a student-led initiative to construct a sustainable building on the University of Warwick's campus. The University of Warwick is a young public research university on the outskirts of Coventry, England. Warwick has approximately twenty-six thousand students - two-thirds of whom are undergraduates – and is consistently ranked within the top ten of UK league tables. The university has over 250 student clubs and societies which contribute to a vibrant student community (Warwick SU List of Societies, 2018).

The project aims to develop replicable methods of large-scale student-leadership in higher education (HE); a bottom-up reimagining of the Warwick students' experience. Ultimately, it is intended that lessons learned from the Nest can be applied across HE institutions to enable a student-led and student-instigated approach to teaching and learning. In this case, the student-led approach is applied to fulfil students' desire for a sustainable campus and a move towards innovative pedagogical techniques; this is symbiotic to the university's own aims. The story of the Nest and lessons learned from the first two years of the project are presented here. These lessons are intended to encourage and enable HE practitioners to develop a culture of student-instigated leadership in their own institutions.

Three key aims have been identified for the Nest Project:

- Develop a blueprint for students to work collaboratively with the university on large-scale projects, becoming true leaders in their education.

- Develop space for innovative teaching and learning at Warwick using new technology and novel form: a 'by students, for learning' approach;

- Show that sustainable buildings can be modern, attractive and act as a precedent for future buildings on campus;

Why Should a Student-Led Approach Be Encouraged in HE?

The authors propose that a university experience should create leaders: individuals with the tenacity and ability to make critical assessments, and subsequently identify and implement improvements. That sentiment is shared by the authors of (Zimmerman-Oster & Burkhardt, 2004), where a retrospective analysis of 31 student leadership development programmes in US higher-education found significant benefits to students beyond graduation. Improvements were noted in students' self-esteem, communication skills, problem-solving ability and willingness to act as leaders. Promoting the development of soft skills is key to closing the so-called 'competency gap', the perceived difference between graduate attributes and employer expectations (Nair, Patil & Mertova, 2009).

It should be noted that whilst student-leadership is distinct from student-partnership, the latter is still required to fulfil the demands of the former. The authors have found that the opportunity to work in partnership with their University to be key to the Nest Project's success, and hence student-partnership will also be discussed here.
A report by the UK's Higher Education Academy (HEA) highlighted the need to engage students as partners in learning and teaching, identifying it as a key issue facing HE in the 21st century (Healey, Flint & Harrington, 2014). Partnerships between institutions and students that involve joint ownership and decision-making are defined as the highest of four forms of student engagement: "valuable because it enables a more authentic engagement with the very nature of learning itself." Curriculum-based projects that engage students as partners in learning have demonstrated a stronger sense of community between students and staff in addition to improved academic performance (Bovill, Cook-Sather & Felten, 2011). The UK's National Union of Students (NUS) also frame student-partnership as an alternative to consumerism in education, one that "needs to be deployed to radical ends" (National Union of Students, 2015).

In summary, the authors see student-led approaches in HE as a way to embed sought-after soft skills in a university experience whilst increasing engagement with the core curriculum. This case study aims to describe a student-instigated approach to student-leadership in HE, few examples of which are found in literature.

History of the Nest Project

Origins

The project originated in the student-society Engineers Without Borders (EWB), who aim to promote international development and sustainability throughout the university. Two members of the society were inspired to build a small strawbale structure on campus after visiting a similar building, to be used as a base for EWB's activities. A suitable site was identified, and a local expert in strawbale construction approached, subsequently beginning the process of building support and gaining approval from the university.

Estates are the department that build and maintain Warwick's campus, whilst Sustainability Champions within Estates lead behaviour change programmes in sustainability. As a student-facing role in a non-academic department, they were well-placed to act as 'project champions', allowing the project to progress through the networks available to staff and not students. Despite their enthusiasm, the lack of pre-defined procedures and governance that exist for similar staff-led projects was an obstacle to initial progress. From the students' perspective, the project leaders had a vision and the practical means to fulfil it, but lacked the awareness of university procedures that were required for permission to do so.

A proposal was submitted by EWB to Warwick's Capital Space and Amenities Group (CSAG), a committee charged with the strategic allocation of space on campus. It was apparent that constructing a building of any size would involve significant bureaucracy, so the initial structure expanded to become a rudimentary classroom for sustainability-related teaching. Whilst supportive of the project, CSAG recommended the proposal be refined to clarify: building governance; demand for the space; and funding for capital and maintenance costs.

The Pedagogical Perspective

Shortly after the proposal to CSAG in the spring of 2016, the initial project leaders left EWB and were replaced by two of the authors: Jack Gaskell and Owen Thompson who were both undergraduate Engineering students at Warwick. At a similar time, Warwick's Institute of Advanced Teaching and Learning (IATL) became aware of the project and helped EWB to reconsider the project from a pedagogical perspective. Until then, the project had been primarily viewed as a technical exercise in sustainable construction. The project leaders began to view the difficulties that they had encountered as a learning experience, symptomatic of an inflexible institutional structure that was not necessarily conducive to student-leadership and alternative forms of teaching and learning.

The new project leaders spoke at an IATL event in May 2016, where the Nest Project was presented for the first time with the renewed aim of exploring and promoting student-leadership in HE. The event represented a critical point for the network of

contacts that EWB developed, as word-of-mouth between staff grew awareness of the project faster than the students could promote it. Funding was subsequently provided by IATL to employ an architect for an initial proposal.

As a result of the project leaders' confidence in the project's value to the university, proposals for the building throughout 2017 became increasingly ambitious towards a modern, attractive landmark of sustainability with a focus on pedagogical development. This shift also prompted a change of name: the working title of 'Eco-Centre' was replaced with 'The Nest Project', reflecting the expanding vision of the initiative and highlighting key features of the building itself. Namely, a structure that is built by and for its users, from natural, sustainable materials and semantically relating to notions of incubation and development.

An Established Project

In July 2017, Owen Thompson graduated from Warwick and was replaced by the third author, Victor Yip. The architect's proposal was submitted to CSAG in December 2017, where it was met with enthusiasm. With all motions supported, for the remainder of the 2017/18 academic year the project progressed through further planning with Estates. Whilst university committees retain oversight throughout the construction period, the project leaders are confident in the building's viability and expect the project to remain entirely student-led, and for those student leaders to continue relevant research with the Nest as a catalyst. Once complete, the building itself is expected to have around 300 square meters in teaching and communal spaces.

Fig 1: Example of a student proposal for the 'The Nest'

Challenges Faced by a Student-Led Project

Established Structures in HE

Through their experience, the project leaders feel that the biggest obstacle to student-led initiatives is the lack of awareness from students and staff of the viability and efficacy of student leaderships and partnerships. Where student-partnership is not embedded in the culture of an HE institution, attempts for students to act as leaders are met with institutional inertia. Raising awareness that students are capable of direct and top-down influence on their university is crucial to inspire student leaders and allow their ideas to become established.

A lack of precedent for student-led projects means that university staff may see participation in projects that fall outside of existing structures as a risk. However, inertia also occurs on the part of students: the structure and procedures of universities initially appear immutable when, in reality, they are part of a slow but organic process of evolution. Presenting the Nest Project to students has shown an increasing appetite exists to influence university practice and procedures.

The authors consider awareness and enthusiasm for student leadership to be an important step to building a culture of proactive student engagement in HE. However, student-leadership should be viewed as distinct from lobbying by students' unions: whilst lobbying has its place for certain challenges, the authors have found it to be different in concept and practice to working collaboratively with university management to implement change. Furthermore, an adversarial attitude towards the university from the students' union has served as a deterrent for many staff to become involved in a student-led project like the Nest.

Student Self-Confidence

Once a project is established, the self-confidence of students leading an initiative becomes key to continued success. In some cases, compromise is necessary; it has been challenging to find an acceptable governance structure for the building's management that retains student-leadership. A compromise was reached where the building initially resides within existing governance structures.

However, there are times where compromise must be rejected to preserve the integrity of the project. Initial building designs aligned with low-cost ecology rather than sustainability as a new and attractive architectural norm. The project leaders required confidence in their abilities and vision to challenge the opinions of professional colleagues, and felt that these skills were lacking before their experience with the Nest. Challenging the views or proposals of staff oversteps a traditional boundary, but is essential in a student-led initiative. While some may question the ability of students to contribute as equals in a professional setting, in a university context consider (Cook-Sather, Bovill & Felten, 2014, p.15):

"... students are neither disciplinary nor pedagogical experts. Rather, their experience and expertise typically is in being a student – something that many faculty have not been for many years. They understand where they and their peers are coming from and, often, where they think they are going."

Preserving Legacy & Continuity

On the current timeline, the Nest will be constructed by 2020, 6 years after the project started. Projects that have lasting significance like the Nest have long lifetimes and must rely on multiple generations of students to reach the full actualisation of their aims. This challenge in continuity is a weakness of student-led projects but also demonstrates a benefit of student leadership: the frequent turnover of students introduces new ideas and fresh enthusiasm at regular intervals.

A major challenge of the Nest Project is to establish a structure of student-leadership that ensures legacy and continuity. Thus far, the project leaders have developed an overlapping system where no two leaders graduate in the same year, and a commitment is expected to last for two years. For similar reasons, new project leaders are phased in gradually over a period of months to reduce the friction associated with transition of leadership. The responsibility of potentially carrying the project for two years also places additional emphasis on finding able student leaders. The project leaders have therefore implemented an extended interview process, where candidates work with them over a period of weeks to better assess their appropriateness for the role.

Visibility of University Networks & Procedures

The project leaders have built a range of contacts throughout the university, who have been instrumental in achieving progress. Connections between staff have been essential to find the relevant expertise or decision-making power for institutional obstacles. In the case of the Nest, these connections have been accessed through staff in Estates acting as 'project champions'. The role of project champions is essential to build those networks initially. However, students possess the unique ability to reach out to staff as they are not constrained by professional hierarchies. Indeed, senior university staff are relatively accessible to students because HE institutions ostensibly exist for their benefit.

The access to staff networks that project champions possess and the privileged positions that students occupy can work in tandem to create a powerful tool for progress. However, transparent and visible hierarchies, networks and procedures eliminate the need for both.

Building Trust Between Students & Staff

In HE, students have few opportunities to prove their abilities beyond traditional

academic routes. There is also a lack of accountability and governance for projects that lie outside existing structures, with progress relying solely on students' inherent motivation. Therefore, the project leaders felt a need to prove their abilities and commitment to staff before meaningful progress could be made. This is partly to dispel what they perceive to be negative stereotypes of students' work ethic, feeling the need to be perceived as hyper-competent. When interacting with senior staff, they also feel substantial personal responsibility considering the investment of time and money in the Nest Project. Ultimately, the project leaders believe that higher numbers of student-led projects will reduce the responsibility felt by individuals and encourage greater trust between students and staff, as has been achieved so far.

Applying Lessons from The Nest

From the perspective of student engagement, the project leaders believe that student-led projects like the Nest have three key benefits:

- They allow the personal development of those involved - in this case the project leaders;

- They directly improve the HE student experience by addressing students' needs and desires, through the 'by students, for learning' approach;

- They raise the consciousness of staff and students to encourage further student-leadership in HE.

True student-leadership cannot, by definition, be implemented from the top-down. In promoting student-leadership, HE institutions must create the conditions for student-leaders to emerge and flourish. It is also important to recognise that student-leadership is a tool, to be used in fulfilling the intertwined needs of students, staff and the university as a whole. A series of recommendations are presented below that - based on the experience of the project leaders - will encourage student-leadership in HE institutions:

Promote and Celebrate Examples of Student-Leadership & Innovative Pedagogy

Normalising the concept of student-leadership is likely to increase its rate of uptake. Institutions must also present themselves as open to change and pedagogically innovative to ensure that ideas are properly harnessed and explored.

Visible and Accessible Networks and Procedures

Championing transparency and visibility in university structures, procedures and hierarchies is key for students to make best use of them. This is especially true of non-academic roles and departments. Promoting the idea that students can reach out to any other member of the university can raise ideas that would otherwise stay silent. Finally, encouraging staff to act as project champions and become involved in extra-curricular activities can build strong student-staff bonds and facilitate a rich network of contacts.

The Importance of Continuity and Legacy

Continuity of leadership is vital for long-term, ambitious projects like the Nest. Nascent projects are particularly susceptible to losing momentum before they become established. Involving multiple students with overlapping graduation dates is a way to counter that risk. However, the regular turnover of the student population should be viewed as an source of new ideas and energy.

Promoting Student Self-Confidence

Students must be encouraged to have confidence in their own ideas and vision. They must realise that universities are capable of change, and that their perspectives and experiences are a valuable insight to how that may be achieved. They should be able to modify and adapt their ideas to new evidence and perspectives, but recognise and defend their inherent value even when faced with more qualified and experienced opposition.

Conclusion and Comparison with Literature

Whilst numerous examples exist of student-partnership and student-leadership (Zimmerman-Oster & Burkhardt, 2004), (Bovill, Cook-Sather & Felten, 2011), the majority of these were initiated by institutions. The Nest Project is unusual in literature insofar as it was founded by students. By definition, the project scope is open-ended and the authors believe that it represents a creative approach to teaching and learning in HE. Many examples of student-led projects and student-led partnerships also focus on transforming academic elements of a university of experience, in contrast to the Nest which involves a large capital project. The authors hope that this case study serves as inspiration and as a guide to HE practitioners looking to transform both the student-experience and the very nature of an HE institution. Student-leadership benefits a university as much as it benefits the students themselves, as new approaches to existing challenges can only be welcome when working towards the common goal of improving the student experience.

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