



2011

Alternatives to Industrial Work Placement at Dublin Institute of Technology

Catherine Bates

Dublin Institute of Technology, catherine.bates@dit.ie

Elena Gamble

Dublin Institute of Technology, elena.gamble@dit.ie

Follow this and additional works at: <http://arrow.dit.ie/comlinkart>



Part of the [Education Commons](#)

Recommended Citation

Bates, C., Gamble, E.: Alternatives to industrial work placement at Dublin Institute of Technology. *Higher Education Management and Policy*, Vol. 23/2, 2011. <http://dx.doi.org/10.1787/hemp-23-5kg9p3j5300v>

This Article is brought to you for free and open access by the DIT Access and Civic Engagement Office at ARROW@DIT. It has been accepted for inclusion in Staff Articles and Research Papers by an authorized administrator of ARROW@DIT. For more information, please contact yvonne.desmond@dit.ie, arrow.admin@dit.ie, brian.widdis@dit.ie.



This work is licensed under a [Creative Commons Attribution-Noncommercial-Share Alike 3.0 License](#)



Alternatives to industrial work placement at Dublin Institute of Technology

by

Catherine Bates and Elena Gamble

Programme for Students Learning With Communities,
Dublin Institute of Technology, Ireland

In the current economic crisis, higher education graduates need transferable professional skills more than ever. They need resourcefulness, an ability to work reflectively, a sense of civic awareness and an impressive curriculum vitae. This case study analyses how Dublin Institute of Technology's Programme for Students Learning With Communities provides cost-effective, sustainable solutions to these needs, offering an alternative to industrial work placement. Community-based learning and research involve collaboration between staff and/or students and community partners to design real-life, course-based projects which meet the learning needs of the students and those of the community. The programme not only enriches the curriculum; it also builds links with communities and brings additional resources to the educational institution, while allowing the institution to fulfil its three main roles of teaching, research and outreach, simultaneously.

Alternatives d'orientation au travail industriel à l'Institut de technologie de Dublin

par

Catherine Bates et Elena Gamble

Programme de communautés d'apprentissage destiné aux étudiants,
Institut de technologie de Dublin, Irlande

Au regard de la crise économique actuelle, les diplômés de l'enseignement supérieur ont plus que jamais besoin de compétences professionnelles polyvalentes. Ils doivent être ingénieux, capables de travailler de manière réfléchie, avoir une conscience civique et un curriculum vitae étoffé. Cette étude de cas analyse comment le Programme de communautés d'apprentissage de l'Institut de technologie de Dublin propose des solutions rentables et pérennes pour répondre à ces besoins, et offre une alternative d'orientation au travail industriel. Les communautés d'apprentissage et de recherche impliquent une collaboration entre personnel et/ou étudiants et partenaires communautaires pour concevoir des projets qui reflètent la vie réelle basés sur des cours qui répondent aux besoins d'apprentissage des étudiants et de ceux des partenaires. Ce programme enrichit non seulement le cursus, mais il tisse également des liens entre les partenaires en apportant des ressources supplémentaires à l'établissement d'enseignement, tout en permettant à l'institut de remplir simultanément ses trois fonctions principales : l'enseignement, la recherche et l'ouverture.

Introduction

This paper is an institutional case study on the potential rewards from the use of community-based learning (CBL – also known as service learning) as an alternative to industry-based work placement (paid or unpaid internship) at the Dublin Institute of Technology (DIT), Ireland. Beginning with the context, we then look at the traditional industrial work placement and at community-based learning and community-based research (CBR). The bulk of the paper focuses on the benefits and practicalities of integrating CBL or CBR into a work placement module, based on our experience of co-ordinating the Programme for Students Learning With Communities in DIT. We end by considering the resources and challenges involved in developing CBL work placement modules.

Context

DIT began in the vocational education sector¹ and is now the largest tertiary institution in Ireland. It awards a wide range of qualifications ranging from apprentice education to doctoral degrees and post-doctoral research. There is still a strong emphasis on applied learning and applied research in many of its programmes of study and DIT maintains close links with industry. DIT also has a strong record of engaging with the community sector through the initiatives of its long-standing Community Links Programme. It has a successful history of admitting and supporting students from diverse backgrounds through its access and disability support services.

It is common knowledge that the Irish economy has undergone a serious downturn recently. In just under three years, from the last quarter of 2006 to the third quarter of 2009, Irish unemployment rates rose from 4.3% to 12.4% (Central Statistics Office, 2010). In March 2010, Inter Company Comparison Information confirmed that two Irish firms were closing every day (*RTE News*, 2010). With widespread unemployment, wage cuts, cuts in working hours for employees and company closures, DIT staff and students are struggling to find appropriate work placement opportunities. Small companies in particular rarely have the time and resources to supervise a student, when the exercise is primarily for the benefit of the latter. Yet work placements are not only a compulsory element of many DIT degree courses, they are also a requirement for validation of the degree by the relevant professional body.

The traditional industrial work placement

The learning outcomes of a work placement module are wide-ranging. To look at just one discipline's criteria for validation of academic courses, Engineers Ireland (EI – the professional body for engineers in Ireland) outlines six overall programme outcomes for Honours Bachelors Degrees. The first three criteria (a – c) are technical, but the remaining three are broader, and clearly relate to the communication, teamwork and other transferable skills which a work placement module normally aims to develop in a student:

- d) An understanding of the need for high ethical standards in the practice of engineering, including the responsibilities of the engineering profession towards people and the environment.
- e) The ability to work effectively as an individual, in teams and in multi-disciplinary settings, together with the capacity to undertake lifelong learning.
- f) The ability to communicate effectively with the engineering community and with society at large.

(Engineers Ireland, 2007)

With these learning outcomes in mind, an engineering work placement module may include the following learning outcomes:

- Integrate into a commercial/industrial environment, observing the rules of that workplace regarding, for example, punctuality, health and safety regulations and completing tasks/work as set down by the employer.
- Demonstrate their interpersonal skills in a working environment.
- Describe the organisational structure and business aims of the host company.
- Explain how work is planned and organised within the placement company and explain her/his team function within that structure.
- Explain how the company deals with Health and Safety and environmental legislation.
- Evaluate the success of the work placement and write a report on the experience.
- Reflect on the effect of the work placement on their future career choices.

(DIT School of Electronics and Communications Engineering, n.d.)

There is a clear match between the learning outcomes of the work placement module and the last three accreditation criteria of Engineers Ireland, particularly in relation to teamwork, interpersonal skills, health and safety and communication with engineers. Student learning in relation to the profession's role in, and responsibility to, society, as well as communication with society, is less in evidence in this particular module descriptor than in the EI criteria.

Staff responsible for several courses in DIT are now exploring community-based learning (CBL) and community-based research (CBR) as an alternative to, or a replacement for a component of, traditional work placements.

Community-based learning and community-based research

Community-based learning and community-based research are supported and promoted by the Programme for Students Learning With Communities across all colleges in DIT. This programme geographically and theoretically straddles the American tradition of service learning and the European science shop movement. Both movements work to develop projects between students and community groups which are collaborative and accredited, but have slightly different philosophies. In the United States the term “service learning” is used instead of community-based learning; “service” indicates the social origins of this movement which is based on volunteer work. According to Learn and Serve America (n.d.a.):

Service-Learning is a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities.

[...]

The core concept driving this educational strategy is that by combining service objectives and learning objectives, along with the intent to show measurable change in both the recipient and the provider of the service, the result is a radically effective transformative method of teaching students.

(Learn and Serve America, n.d.b)

Much of US service learning has now moved to a model of collaboration which is reciprocal between community and college. However, the structures of some service-learning programmes (for example, those where students volunteer for a set number of hours in a community organisation in order to receive course credits) still draw on the model of the community as primary beneficiary.

In Europe the emphasis has been more on community-based research than community-based learning. This research is often facilitated by science shops. Science shops first emerged in Dutch universities during the 1970s and have spread across Europe and beyond. The European science shops’ origins combine technical research and social concerns.

Science Shops are organisations that offer citizens’ groups free or very low-cost access to scientific and technological knowledge and research in order to help them achieve social and environmental improvement (Søgaard Jørgensen *et al.*, 2004, p. 3).

A Science Shop provides independent, participatory research support in response to concerns experienced by civil society (Hende and Sogaard Jørgensen, 2001).

The term “science” in our sense is used broadly and includes the social and human sciences, as well as natural, physical, engineering and technical sciences. Science Shops [involve] bi-directional knowledge transfer (Sogaard Jørgensen et al., 2004, p. 15).

Social science research questions, rather than technical ones, now predominate in some science shops. While the latter focus on the possibility of effecting policy change, some projects which have a technical slant can sideline personal and social learning (Zlotkowski, 2010).

Students Learning With Communities has a foot in both of these traditions. The programme focuses on project-based community-based learning, in line with the US tradition and with DIT’s vocational education roots. In the European spirit we are also developing community-based research (CBR): we advertise community research questions on our website, and in 2010/11 developed and piloted a new non-discipline-specific module on the subject. As in the United States, communities do not contribute financially to our projects (although some science shops charge reduced research fees). The programme has also incorporated the European practice of working for policy change. We work with the community from an asset-based perspective (focusing on the assets and strengths it brings to the collaboration, rather than just on their needs) and our aim is to maximise personal, technical and social learning for all partners involved.

The relationship between CBL/CBR and work placement objectives

The learning outcomes in module descriptors which incorporate CBL projects require students to develop not only discipline-specific technical skills, but also to:

- Demonstrate the link between their community learning and their classroom knowledge.
- Demonstrate teamwork and collaboration and negotiation skills.
- Demonstrate their ability to consult with, and respond to, the needs of a community partner.
- Synthesise their learning into a tangible project outcome.
- Communicate clearly their project/project outcomes to peers and where possible, a community partner, in an accessible way.
- Demonstrate their ability to reflect on and critically appraise their learning experience.

- Reflect on, question and challenge the causes and effects of inequality and disadvantage in society.

(DIT Faculty of Engineering, 2009)

While the community context for a CBL project can be significantly different to the context for an industrial work placement, there are evident similarities in the learning outcomes for students in both cases. These have been noted by Hengel and Shumer (2008) and include: making connections between experiences and subject matter learning; demonstrating social and cognitive learning and personal, social, psychological and academic growth; developing problem-solving skills which are applied in contexts beyond the classroom; and developing practical skills and citizenship skills, social involvement and productive employment.

CBL adds further outcomes to those of the traditional work placement. For example, CBL offers mutual benefits to students and community organisations, as the projects which students work on are collaboratively agreed with the community partner and are not simply an exercise to primarily benefit the student. CBL projects also assess the students' understanding of the impact of their future profession on society and their ability to communicate with the public. The projects expose them to social inequalities (the communities are generally underserved ones) with a view to developing their sense of ethics and civic responsibility. As Duffy (2010) points out, ethics is difficult to teach, but CBL may help the student to develop an awareness of his/her beliefs and values in a social context; the use of reflection (an intrinsic part of CBL) can help develop self-awareness in general and thereby lead to ethical development.

Integrating CBL into the work placement module

The recent economic challenges in Ireland and the consequent difficulty faced by DIT staff to find industrial work placements for their students coincided with the initiation in September 2008 of the Programme for Students Learning With Communities in DIT, and its promotion of CBL and CBR across the college. As a result, the two staff members who work full-time on the programme have been working closely with DIT teaching staff to adapt work placement modules (among others) to incorporate the principles of CBL, in almost all cases at the instigation of the teaching staff. This is a relatively straightforward process, and is best facilitated when DIT staff have upcoming school or programme reviews and seek to formalise the development of CBL projects as an alternative to, or replacement component of, traditional work placements.

This process is not without precedent. At California State University-Fresno, for example, the Community Service Scholarship Program combines co-operative education with service learning. Students receive co-op/internship credit and scholarships when they complete a placement at a community

service site (Derousi and Sherwood, 1997). As in traditional co-op work placements, students who follow these programmes get real-world training. They are able to explore career options and acquire enhanced employability skills such as communication, problem solving and leadership. They also become sensitised to community and social problems. Combining co-op and service learning thus prepares students for roles as workers and citizens (Kerka, 1999).

In January 2011, the Irish government unveiled its National Strategy for Higher Education to 2030. The strategy included a specific recommendation on the use of CBL/service learning as an alternative to industrial work placement: “One solution to the challenge of finding suitable work placement for students is service learning. This has the advantage of also providing students with the opportunity to engage in civic endeavours” (Higher Education Strategy Group, 2011).

Since 2008 the following courses in DIT have turned to CBL as an alternative to industrial work placement:

1. As part of the Bachelor of Engineering course (Electrical and Electronic) and as an alternative to traditional work placements, third-year students participated in CBL projects. According to Duffy (2010), the co-ordinating DIT lecturer for this module, these projects were initially proposed by Social Entrepreneurs Ireland² and three suitable projects with an engineering focus were identified, most of which could be carried out in the DIT’s Engineering School’s facilities. The projects were:
 - a) To provide a quiet motor to drive roller and louvre blinds in a light treatment therapy room for cerebral palsy patients located in the Camphill Community³ in Kilkenny.
 - b) To carry out a preliminary design for automating a district heating system for the Camphill Community in Kilkenny.
 - c) To design a small-scale biodigester for the Smithfield Fruit Market, Dublin City Council.

(Duffy, 2010)

Students worked on these projects in groups in order to gain experience in team-based problem-solving tasks, communication and negotiation with their client and their peers. As they were also asked to work on other problems at the same time during the work placement phase, and some acquired paid work placements elsewhere during these projects, some students left the CBL projects before they had been completed. In the end, although work was done to advance the projects, none of them was actually completed during the year. However, project a) was continued as part of a final year assignment by a Bachelor of Engineering Technology student

(Duffy, 2010). The fact that the student took on this project for his major study shows that there can be heightened engagement of some students with CBL projects, often leading to a commitment to develop the project beyond the original module. This heightened engagement ensures that those students' learning is enhanced and deepened in ways that may not be facilitated by industrial placements, once completed.

According to Duffy (2010), these projects are very challenging for the students as not only do they have to find a solution, but this must also be suitable for the real-world client. He feels that the use of community-based projects involving final-year students could be increased as there are many suitable engineering projects located in the community sector. Collaboration with other schools in the College of Engineering and Built Environment could also be initiated so that multi-disciplinary projects could be developed. This is reminiscent of the Engineering Projects in Community Service (EPICS) programme at Purdue University, IUPUI, in the United States, where interdisciplinary, multi-annual community-based learning projects are successfully developed and implemented. In this way, continuity is ensured and the community is well served. The community partner on the Camphill project which was continued by the final year student was certainly happy with the progress made.

2. As part of the Bachelor in Science Degree in Business and Management studies, a small number of students has opted for a CBL placement with an Irish-based charity in Malawi for their work placement option. Wells for Zoe is an Irish charity which initially focused on providing pumps and clean water in rural areas of Malawi and which has since expanded into experimental farming and early childhood education. DIT students have been volunteering to work in Malawi with the charity since 2008. In 2008/09 a business student, who had previously volunteered with the charity, was the first to receive academic credits for this work through the work placement module on the Bachelor of Science in Business and Management Studies. For these credits he completed a 3-month CBL placement in Malawi, during which time he developed new systems and structures for the charity. He also developed accountancy systems and became involved in the business operations being run by Wells for Zoe on site. In this way not only did the student meet the general learning outcomes of his work placement module, but he also added another level of learning. This included learning about the transferability of systems, of discipline-specific language and of academic learning across cultures and contexts, experiencing first-hand the sharp socio-economic inequalities between countries and living as a member of an ethnic minority. This intercultural learning is relevant in a newly multicultural society such as Ireland and given the likelihood of emigration of new graduates in the context of a severe recession. It is unlikely that this quality of learning could be achieved on a standard local industrial work

placement. Since 2008/09 other students on the BSc in Business and Management Studies have taken up the option of a CBL placement in Malawi as an alternative to placement in industry.

3. As part of the Higher Certificate in Pharmacy Technician Studies, first-year students can participate in a CBL project which involves tutoring biology and maths to secondary-level pupils in a local disadvantaged inner-city school. As part of their assessment for this project, these students are given one month's exemption from their second-year work placement module which is equivalent to 5 ECTS⁴ of the 30 ECTS allocated to that module. This is possible because the students are fulfilling in part some of the learning outcomes of the work placement module, including: "... to apply in a professional setting the skills, understanding and concepts studied in the programme curriculum [and] ... to extend communication skills" (Dunne, n.d.).
4. As part of the BSc in Mathematical Sciences, third-year students can now work on a CBL project instead of, or in partial replacement for, taking up a six-month industrial work placement. In these instances the students forgo any payment that they would likely receive for their work placement. In 2010/11 two students worked on analysis of data from a large national survey with a health-focused community partner. The community partner has offered training in the relevant software to the students as part of the CBL placement, and intends to use the results of their work to lobby for policy change.
5. The BSc in Leisure Management has a very broadly described work placement module which allows students to combine a range of smaller, optional modules which have aspects of work placement built into them. Since 2009 one of these modules has involved CBL and is run with the support of the Ladies Gaelic Football Association (LGFA) of Ireland's Gaelic for Girls Programme and Dublin City Council. Students choosing this module are trained by the LGFA as referees and coaches and then put these skills into practice by coaching and refereeing girls in inner-city sports grounds and organising a one-day blitz event. The module is assessed through a reflective journal submitted by the students on their learning (personal, academic and social) throughout the module. In addition to the module credits, students who successfully pass the LGFA's coaching and refereeing exams during the course of the module obtain nationally recognised qualifications in these two areas.
6. A new CBL project being piloted in 2010/11 involves a small number of students in the BSc in Computer Science working with Wells for Zoe to identify, design and install relevant computer application systems in Malawi, instead of an industrial work placement. This placement is very tightly structured, involving an initial preparatory phase where students collaborate with other Irish community-based organisations on CBL projects involving

computer systems, as well as receiving training from the Irish development education organisation Comhlámh. This induction phase is followed by an immersion phase, involving a 6-week visit to Malawi by the students, followed by a research and design phase in Dublin. As 2010/11 is the first year of the service-learning module, the students will visit Malawi once, while the lecturer, Ciarán O’Leary, hopes that participating students will visit twice as of 2011/12. The intention is that this year’s student group project will be handed over to next year’s student cohort, who will implement it in Malawi as necessary. Interested students went through a detailed application process to ensure that the most committed students took part, and that they had time to raise funds for their travel costs and undergo vaccinations.

Aside from these existing modules, there are several new CBL placement modules in the planning stage. As the principles of CBL mean that projects are collaboratively designed with the community partner, we are currently exploring further opportunities for placement, such as with Wells for Zoe in the BA in Early Childhood Education, the BA in Social Care and the BSc in Human Nutrition and Dietetics. Staff responsible for the BSc in Computer Science are also exploring the possibility of students working with local communities in the post-Chernobyl Republic of Belarus. This would be carried out in collaboration with the DIT Computer Learning in Communities projects underway in Belarus which provide computers and IT tuition to local people, including young people with intellectual disabilities.

Benefits of CBL work placement modules

As can be seen from these few examples, the benefits to students from engaging in collaborative CBL projects such as these often outweigh those of a traditional industrial work placement module, where students may not be given a particular project to work on (with the associated responsibilities and time management learning) and may be limited to photocopying/filing/coffee-making/observation of the workplace.

Research also shows that CBR projects or “... science shops contribute to ... developing student competencies and skills by applying project-oriented and problem-based methods” (Søgaard Jørgensen *et al.*, 2004, p. 5). The INTERACTS study (*idem*), which analyses 21 case studies from European science shops, found that students engaged in CBR projects could benefit from developing and enhancing the following skills: social competency; professional skills; communication and co-operation skills; new knowledge and perspectives; knowledge and expertise within trans-disciplinary research; mediation skills to connect the various needs and demands of different groups with their theoretical scientific background; and computer skills. Students also enhanced their CVs and consequently their employability; they

were able to use their research findings when submitting theses or writing for peer-reviewed journals; and became more conscious of using scientific terminology with care when making presentations to the general public.

Research carried out in the United States on service learning also shows that CBL enhances students' engagement with their college studies and increases their ability to apply the theoretical knowledge they have learnt in the classroom. It shows that CBL has a positive impact on students' well-being and general college experience, leads to a lower drop-out rate and can improve students' confidence and motivation (Hurd, 2008).

Not only that, but as students engage with socio-economically or otherwise disadvantaged communities through their community-based learning projects, students experience the effects of their discipline in these contexts. This offers them the opportunity (when skilfully prepared) to engage their capacity for critical thinking, develop their social awareness and challenge social norms and inequities in a way that traditional industrial placements may not. These projects have the possibility of broadening the students' sense of civic responsibility and, as we face unprecedented economic, social, political and environmental challenges, we urgently need to work to support the development of socially responsible citizens who not only have relevant experience and skills, but are also determined to work for change.

Apart from the plentiful benefits awaiting students who engage in community-based learning projects, there are also benefits accruing to their community partners. According to Learn and Serve America, community-based learning benefits the people served and their communities – and ultimately society – in the following ways:

- It meets real needs and priorities for individuals and communities, as young people [mature students are also involved] bring new energy, capacity, and creative ideas.
- Community residents have opportunities to build positive relationships with young people.
- Communities see youth in a different way – as resources, not problems.
- A new generation of caring and experienced citizens, activists, and volunteers is cultivated.

(Mohamed and Wheeler, cited in Learn and Serve America, 2007)

In addition, as long-term relationships develop, community partners gain access to university staff expertise and have the opportunity to be involved in collaborative research. They can also influence the direction of the higher education research agenda in function of their (and other civil society organisations') needs. This in turn enhances the relevance of teaching and research in the higher education institution.

Unlike the dwindling supply of industrial work placements, these kinds of projects are generally sustainable. The work done by students in one year often leads to new suggestions from students and community partners for work for the following year, in the same discipline and in additional new areas. As lecturers/co-ordinators and community members build relationships of trust and understanding, then larger, multi-disciplinary and even inter-disciplinary projects can emerge from their collaboration.

Issues regarding implementation

From a management perspective, having an office to co-ordinate and support CBL projects is essential, but not very costly. In DIT the Programme for Students Learning With Communities has a full-time staff of two, plus one part-time staff member since 2010. It has a small non-pay budget which covers costs for administration, annual award ceremonies, travel and small seed-funding grants (for interested academic staff who would like to start new projects, or develop existing ones). Academic staff rarely have the time to find appropriate community contacts even if they would like to run CBL projects. However, it only takes one or two co-ordinating staff members' time to meet a range of community groups, discuss their strengths and needs and connect them with lecturers and students with similar interests, with a view to starting new projects. As pre-existing courses have little scope to include extra or new modules, a large part of our (i.e. the programme staff's) work in DIT comprises discussing with interested lecturers how CBL projects can be incorporated into existing programme modules, such as the work placement module. We also offer advice on how to write up new modules to incorporate relevant learning outcomes, should staff wish to take that approach. We make time to develop relevant policies and resources designed to assist academic staff and community partners in these projects. For example, we are currently working on implementing DIT's new child protection policy targeted at students working, learning or volunteering with children (developed by us in collaboration with Campus Life, the office for DIT student services).

To conclude, for a relatively low financial investment, a higher education institution can reap considerable benefits by considering CBL as an alternative to industrial work placement. The college benefits by increased input from community partners, and the energy and expertise they bring. DIT's community partners, for example, are extremely generous with their time and ideas, actively participate in the Students Learning With Communities advisory board and are genuinely committed to enhancing student learning, as well as to maximising the benefits of this work in favour of their own communities. Building these links is a good way to embed the college in the community. They also increase the likelihood of non-traditional students (e.g. students with

disabilities, mature students, socio-economically disadvantaged students and students from ethnic minorities) applying to study in the college, with all the richness of experience that they bring to class and college life generally.

Creating links with communities is also a tangible way for the college to fulfil its third mission, over and beyond research and teaching (CBL and CBR clearly feed into these). New streams in European research funding are focusing on higher education and research institutes engaging with the public, on public engagement in research, and on developing the curriculum to facilitate lifelong learning. The Programme for Students Learning With Communities has successfully obtained European research funding through the seventh EU Framework Programme “Science in Society” as part of a wider consortium of CBR offices (science shops), community partners and research organisations across Europe.

One essential word of caution is that community-based learning projects really need to be considered a viable alternative to work placement, not a “second best” option. At DIT, community-based learning projects and community-based research projects are offered at no financial cost to the community partner (this is not always the case, as discussed above). If the attitude of “second-best” predominates, then we will find that students will drop out of CBL projects should the opportunity for paid industrial work placement arise (as in the engineering example described above). Staff organising work placements really need to understand and explain to their students that work placement modules, particularly those that incorporate CBL, offer benefits other than financial ones. They enhance students’ understanding of the impact of their profession in society and facilitate their ability to communicate ideas to non-specialists.

An example of best practice in this context is the new DIT BSc in Computer Science project with Wells for Zoe in Malawi. The co-ordinating lecturer, Ciarán O’Leary, who has run a range of CBL projects over several years, promoted this option from the start as a very high status alternative to industrial placement. According to O’Leary (2011):

We see this as an equivalent to work placement, rather than a substitute to it. This year there has been no difficulty placing our students in paid positions for work placement, so the ICT sector, unlike just about all other sectors, is not finding it difficult to place students in jobs. As such, we’d like to think that the service-learning module provides students with an opportunity not available to them through work placement, for example, to take on more responsibility and have more control of the direction of their work than they would get in work placement. The ability to work autonomously, for example, is a learning outcome that can be better achieved, we suspect, in our module than work placement. The ability to

understand organisational and management structures would be better served by work placement. The distinction is in the emphasis, though both modules treat more or less the same high-level learning outcomes. Equivalent, just not identical. Not a substitute, but an excellent opportunity.

O’Leary organised presentations to students by the couple who ran Wells for Zoe as well as a DIT student from the BSc in Business and Management Studies who had done his work placement there. There was an arduous application process (a long application form, a rigorous interview by students who had previously volunteered to work with the charity, plus an obligation to raise over EUR 2 000). Furthermore, O’Leary decided to limit the number of students who were allowed to go abroad, and both of these factors ensured that the participating students really wanted this placement and understood the benefits it could bring, over and above an industrial work placement. As discussed above, the intensive phases of preparation, immersion, research and design were all carefully structured. O’Leary also supervised daily reports and reflections from the students during the preparatory phase and, along with his decision to make this a rolling multi-annual project, this ensured that the students and the community partner both got the most from this project.

As regards the perceived status of CBL placements in relation to industrial work placements, our case has been strengthened by the recent endorsement of this approach in the new National Strategy for Higher Education, discussed above. We have also identified a need for an educational process involving relevant professional bodies and professionals. This would serve to highlight the additional benefits offered by CBL compared to traditional industrial work placement, and to ensure that a CBL placement is seen by these professionals and by students as enhancing their CV. We plan to begin this process in 2011/12.

There is one final point to consider if students are to maximise their learning from a CBL placement. While most work placement modules require students to keep a learning log, the richness of potential learning from a CBL placement – at a personal, academic and social level – may be lost if students are not taught and encouraged to reflect on their experiences. We have found that both students and staff feel in need of support in this area, so we developed a pilot non-discipline-specific reflection class which we delivered on CBL modules across DIT in 2009/10. We evaluated this at the end of the academic year and developed a package of handouts, slides and teaching notes. We now make these available to academic staff, along with a training workshop exploring how to use the pack, so that they can deliver the class themselves the following year. These reflection skills will be carried by these graduates into their personal and professional lives after college; they will also be used on the work placement module and help to create a new generation of “reflective practitioners” (Schön, 1991).

Conclusion

CBL placements, as an alternative to industrial work placements, offer cost-effective and sustainable solutions to many of the challenges currently facing higher education institutions (HEIs) in Europe. These include how to find work placements for students during a recession; how to maximise stretched resources to enhance student learning; and how best to prepare students for the workplace and for a future as active citizens. CBL is highly compatible with the concurrent development of both technical and non-technical transferable knowledge and skills (including awareness of the impact of the profession on society and a sense of ethics), as increasingly required by professional bodies for the validation of courses at tertiary level. Although CBL is an established pedagogy in the United States and Europe, it is still in its infancy in HEIs in Ireland. Integrating CBL into existing academic structures such as work placement modules is a relatively straightforward task, once the similarities and differences between the philosophies of both are clearly understood. Once this happens, then the CBL work placement experience can result in enhanced learning by students as well as additional benefits for HEIs and community partners. Long-term college-community collaboration on CBL projects can lead to an increasingly equitable education system (for example, through increased participation of disadvantaged groups in higher education) and a more socially aware generation of emerging professionals.

The authors:

Dr. Catherine Bates
Project Co-ordinator
Programme for Students Learning With Communities
Community Links
Dublin Institute of Technology
23 Mountjoy Square
Dublin 1
Ireland
E-mail: slwc@dit.ie

Elena Gamble
Project Officer
Programme for Students Learning With Communities
Community Links
Dublin Institute of Technology
23 Mountjoy Square
Dublin 1
Ireland
E-mail: slwc@dit.ie

Acknowledgements

We would like to thank Prof. Tommy Cooke, Ciaran O'Leary and Gavin Duffy in DIT for their comments on the drafts of this paper, as well as the anonymous reviewers from this journal for their advice. We would like to thank our main funders, the Irish Department of Education/Higher Education Authority (via Strategic Innovation Fund II). In addition, the programme has received funding from the European Community's Seventh Framework Programme (FP7/2007-2013) under grant agreement No. 244264 (the PERARES project). We would like to acknowledge the support of the Learning, Teaching and Technology Centre in DIT which funded our attendance at the OECD-IMHE conference in 2010 where we presented this paper. Finally, we would like to thank the staff, students and community partners who participated in the modules which inspired this paper.

The above section on Community-based learning and community-based research is drawn from Gamble, E. and Bates, C. (2011), "Dublin Institute of Technology's Programme for Students Learning With Communities: A Critical Account of Practice", *Education + Training*, Vol. 53, Issue 2/3.

Notes

1. From the late nineteenth century onwards a range of vocational colleges were set up around Dublin's inner-city under the City of Dublin Vocational Education Committee. In 1992 these were merged into DIT.
2. Social Entrepreneurs Ireland is an Irish Charity that aims to identify and support social entrepreneurs and their organisations. See www.socialentrepreneurs.ie.
3. The Camphill Communities is an international charitable trust which works with people with intellectual disabilities and other kinds of special needs. See www.camphill.ie.
4. ECTS stands for European Credit Transfer System and is now the standard name for credits in the Irish higher education sector.

References

- Central Statistics Office (2010), "Live Register February 2010", Dublin, www.cso.ie/releasespublications/pr_labforarchive2010.htm, p. 6, accessed 15 March 2010.
- DIT Faculty of Engineering (2009), Draft Engineering Community-Based Learning Module, unpublished module descriptor.
- DIT School of Electronics and Communications Engineering (n.d.), "Work Placement module descriptor", <http://modulecatalogue.hosting.heanet.ie/catalogue/modules/WKPL3602/>, accessed 15 March 2010.
- Duffy, G. (2010), personal correspondence with authors.
- Dunne, J. (n.d.), "Pharmacy Work Placement I module descriptor", <http://modulecatalogue.hosting.heanet.ie/catalogue/modules/TFIP2001/>, accessed 18 March 2010.

- Engineers Ireland (2007), "Accreditation Criteria for Engineering Education Programmes", www.engineersireland.ie/services/programme-accreditation/, p. 15, accessed 15 March 2010.
- Hengel, M.S. and R. Shumer (2008), "School-to-Work and Service-Learning: A 'Links' Piece, Connecting Theory and Practice", www.servicelearning.org/instant_info/bibs/he_bibs/career/, accessed 13 April 2010.
- Higher Education Strategy Group (2011), *National Strategy for Higher Education to 2030*, Department of Education and Skills, Dublin.
- Hende, M. and M. Sjøgaard Jørgensen (2001), "The Impact of Science Shops on University Curricula and Research", *SCIPAS Report*, No. 6, www.scienceshops.org/new%20web-content/content/documents/SCIPAS/wp6-so.pdf, accessed 13 April 2010.
- Hurd, C.A. (2008), "Is Service-Learning Effective? A Look at Current Research", in S. Shalini (ed.), *Service-Learning: Perspectives and Applications*, ICFAI University Press, India, pp. 44-60.
- Kerka, S. (1999), "New Directions for Cooperative Education", *ERIC Digest*, No. 209, www.ericdigests.org/2000-2/new.htm, accessed 13 April 2010.
- Learn and Serve America: National Service-Learning Clearinghouse (n.d.a.), "What is service-learning?", www.servicelearning.org/what-service-learning, accessed 30 November 2009.
- Learn and Serve America: National Service-Learning Clearinghouse (n.d.b.), "The Benefits of Community-Based Service-Learning", www.servicelearning.org/instant_info/fact_sheets/cb_facts/benefits_cbosl, accessed 26 May 2011.
- Learn and Serve America: National Service-Learning Clearinghouse (2007), "The Benefits of Community-Based Service-Learning (expanded)", www.servicelearning.org/instant_info/fact_sheets/cb_facts/benefits_cbosl/expanded.php, accessed 23 March 2010.
- O'Leary, C. (2011), personal correspondence with authors.
- RTE News (2010), "More than two firms close every day – ICC", www.rte.ie/news/2010/0301/economy.html, accessed 15 March 2010.
- Schön, D.A. (1991), *The Reflective Practitioner: How Professionals Think in Action*, Arena, Aldershot.
- Sjøgaard Jørgensen, M. et al. (2004), "Democratic Governance Through Interaction between NGOs, Universities and Science Shops: Experiences, Expectations, Recommendations", *Final Report of INTERACTS*, www.scienceshops.org/new%20web-content/content/documents/Interacts-final_report.pdf, accessed 1 December 2009.
- Zlotkowski, E. (2010), personal correspondence with authors.