Higher Education Academy
University of Hertfordshire

Strategic enhancement programme: engaged student learning

Building student-staff partnership in educational practice

Report

June 2016
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Local context

The University of Hertfordshire (UH) is committed to partnership working and the learning and teaching strand of the UH Student Experience Strategy commits to ‘Creat[ing] a culture of a learning partnership between students and between students and staff’ (UH, 2010:6). In 2015, a research team from the School of Education and the Learning and Teaching Innovation Centre (LTIC) (Joy Jarvis, Professor of Educational Practice; Dr Claire Dickerson, Research Fellow; Karen Clark, Principal Lecturer LTIC; and Lewis Stockwell, Senior Lecturer) worked with the Higher Education Academy (HEA) on the strategic enhancement programme: engaged student learning focusing on student-staff partnership.

Partnership work in the Schools of Humanities, Law and Education since 2010 (Jarvis et al., 2013) has involved staff and students enquiring together to enhance learning and teaching. The approach involves establishing underpinning principles and carrying out partnership in different ways related to discipline and context. Evaluation research of this partnership work has identified that students learn a range of employability skills and graduate attributes and gain confidence in working with staff at different levels. The findings suggest that students gain a different perspective on themselves as learners, recognising the importance of taking responsibility for their own learning and that of others and for being more proactive in their learning.

The impact on students’ engagement with their learning has been identified in other examples of partnership working across UH e.g. evidence from a computer science project showed that students talked about the project enriching their learning and making them feel part of the University. Staff got to know students better and learned to understand their perspectives, which can lead to more effective student-staff engagement. This project was highly commended in the 2014 HEA Student and Staff Partnership Awards.

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1 University of Hertfordshire 2010, Student Experience Strategy 2010-2015. Hatfield: University of Hertfordshire
3 https://www.heacademy.ac.uk/download/highly-commended-2014-university-hertfordshire
Rationale

A student partner within the Schools of Humanities, Law and Education used the metaphor of a wall to identify the reasons for doing partnership projects. He saw this wall as a barrier between staff and students, which limited learning. The process of building the wall and dismantling it through engaging in partnership working is illustrated below.

1. **Building the wall**
The wall is created by power relationships, different roles and responsibilities and perceptions of roles, and of academic work and different language and locations.

2. **Looking through the wall**
If staff and students gain insight into each other’s worlds they can see some similarities in what they are doing but they still have limited understanding of each other.

3. **Connecting through the wall**
As students and staff interact more frequently and start to develop relationships this leads to greater understanding of each other and of academic work.

4. **Taking down the wall**
Through working together as partners on specific projects students and staff gain increased understanding of each other’s perspectives and their own roles and responsibilities.
5. Working without the wall

Working in partnership results in outcomes that are better than the combined effect of each group working alone. It also develops the skills, perceptions and knowledge of all those involved.

Wall illustrations: Copyright Joel Cooper Illustrator (http://joelcooperartist.blogspot.co.uk/)

Scoping study

A scoping study was carried out across UH in Spring 2015 to explore staff and student perceptions and understanding of staff-student partnership working and to identify the range of approaches currently undertaken at UH. A questionnaire was piloted with colleagues and former student partners and then an invitation to complete the questionnaire was extended via UH email. In total, nineteen participants responded. Data were analysed to identify key terms used to describe partnership working and some benefits and challenges of the approach.

A range of responses to the following question is given below: ‘Staff-student partnership’ is a term used to describe some ways staff and students work together in groups. What do you understand by this term?

‘I take the term ‘staff-student partnership’ to mean any research activity carried out between staff and students belonging to a shared community (class, department, institution) that leads to positive change for both themselves and others working in that community’

‘I don’t believe this can be succinctly defined i.e. in one sentence. It is multifaceted - it is about a process of engagement where both students and staff make a genuine commitment to working together to achieve a desired often agreed goal. I feel the term partnership is a misnomer something that can never be achieved - an unrealistic aspiration - I feel a better term is collaboration or engagement. For this to occur what I feel certain about is that certain antecedents need to exist at a structural, organisational and environmental level. It needs to be part of the HEI Culture as a whole’
‘Staff and students working together on an equal footing with equal ‘power’ balance’

‘I think it is about working together in the truest sense, letting each side of the partnership have an equal say and being prepared to go with what the group think (not just agree until it is something you do not like). True partnership working does not happen often and requires a genuine commitment from staff and students to be open, honest and respectful of each others viewpoints and contributions’

‘Supporting and learning from each other in order to achieve a mutual goal’

The key terms identifying respondents’ perceptions of essential features of partnership working are shown in the tag cloud below.

Respondents’ perceptions of the benefits of the process include:

- A better solution or outcome e.g. a more effective teaching resource
- Skills development by participants e.g. research and communication skills
- Increased understanding and insight into each other’s perspectives
Challenges include:

- Resources e.g. time including scheduling meetings and appropriate physical spaces for meetings
- Working together e.g. being honest, confidentiality, seeing each other as colleagues or collaborators and managing power differentials
- Perceptions of the value of this approach e.g. colleagues’ views of the status of this way of working

Case studies

Individuals and groups with experience of undertaking student-staff partnership work were contacted and invited to meet with a member of the research team to document their work as a case study using a template developed and piloted by the researchers. The process of documenting the case studies enabled students and staff across UH to engage in professional dialogue about staff-student partnership working and wider issues relating to learning and teaching in HE. The case studies come from a range of UH Schools and from the LTIC and indicate that this work is taking place in different contexts and in different ways across the University.

The research team reviewed the first six case studies shown below in relation to the work of others in the field of student-staff partnership, particularly the work of Healey et al. (2014). Each case study was explored in relation to the four quadrants of the ‘partnership learning communities’ component of the students as partners conceptual model (Healey et al., 2014:25).

These four quadrants are:

1. Learning, teaching and assessment
2. Subject-based research and inquiry
3. Curriculum design and pedagogic consultancy
4. Scholarship of teaching and learning

Of the six case studies, one was located in learning, teaching and assessment (1) and the other five combined elements of curriculum design and pedagogic consultancy and scholarship of teaching and learning (3, 4). Other case studies in development are located in subject-based research and inquiry (2). For some of the case study respondents it was clear that the context of the partnership and the detail of the project itself were less important than the process of building partnership. The research team identified that partnership requires or leads to a change in the relationship between students and staff and this was seen as beneficial for student learning and for the effectiveness of staff teaching. This change in relationship between staff and students and in relation to knowledge generation and learning was identified as challenging and could be seen as ‘a threshold concept’ (Cook-Sather 2014, 186) in higher educational practice.

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**Working strategically**

Participants in this research have already identified the value of critically reflecting on their way of working with colleagues and of sharing this work with others engaged in similar work. Engaging together in this research has nurtured our ‘partnership learning community’ by drawing together what we have done. The next stage of working strategically across the institution will involve bringing together the case study authors to share insights and practice. Additionally, members of this group and the research team will continue to take forward a range of staff-student initiatives.

The research findings and the ongoing collection of case studies will be available on the UH LTIC and School websites and shared through both institutional and external events. A partnership webpage will be developed, which will include the case studies as a resource for staff presented in an easily accessible format by clicking on the relevant box (see suggested format below).

![Case Study Examples](image)

- **case study 1**
  photography
  breakfast club

- **case study 2**
  partnership in Philosophy of Education

- **case study 3**
  feedback for learning (assessment)

- **case study 4**
  student fellows

- **case study 5**
  reading in Law

- **case study 6**
  student involvement in HEA Fellowship panels

- **case study 7**
  suite of opportunities in Computer Science

- **case study 8**
  alpine glacier monitoring
Case study 1
Photography breakfast club
School of Creative Arts

Who was in the partnership?
Rebecca Thomas, leader of the photography programme, and an open invitation to level 6 photography students – gradually developing to a group of 6-8 fairly regular attenders.

What was the purpose?
The project was initiated by Rebecca to enquire into and come to understand more about the photography students’ perceptions and experience of their programme. Also to help the students understand more about the programme and how it works. Her aim was to develop mutual understanding of photography learning and teaching processes and the curriculum. A driver was the need to improve NSS scores.

How long did it last? Is it ongoing?
The breakfast club started in the first week of Semester A 2014 and naturally drew to a close in April 2015 just before Semester B assessments. It was a weekly session 9-10am. The students involved have now completed their University programme, but Rebecca is proposing to start a similar club in the next academic year for a new group of students.

What was done/what happened?
The group had breakfast together. Rebecca provided some of the food. They had conversations about a range of topics around photography, arts and the programme and got to know each other as people and as creative arts colleagues.
**What were the benefits?**

Rebecca noted that she began to sit with undergraduate students in social spaces, whereas previously she had tended to do this more with postgraduates. She felt that she understood more about students’ expectations and perceptions of their experiences. She had made assumptions about students wanting more employability and skills sessions, whereas they talked about confidence, expectations and transitions. She gained increased understanding of what they arrived with when they came to University and of transition issues.

Students talked in the periodic review of the programme about the value of the breakfast club for getting to know a member of staff and sharing understanding of the programme. They talked more about this than about programme committees and student representative work (the photography student representative was part of the breakfast club). The students noted that one thing they liked about the breakfast club was knowing that a member of staff would always be in a particular place at a particular time; that she was visible and approachable. They liked it that a tutor was spending time listening to them, that they could talk about anything and that they were given this conversation space. The students noted that they understood more about staff roles and about the University as a result of the club. They also felt that there was an equality of power in the group – all could contribute, which they did not feel was the case in a student representative role.

**What were the challenges?**

A challenge for Rebecca was that students contacted her more and she is considering how this conversation space could be created in other contexts and the consequent issues for staff time. There were also challenges in relation to boundaries, confidentiality and the importance of maintaining a professional relationship.

**Further information/contact details**

Rebecca Thomas [r.thomas@herts.ac.uk](mailto:r.thomas@herts.ac.uk)
Case study 2
Partnership in Philosophy of Education
School of Education

Who was in the partnership?
Seven final-year BA (Hons) Education Studies and BA (Hons) Education Studies and Early Years students, with one tutor.

What was the purpose?
For the students, this was one of their final modules on their degree and was attended for the partial fulfilment of the programme. For the academic, it was to educate using the conventions of academic practice – to create, share and critique ideas as a community – to enable or develop student autonomy, through critical reasoning and reflection. Furthermore, the partnership aimed at facilitating a democratic culture within the learning environment.

How long did it last? Is it ongoing?
From January to May 2015.

What was done/what happened?
Values, Citizenship and Morality is a module which explores thinkers and concept in these three areas connected to education, in its broadest definition. To make use of students’ prior educational knowledge and to develop research and critical skills and capacities, the module embraced a radical pedagogical approach. The consequence of this pedagogical approach was, what some might call, a ‘flipped classroom’, however the ‘flip’ was much greater than a change in power dynamics.

At the start of the module, the group were presented with the learning outcomes and a blank module calendar. After the initial shock and recoil of the risk, to which they were initially averse, the group drew on their prior knowledge and made use of their research skills to develop their curriculum. In connection to curriculum development, students began to challenge the idea of the lecturer and spent part of their planning time thinking about the learning and teaching strategies they felt were appropriate and the types of resources they wanted (or not) to make use of. Two consequences were the rejection of PowerPoints; they positioned the lecturer as an initial researcher and guide, who would provide two to three initial resources as a spring board for the group to go on to do further research and then bring these to the discussions. The lecturer would then facilitate the discussions.
What were the benefits?
The students were positioned as capable intellectual partners through the undertaking of research, the critiquing of ideas and concepts, and the creation of new ideas and possibilities. By being positioned as a community of capable learners they engaged with knowledge in a way that they had expressed they had not done before. They were, on the whole, autonomous in their research and provided knowledge for others in the community to critique and question, so much so that the learners requested their assignment titles and propositions to be critiqued by the group. The learners developed their research skills, assimilation and synthesis skills and discussion skills, as they were provided with the space and place to explore the possibilities of knowledge and to criticality explore their own capabilities as individuals and as a group.

The power dynamics of the group added a significant benefit to the exploration and critique of ideas. The role of the tutor became more of an expert guide than an expert knowledge giver, which meant the focus of the learning was no longer about content per se but more about what researchers can do with knowledge and the possibilities for action and change. Learners became more politically literate as a result of criticality required to address the knowledge they were assimilating and questioning; coupled with the development of skills and the management of relationships, their political literacy is one of the significant benefits of this curriculum-based partnership.

Above all else the learning through academic partnership was fun!

What were the challenges?
There were three significant challenges on this module, the first being the management of risk on behalf of the students. For one student the potential for risk was too great and they transferred to another module in the first two weeks. The remaining students spent key elements of initial discussions concerned with the potential of failure and possibility of disadvantage. This required them to trust in my judgment, as an academic, until they began to feel confident with the process. Whilst this was a challenge, this was managed through the group relationships and their own learning and teaching strategy.

The management of relationships was the second significant challenge as the new way of being led to possibilities I had not encountered before. Learners preferred to communicate through a mobile group messaging service and further preferred to move the communication away from a virtual learning environment, which is often seen as very formal. This meant that I could be contactable anytime and any place. Whilst, for this group, it was not particularly a problem, it could have become a significant challenge to professional relationships and the delineation of boundaries.

The third significant challenge was broader than the partnership project itself; as the students became more critical of their education. As a result of module materials and activities the group began to become critical of the culture, expectations and the environment they had been studying in during the prior two-and-a-half years. Whilst they praised this module at programme committees, they felt that similar pedagogy and relationships should be fostered throughout the entirety of the degree. This challenged the culture and practices throughout the programme.

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Case study 3
Feedback for learning (assessment)
Schools of Education, Humanities and Law

Who was in the partnership?
Six undergraduate and postgraduate students and four members of academic staff from the Schools of Humanities, Law and Education.

What was the purpose?
➢ To initiate a process for working with students as partners to enhance learning and teaching
➢ To demonstrate the role of enquiry-based projects in developing learning and teaching
➢ To undertake an enquiry into students’ perceptions and use of feedback on written assignments for the purpose of practice development.

How long did it last? Is it ongoing?
Eight months including preparation of the resources, some of which were used in student-led sessions to support student induction. The success of this project led to the development of further work that included some of the same staff and students.

What was done/what happened?
The students were recruited through an advert via the Students’ Union and employed as ‘student researchers’ to work with staff on a jointly developed project on a topic previously identified by staff as a cause for concern. Students were paid an hourly rate for two hours per week for five months. Whole group meetings were held on a fortnightly basis with students and staff undertaking project work individually between meetings.

The student researchers collected data from other students; worked with staff to analyse the data; presented findings to staff; led workshops for students; and co-created resources with members of staff engaged in the study. These resources included a free access Feedback for Learning project report (Jarvis, 2010)⁶; a Learn from Feedback flyer for students; an advice sheet for staff on giving feedback; a journal article (Graham and Jarvis, 2010)⁷ and a video for students on using feedback for learning available on YouTube (UH, 2011).⁸ Students presented the project to a cross-University audience at an internal learning and teaching staff conference.

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⁸ UH 2011, UH Learn from Feedback. Available from: http://www.youtube.com/watch?v=0HbbCNlr-z4
During this stage of the study individual members of staff in different Schools independently asked students for help with aspects of learning and teaching development (for example, to join a module development team) and some asked to engage with student researchers as 'consultants' on learning and teaching.

**What were the benefits?**
- Staff gained greater understanding of students' perceptions, which they could use to design feedback so that it could be used more effectively
- The resources from the project have been in use by students and staff since they were created
- Increased discussion about feedback amongst staff and in some cases between staff and students
- Increased staff awareness of the roles students can play in developing educational practice and participating in learning and teaching enhancement
- The students gained confidence and developed skills in communicating with staff and peers in a range of contexts
- The students and staff gained skills in undertaking education research

**What were the challenges?**
- Identifying sources of funding
- Administrative issues particularly in relation to student employment
- Timetabling staff-student meetings, booking rooms etc.
- Identifying ways of working
- Finding time for the project

**Further information/contact details**
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Case study 4
Student Fellows
School of Health and Social Work

Who was in the partnership?
Undergraduate students and staff from School of Health and Social Work.

What was the purpose?
The idea was to recruit a number of Student Fellows to identify and run their own projects within the School to enhance the student experience. Parameters were kept as broad as possible while retaining coherence and feasibility. Offering autonomy and status to the Student Fellows was a specific goal, to enable them to engage with the School community in a new way.

How long did it last? Is it ongoing?
The project was launched in August 2014, four Fellows were recruited and began projects in January 2015 which will run through the next academic year. The Associate Dean Learning and Teaching (ADLT) sees this as a core way of working in the School.

What was done/what happened?
The ADLT, inspired by work at the Universities of Winchester and Exeter, proposed to senior leadership colleagues that students be invited to come forward with proposals to develop enhancement projects. Successful applicants would be free to develop their ideas in the School with support from staff who would typically put them in touch with key personnel. Senior management agreed to finance the initiative and work began to identify new Student Fellows. The marketing strategy included the design of posters for advertising in student spaces and on StudyNet. These attracted a good field of candidates which was eventually narrowed to a short-list of six who had pitched feasible projects.

Four students were appointed to run three projects each of which addressed issues to do with student support. Two projects will introduce different styles of “buddy” system to supplement existing student support structures within the School. The third identified a gap in clinical debriefing of nursing undergraduates which it was compellingly argued was contributing to student stress. A model for providing structured debriefing is being developed with a small group of students. Throughout the initiative Fellows researched their ideas, surveying peers, and project planning; they linked with relevant academic and professional colleagues both in and outside the School. The buddy systems are in place in Paramedic Science and Pre-registration Nursing and will run in the academic year 2015/16. The pilot version of the new clinical debriefing will run with Nursing students in summer 2015.
What were the benefits?
The projects have been greeted warmly by staff who have recognised their value and been pleased to work alongside students in this way. Student Fellows have remained highly engaged and happy to continue the initiatives beyond their paid terms of office.

Julie Vuolo (ADLT): “It is easy to lose sight of the things that matter to students. For me the Student Fellows project is about letting students lead through the conversations they have with other students - it is insider access to what students want and how they want to do it. There is great satisfaction in authentic staff-student partnership working and a genuine pleasure in seeing them take their own ideas and grow them. It is a privilege to facilitate a project like this.”

Evaluation of the Student Fellow work continues.

What were the challenges?
Arranging meetings with Student Fellows proved difficult with everyone’s busy calendars, further complicated by the students’ different placement patterns. The plan was for the Fellows to meet regularly as a group but they have had to work more independently than anticipated.

Further information/contact details
Julie Vuolo, Associate Dean (Learning and Teaching) School of Health and Social Work, j.c.vuolo@herts.ac.uk
Case study 5
Reading in Law
Schools of Law and Education

Who was in the partnership?
Undergraduates from the School of Law and staff from the Schools of Law and Education.

What was the purpose?
To develop reading strategies and skills in undergraduate law students.

How long did it last? Is it ongoing?
An inquiry into current practice and the development of materials took place over two academic years, these resources are still in use.

What was done/what happened?
Informal surveys in the School of Law at the beginning of the academic year identified reading as a key focus for effective learning in the discipline. Experienced staff and novice students independently articulated this as a central practice and it was decided to research this perception and practices/expectations around reading. Law and Education staff worked together with students to articulate more precisely the issues and identify purposes of different reading tasks. Resources were developed and introduced to the next cohort of law undergraduates jointly by staff and students. Feedback was used to refine these materials and produce further ideas for engaging students and staff around difficulties involved in reading within law.
What were the benefits?

A reusable resource was created articulating the purpose of different reading materials and outlining some possible strategies to make reading effective. There was also greater staff awareness of the dimensions and difficulties of reading in the discipline which in turn informed teaching practice.

Beyond this specific tangible benefit, some staff saw afresh that acquiring disciplinary expertise is a shared problem for staff and students. Thus joint working is a logical and effective way to approach issues which delivers new insights and encourages shared responsibility for the development of skills.

Lecturer Karen Clark said: “I’d forgotten the struggle I had when first learning this. Connecting with student stories enabled me to become a more effective teacher. It just made complete sense to work together.”

Student Florence Afolabi said her involvement in the project had far-reaching benefits: “I... began to see the University as being one big community. Students and staff shared the same space but were, in my opinion, in two different circles. Realising that we were part of the same community allowed me to be more open and contributive. The process of working together to 'discover' really facilitated this.”

What were the challenges?

There was some scepticism from both students and staff about the complexity of reading – some initial reactions thought any difficulty with reading as such had been dealt with much earlier in the education process.

Staff can find it hard to work authentically with students. There is entrenched expectation of the lecturer-student relationship which is to an extent subverted by this way of working. A problem often seen by staff as owned by the students (“they don’t read”) is repositioned as a shared difficulty. A student keen to perform well at a new stage in their life is asked to articulate challenges. This can be both hard for them to do with confidence and hard for staff to facilitate.

Further information/contact details
Karen Clark, Learning and Teaching Innovation Centre, k.clark@herts.ac.uk
Case study 6
Student involvement in HEA Fellowship panels
Learning and Teaching Innovation Centre

Who was in the partnership?
Staff from the Learning and Teaching Innovation Centre (LTIC), current students and recent graduates of the Post Graduate Certificate in Learning and Teaching in Higher Education and members of Hertfordshire Students’ Union.

What was the purpose?
To engage students with the Continuing Professional Development (CPD) framework and the UK Professional Standards Framework, to share more widely how the University values its teaching staff and to empower students in this decision-making process around learning and teaching.

How long did it last? Is it ongoing?
The CPD framework was accredited in October 2013 and the first panels were held in early 2014. Student participation is an established and integral feature of the way these panels run and the University is fully committed to continue this way of working.

What was done/what happened?
The University of Hertfordshire (UH) CPD framework enables institutional panels to award various levels of Fellowship of the HEA. Students join panels as equal members with staff to consider a mixture of written and oral submissions from across the University.

All panel members are given general guidance and one-to-one support from the LTIC team about how to participate fully in the process. Panellists will be familiar with the UK Professional Standards Framework as a result of studying on the post graduate certificate or undertaking their own application through the CPD framework. Advance distribution of paperwork ensures all applications are considered by individual panellists before they meet to make decisions. Experienced staff chair panel discussion and all participants are involved either questioning applicants who choose to present in person or interrogating the written forms.
What were the benefits?
Discussion brings new perspectives, challenging assumptions and offering fresh insight about shared concerns to both staff and student participants. An activity central to everyone is celebrated and the breadth and variety of learning and teaching activity at UH is highlighted, in turn fostering a greater sense of community.
Student involvement showcases some of the Graduate Attributes to which the University is committed – allowing participants the chance to develop and demonstrate their criticality, decision making and confidence.
Participants all report enjoying the experience; these comments are typical: “it opened my eyes”, “it was really useful to see a different perspective”, “it was actually really interesting for me to hear some of the work that the applicants had done and the challenges they had overcome.”

What were the challenges?
Staff most familiar with the process report two key issues – one is alertness to inequality and the relative isolation of the student panellists:
“The power dynamic can be tricky, supporting the student to be confident in a process wholly designed by staff. One-to-one training for the student has proven important in overcoming this. The role of the chair in ensuring equal participation is also crucial.”
“Another challenge has been that the students are involved as individuals on the panel and they perhaps do not feel a sense of student community over time. The partnership relationship is successful around this process but is not necessarily enduring for them.”

Further information/contact details
Dr Helen Barefoot, Deputy Director of LTIC, h.barefoot@herts.ac.uk
**Case study 7**

**Student staff working: a suite of opportunities**

**Computer Science**

Who was in the partnership?
Undergraduate and postgraduate students from campus-based and online programmes along with staff from the School of Computer Science

What was the purpose?
To offer a range of activities which would foster a vibrant, positive and open educational community. Within these activities, individuals gain a wide range of important skills and a more rounded appreciation of each other’s perspectives.

How long did it last? Is it ongoing?
The first activities began in 2002 and further initiatives have since been established. The building and sustaining of this educational community is seen as central and integral to the working of the School.

What was done/what happened?
A variety of initiatives enable students to get involved in different ways.

**Student fora:** A formally required annual open student forum has been transformed into a vibrant student-led series of meetings through the year. Lively sessions, with an agenda driven by students raise problems, discuss solutions, gather feedback. Staff support is offered in planning and arrangement and they appear as ‘guests’ at the forum.

**School newsletter:** Students produce their own online newsletter about people and events around the school, interviewing alumni and staff, introducing technological developments and Computer Science initiatives.

**Peer Assisted Learning (PAL):** Student leaders have been enrolled to support first year students in developing their programming skills and their transition into Higher Education. The scheme is run as a short course for which the PAL leaders earn credits. PAL leaders work with staff to understand how to create supportive informal environments and then run their own groups for peers throughout the academic year. PAL leaders and staff meet regularly throughout the year. These meetings provide a forum for dialogue between PAL leaders and staff to find solutions to shared problems such as how to best design programming exercises when working with groups of very diverse programming abilities.
RoboCup: Students and staff collaborate in the Bold Hearts – the RoboCup team from the University of Hertfordshire. The team was founded in 2002 by Professor Daniel Polani, and consists of Computer Science students who have a keen interest in Artificial Intelligence and Robotics. Bold Hearts achieved second place in the RoboCup World Championship 2014 in Brazil and are currently the top-ranked robot football team in the UK.

What were the benefits?
Mutual respect is fostered between staff and students who get the chance to appreciate better the level of commitment, knowledge, energy each brings into School life. Issues which might become problems are aired and discussed in a positive atmosphere, connections between students, staff, alumni are strengthened. The projects all seem to tap into the good will and energy of participants who often make substantial commitments, which are materially unrewarded, to enhance the shared life of the School.

What were the challenges?
Very early on, we realised that it was important to ensure that students are equipped and supported to make the most out of the opportunities that are available to them. PAL leaders attend a 2-day workshop before meeting their first year students, and have a member of staff to support them throughout the year. Students who lead the forums are provided with opportunities to lead smaller scale meetings or a “mock forum” prior to the larger student fora.
Finding shared time and obtaining funding (taking part in activities such as RoboCup has inherent costs) always present a challenge but staff and students have worked together towards finding creative solutions to these.

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Case study 8
Alpine glacier monitoring project
Life and Medical Science

Who was in the partnership?
Undergraduate and postgraduate students from Geography and Environmental Management programmes, Dr Phil Porter and colleagues from the School of Life and Medical Science

What was the purpose?
The idea was to engage and enthuse students about research in the disciplines of Geography, Geoscience and Environmental Management through providing an annual overseas research trip where students could participate in fieldwork knowing that academic and logistical support was fully provided. Research work undertaken by staff and students then fed back into the curriculum through strategies such as using data sets collected by students in practical classes back at the university. The project also aimed to foster interest in and enthusiasm for fieldwork and for students to develop generic and discipline-specific research skills.

How long did it last? Is it ongoing?
Annual trips to Switzerland have taken place most years since 2007. This project is ongoing, with more fieldwork scheduled for the academic year 2015/16. Visits vary in length from one to three weeks.

What was done/what happened?
Students travelled to the Swiss Alps to assist staff in the field collecting data in connection with research primarily concerning potentially hazardous lake formation in front of shrinking glaciers. Students also built a public website sharing their experience and promoting videos demonstrating fieldwork techniques and tips to encourage their peers to consider taking up field-based research. In further work a DVD was produced to share the importance of the substantive research with schools and community groups.

What were the benefits?
A suite of online resources has been created which are of enduring benefit to students and educators. The challenge of living in close quarters round the clock developed teamwork skills along with resilience when adverse mountain weather conditions made life less than pleasant.

For many students the project triggered a much deeper level of engagement with the discipline; for some this was a dramatic shift of focus and the beginning of their own research career.

Dr Phil Porter said: “I think the project has given me a greater sense of respect for students’ abilities and for students to gain an appreciation of the work we undertake to develop research and keep the curriculum current through that research. It is easy to underestimate each other but in the field, getting to know each other, the true abilities of our students shine...”
through. It's also good for your job satisfaction and self-confidence to see students genuinely benefitting from your efforts to engage them with research and to help them fulfil their potential.”

Former participant Martin Smart said: “Participation in this project gave me a great opportunity to put theoretical work into practice in a real research setting and to collect data that had genuine benefit not just for my research, but also for communities in Switzerland concerned about the impacts of shrinking glaciers. It also helped me develop confidence in my abilities as a student and researcher”.

**What were the challenges?**

Taking student groups abroad with large amounts of expensive technical equipment requires huge logistical effort. Securing complete candour about students’ pre-existing medical conditions is important and may not always be straightforward. Health and safety concerns are vital and the team saw its share of medical complications across various expeditions.

Group dynamics when everyone is living in close proximity also needs attention and sometimes management.

Beyond the practicalities Dr Porter also notes the challenge of persuading students of their own potential and efficacy in this demanding environment: “It can be hard setting them free, convincing them that they have what it takes to collect data for a research project.”

**Further information/contact details**

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![Figure 1 Students on location](image)

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