Learning From an Irish Multidisciplinary Collaborative Project Where Students are the Community

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6. Allocate 1 1/2 - 2 hours for the first meeting, to share experiences and explore areas of particular interest.
7. Set achievable goals, and design realistic and measurable processes, as actions to review at each meeting.

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College Awareness of Road Safety is a collaborative course-based multidisciplinary CBR project between students and staff at Dublin Institute of Technology and the Garda [police] Road Safety Unit, begun in 2007/8. Both partners describe this collaborative research model, whose aim is to improve awareness of road safety among the target group of 17-24 year olds - i.e. students themselves - by engaging them in course-based research. This paper presents both perspectives on the benefits of mentoring in this model, where academic staff from various disciplines and the Road Safety Unit mentor students to creatively develop individual approaches to road safety-related research.

Introduction
We consider the benefits and challenges of a multi-annual, multidisciplinary community-based research and learning collaboration between Dublin Institute of Technology and the Road Safety Unit of An Garda Síochána (the Irish Police Service). A mentoring approach encourages and supports students to research the issue of road safety and disseminate their research effectively among their peers.

Learning from an Irish multidisciplinary collaborative project where students are the community

by Dr Catherine Bates (Dublin Institute of Technology), Sergeant Jim McAllister (Garda Road Safety Unit)

Introducing the collaboration - the Garda perspective.
The Garda Road Safety Unit (founded 2001) researches, prepares and delivers road safety initiatives to a variety of road user groups in the community, with particular emphasis on 17 to 24 year olds. Initiatives are well established in the 1st and 2nd level education system (up to age 17 approximately), however the 3rd or university level, is not so well served.
The Road Safety Authority’s ‘Safegrads’ programme - guidelines for the Students Union and college administrators to run a Road Safety week - is available in a number of colleges, but doesn’t allow students to explore road safety issues over a longer period.
In 2008 the Dublin Institute of Technology (DIT) in partnership with Garda Road Safety Unit, initiated the College Awareness of Road Safety (CARS) project across the Institute. The Garda Road Safety Unit (RSU) initially addressed a number of lecturers from a variety of faculties to outline their objectives for the initiative.
Mainstream advertising and other road safety initiatives were not having the anticipated impact on fatalities and injuries in the 17 to 24 year age category (see table 1).
The CARS project sought ideas and initiatives from students for innovative methods of delivering road safety messages to the target audience, in this instance the students themselves. Lecturers and students had complete freedom in selecting a road safety topic which they felt had an impact on their peers, researching relevant data, producing an appropriate strategy to address the problem and raise awareness among their peers, and then delivering their initiative, provided module learning outcomes were met. RSU staff were available to mentor students and provide assistance. Lecturers ensured that topics and methodologies were appropriate to the learning outcomes of their module, and assessed projects accordingly. Lecturers determined whether group projects were acceptable. Projects could be research-based and/or lead to the development of a road safety initiative, e.g. a road safety video on youtube or a poster campaign.

Students were allowed as much leeway as possible, encouraged to think outside the box and be creative in designing their discipline-specific project, to ensure participation from as many students and disciplines as possible. RSU staff met students with an interest in the project and outlined the background to the project. The RSU were available to advise or provide practical assistance to the students, directing them to relevant sources for data, and clarifying any ambiguities. At the end of the initiative a showcase event featured the various projects and a number of Road Safety practitioners and experts attended. Awards were made for the best projects, and prizes were provided by supporters of the initiative. The initiative has grown over the subsequent 3 years and has now become established in the college curriculum.

The academic perspective
The CARS project is supported by the Programme for Students Learning With Communities (SLWC), which promotes and supports community-based learning and research (CBL and CBR) in DIT, as part of Community Links, the DIT centre for access and civic engagement. DIT is one of the largest providers of Higher Education in Ireland, with 20,000 students up to PhD level. The value of CARS was immediately apparent from an academic perspective. The wide open brief from the RSU, and their support to participating academics and students, was a wonderful opportunity for us to support staff to develop academically rigorous projects with real-life applications across a range of disciplines, offering students the opportunity to change behaviours and save lives. Our remit is to work with underserved groups, and the RSU was a relatively well-resourced state agency, but the RSU wanted to work with us because students were underserved in relation to road safety, as discussed above. With the RSU as mentors, and the students as the underserved community, the project was within our remit.

All CARS projects run as part of modules which do not require a community-based learning approach. Writing and validating new modules, and securing accreditation from professional bodies, is time-consuming, so we advise academics to implement CBL or CBR projects through existing modules. We discuss modules with relevant learning outcomes to CBL or CBR, and explore suitable topics related to road safety. Some lecturers use problem-based learning to allow students identify their own topics related to road safety. The open brief from the RSU really facilitates this. Students can undertake research, technical projects, or creative work; individual or group projects; at any level of study from undergraduate to PhD. Our annual CARS award for students, judged and presented in different ways over four years, gives important recognition to their work with the RSU. In 2010/11 approximately 110 students participated in CARS across 8 disciplines, undergraduate and postgraduate. Projects included: first year Product Design students designing concepts for products to enhance road safety; first year Marketing students producing youtube videos and posters on road safety; MSc in Environmental Health students researching speeding behaviours and attitudes to road safety among drivers, and a final year Chemistry student analysing methods for breath and urine testing for alcohol.

Mentoring structures
Every year in DIT we organise at least three CARS lunchtime meetings, where interested lecturers and students meet the RSU and SLWC staff, to discuss project ideas, and clarify what support they might need from the RSU. We collaboratively agree the format of the end-of-year showcase - another opportunity for participants to meet and learn from each others perspectives on road safety. These regular meetings are invaluable in providing peer support among staff and postgraduate students (and occasional undergrads) and mentoring support from the RSU. Once projects have been designed, RSU staff attend preliminary meetings with students to explain the thinking behind CARS and urge students to be innovative. The RSU support the students with practical assistance, e.g. the supervised provision of breath testing or speed detection equipment, advice on relevant data sources. More recently the RSU have suggested topical areas of road safety on which research data is required, e.g. measuring and recording the distance between cyclists and vehicles overtaking them, and collecting this data in a mix of environments.

Challenges
Because lecturers adapt existing modules to incorporate CBL or CBR as part of CARS, CARS is not written into the module descriptor, which makes us dependent on individual staff members to engage with CARS, and weakens the project’s sustainability - e.g. when one lecturer fell ill, the person taking over his module did...
not run a CARS project, as there was no requirement to do so. The mentoring approach adopted by the RSU means delegating the direction and management of the research and projects to students and lecturers. Trust and respect are essential requirements in a supportive but non-directive mentoring structure. The recession has meant staff cutbacks in DIT and in the RSU, and additional workloads. We pragmatically review what existing resources allow us to do. This review can be productive, as we changed the end of year showcase format from the large one-day labour-intensive exhibition of student work of the first two years to a more focused presentation evening. While the exhibition of projects was open to non-participating students, participating students didn’t have time to view each others’ work. Students now have five minutes each to present on their work to their peers and the RSU, the Student Union president, and SLWC staff, followed by 5 minutes of questions and feedback. This format seems to place more focus on the academic dimension of the student projects, and allows them to hear, and ask questions about, how students in other disciplines address the issue of road safety. They also receive prompt and succinct feedback from their peers and the RSU, and the RSU have immediate access to the outcomes of their work - this access had not been consistent in previous years. The most serious impact of staff cutbacks is that no positions or units are guaranteed, and this project depends on a centralised contact point or CBL/CBR office in DIT, as the RSU could not identify and approach individual lecturers themselves every year, and on the invaluable supports from the RSU for DIT students and staff.

Evaluation
From the RSU perspective this is an effective initiative for the following reasons:

a) most students take part in CARS by choice, therefore are more likely to be enthusiastic about the topic. As students wrote in anonymous post-project evaluations: ‘A lot of work, but enjoyable and fun. I liked doing it and got a lot out of the results: teamwork, new knowledge on road deaths etc, achievement, pride’.

b) students engage with Road Safety as a topic over a long period through CARS. As one student wrote: ‘I didn’t think [the project] would be as major it was. I didn’t really gauge how it might actually help future research [...] It ended up being very much a ‘big deal’. I was delighted to be a part of it; and particularly since there’s scope for future research.’

c) students researching road safety are more likely to analyse and retain data and information than if they were spoon fed, as in other initiatives. As students wrote: ‘I learned so much [...] I benefitted from learning firsthand the attitudes of the community’ - or more cautiously: ‘I knew it wouldn’t change much in real terms i.e. what we achieve won’t influence the situation that’s on our roads, of course it will make students in our class think, but is that enough?’

d) students brainstorming ways to target their peers could develop innovative solutions which could then be brought into mainstream road safety promotion. This student felt CARS ‘gave myself and my group more awareness on the topic [of drunken pedestrians], allowed us to use our creativity and show our marketing knowledge and expertise’.

Future potential
This year for the first time, one lecturer took an interdisciplinary approach to CARS. The Transport Management lecturer invited participating staff and students in other disciplines to devise research questions relevant to their CARS projects, on which her students would collect data. SLWC staff hope to build on and extend this interdisciplinary approach, to deepen and enhance student learning. We would also like to research the impact of CARS by comparing the road safety awareness among students after taking part in CARS with that of a group of students who had no involvement in CARS. Looking forward, as CBL and CBR are integrated into 3rd Level Education structures, as recommended in the National Strategy for Higher Education to 2030 (Hunt 2011), the RSU propose to develop CARS on a national level. An umbrella group is developing and partnerships are growing among colleges and universities focussed on CBL. This offers an opportunity to extend CARS initially to another 5/6 colleges, with a long term objective to have the initiative in every 3rd level college in the country. Progress will require acceptance by college authorities of CARS, and a unit in each college to co-ordinate the running of the initiative.

Conclusion
The mentoring approach behind this multidisciplinary project, while labour-intensive, supports students and lecturers to explore freely the issue of road safety from the perspective of their own interests and disciplines. We would recommend this approach to anyone wanting to start a multidisciplinary project, particularly one which directly impacts on the lives of the participating students.

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