

Co-operative Study and E-Learning: Lessons from Nova Scotia



Diarmuid McDonnell

The development and embedding of e-learning in higher education has been well documented and numerous studies discuss best practice for incorporating appropriate pedagogies for effective online content delivery. Very few studies, if any, address the process and methodology of marrying a co-operative pedagogy with a higher education qualification delivered primarily online. This case study analyses the Master of Management in Co-operatives and Credit Unions (MMCCU), a master's level qualification offered by Saint Mary's University in Nova Scotia, Canada, and what it means in terms of adopting a similar approach here in the UK.

Introduction

The original idea for this case study arose from a conversation I had with a colleague who is currently enrolled on the Master of Management in Co-operatives and Credit Unions (MMCCU) at Saint Mary's University in Nova Scotia, Canada. I was beginning my research into co-operative models of enterprise and was keen to derive insights from existing programmes on the topic. From the conversation I discovered that the programme (which is one of the few master's programmes on co-operative studies in the world delivered in English) is unique. It not only offers an academically rigorous and demanding three year master's programme but successfully combines a co-operative learning pedagogy with the latest e-learning technology in its delivery.

Programme Description

MMCCU is an international management programme designed to provide graduates with the management learning and skills needed to run a successful co-operative business. Throughout the curriculum each management issue and function is explored within the context of the unique co-operative business environment created by the purpose, values and principles of co-operation. The online university prospectus describes the programme as follows:

An international programme, the MMCCU draws its candidates, faculty, and research from around the globe. You may study with managers from different types of credit unions and co-operatives located in different countries (or different continents) linked by information technology and face-to-face learning encounters. The programme is online and students and faculty are resident in various countries but part of a co-operative learning community forged during the orientation. Students learn while remaining in their jobs and linking their learning to their organizations (Saint Mary's University, 2010a).

Reasoning for MMCCU

The original idea for the programme arose in the mid-1990s during a National Co-operative Business Association (NCBA) meeting in Washington. Like all great ideas, this one aimed to fill a gap in the market, ie the need for a co-operative master's of business administration (MBA). Early on in the planning of the programme the organisers realised that a co-operative MBA would have to be radically different from a traditional MBA in terms of content, delivery and construction. Their thinking was based on the hypothesis that co-operative managers need a different set of knowledge skills and attitudes than traditional managers. Problems soon arose during this innovative project. Firstly, the organisers noticed a lack of relevant materials for the chosen programme courses - particularly in human resources and accounting. Secondly,

co-operative managers - the target market for the programme - were highly unlikely to be able to leave their jobs for two years and travel to Nova Scotia to undertake their studies. Finally, it became swiftly apparent that to be true to recognised co-operative values and principles, an alternative learning pedagogy needed to be adopted. The following sections highlight how, through innovation and a desire to be a 'global leading edge' in this area, the organisers of the programme managed to overcome these problems.

Programme content

The programme is delivered over three years and is broken down into a number of courses per academic year: four in years 1 and 2 and five in year 3. Each academic year is broken down into two semesters, with two courses per semester. The programme is structured so that the courses are undertaken in a linear fashion.

Table 1-MMCCU courses

First Year	Second Year	Third Year
Philosophical Origins and Historical Evolution of Co-operative Governance and Business Practice The Emerging Global Economy and Society from a Co-operative Perspective I Comparative Co-operative Practice I: Variety and Range of Co-operative Business Co-operative Financial Analysis and Management I	The Emerging Global Economy and Society from a Co-operative Perspective II Field Research: Study Visits to Exemplars of Excellent Co- operative Business Practice Comparative Co-operative Practice II: Co-operative Innovations and Best Practice Technology, Communication and Co-operation	Marketing the Co-operative Advantage: Co-operative Education, Member Relations and Marketing Co-operative Financial Analysis and Management II The Co-operative Management Approach I: Governance, Planning and Strategic Analysis The Co-operative Management Approach II: Leadership, Personnel and Management Style
		Final Cap Stone Paper

Students are required to attend a one week induction programme before embarking on the programme. During this induction, students are divided into their programme groups and urged to develop a set of values about how the group should interact and progress through the programme together. Students will remain in these groups for the duration of their time on the programme encouraging a sense of co-operation.

MMCCU course content is delivered through a virtual learning environment known as *Blackboard*. Students are provided with a handbook to help them become familiar with this technology, as it plays an important role in supporting student learning. The only exceptions are when candidates gather together in Halifax for the compulsory one-week programme orientation, and in the second year when the class visits either Spain or Italy to study integrated co-operative development in action.

In terms of class groups:

Candidates for the MMCCU degree are expected to move through the programme as a cohort, that is, those who begin in the fall of 2010 will take all of their courses together before writing their final Report end of 2013 (Saint Mary's University, 2010b).

This statement alludes to one of the fundamental principles underpinning the pedagogy of the programme; both student and programme achievement is measured in terms of the number of

students who successfully complete the programme. This is radically different from the success paradigm currently found in education at all levels, ie to achieve the highest mark you possibly can without any regard for the achievements of your peers. It is founded on a high level of student interdependence, which I will discuss further on.

Co-operative Pedagogy

The MMCCU programme utilises a number of different pedagogical elements to create what I term a co-operative pedagogy: one that encompasses the myriad opportunities students have to learn not only *about* co-operation but *through* co-operation. Central to MMCCU's pedagogy is a number of instructional elements designed to promote co-operative learning. Five of these elements are necessary conditions for co-operative learning to occur. I will examine MMCCU's satisfying of these conditions, as well as a number of related elements of the programme. The five co-operative learning elements are (Johnson et al, 1991):

- 1. Positive interdependence students are required to 'sink or swim' together; students will either succeed or fail collectively. In the MMCCU programme, students are required to complete a significant number of assignments in their programme groups. Students are driven to achieve a mutual goal (a group mark for the assignment) rather than an individual one (individual grades).
- 2. Promotive interaction students are encouraged to learn from each other. This is primarily achieved through face-to-face discussions, debate and peer tutoring. MMCCU places great importance on promotive interaction and has sought to recreate it using some of the tools provided by the Blackboard virtual learning environment (VLE). The online discussion forum promotes participation and reflection amongst students, allowing them to post measured and thoughtful responses to course issues. The variety of student backgrounds and nationalities facilitates the co-operative learning process by marrying diverse viewpoints and opinions.² The importance of discussion is reflected in the weighting that is given in student assessment: between 30 and 50% of a student's individual grade for a course is based on his/her participation in the discussion forum.
- 3. Individual and group accountability students are responsible for managing their own learning as well as being accountable to their group for assignments. There is no room for 'free-riders' in a group. In the MMCCU programme students must ensure they peer review each other's work before submitting it for assessment by their tutors. Students are not only accountable for their own performance but also for the performance of their group members (reflecting the ethos of the course).
- 4. Interpersonal and small-group skills students must develop appropriate social skills to ensure co-operative learning is effective and manageable. MMCCU students have the opportunity to develop these skills in a variety of ways: assigning group roles for ensuring assignments are completed; developing a system for making decisions within their course groups; building trust through face-to-face meetings (at the induction and study weeks) and regular online discussion; and dealing with conflict (also through the online discussion forum and, sometimes, through their tutors).
- **5. Group processing** members of a group need to establish and then maintain effective working relationships to ensure the group achieves its objectives. Examples of how this occurs in the MMCCU programme will be covered in the next section.

There are a number of other elements of the MMCCU programme that affect the efficacy of the co-operative learning elements outlined above. In no particular order of importance these are:

1. The primacy of the co-operative values and principles

The co-operative and credit union values and principles are not a sea anchor dragging behind the ship and impeding progress, but rather are the mainsail that should provide its power and ensure its business success (Saint Mary's University, 2010a).

While not strictly a pedagogical element, the co-operative values and principles

(International Co-operative Alliance, 1995) provide a foundation for learning about co-operation throughout the programme. In every course, be it Technology, Communication and Co-operation or Co-operative Financial Analysis and Management, students are encouraged to contextualise their learning in terms of the co-operative values and principles.

2. Effectiveness of learning techniques

The co-operative pedagogy utilised in MMCCU is based on the educational paradigm that students retain more information when they teach each other compared to other forms of learning. There remains some controversy over the exact percentage of information students retain through various methods of learning; the most oft-quoted figure states that students remember 90 per cent of what they learn through teaching someone else. Despite these concerns regarding the accuracy of information retention rates, numerous empirical articles have shown that co-operative learning is an effective way of improving information retention amongst students (Johnson and Johnson, 1999; Slavin, 1980; Walker, 1996).

3. Assessment

Assessment is varied, incorporating individual and group work. For each course, there is a midterm paper and a final paper, which are completed individually. Within each group assessment, participants are required to complete the assignment together. In essence, each participant is required to complete a section individually and then complete a number of sections as a group. Once completed, the individuals within the group assess each other and then present their work to the wider community of students and academics, where it is assessed again.

4. Student retention rates

While not a pedagogical element, the issue of student retention on e-learning courses significantly influenced the choice of adopting a co-operative pedagogy. Retention rates for e-learning courses vary but aggregate statistics estimate the average drop-out rate is often higher than 20% (Tyler-Smith, 2006). One of the aims of MMCCU is to achieve a low rate of drop-outs amongst students through the adoption of a co-operative pedagogy. To date, the use of a co-operative pedagogy is believed to have been successful as a means of reducing student drop-out rates: the rate for the MMCCU programme stands at somewhere between 12 and 15%.

5. Student support

The creation of a supportive community is central to the success of individual learners. Students have access to every other participant's email address, including the tutors, to facilitate clear and timely communication. They also have a dedicated discussion area where they can interact in a social environment, away from the course discussion boards. Feedback is given by tutors on assessments, assignments and also general queries. The support environment is very much student-centred, where participants are expected, in the main, to support each other throughout the duration of the programme, reflecting the mature nature of the majority of the participants and the mantra that MMCCU exists to work with students rather than against them.⁴

Student Insight into Programme Delivery

In order to provide a deeper understanding of the pedagogy and its effect on the student learning experience, I conducted a brief interview with a graduate of the programme, Mr Alan Dootson. His responses revealed some important insights into the use and effectiveness of co-operation in the delivery of the MMCCU qualification.

Student interaction and community development

The vehicles for student interaction are essential for ensuring students (a) complete and pass

assignments; (b) present and embed diverse points of view; and (c) derive information and insights from tutors. In terms of assignments, co-operation amongst students allows them to develop a strategy for addressing the task at hand. There is a strong emphasis on peer review for group assignments and roles within the group are not assigned but rely on students volunteering to take responsibility for a task.

The efficacy of said interactions is reliant on a strong sense of community amongst students. To this end, the programme did its utmost to create a strong sense of community; this approach is vital to ensure the students achieve their primary aim (achieve a master's level qualification) through co-operation rather than competition. Students and their families are invited to a week long induction at the beginning of the programme in order to establish what will become an essential relationship with each other as well as the course tutors. The strength of these relationships is evident in the support students provide during times of individual stress; Alan recounts his experience in this matter:

An unprecedented level of individual and family tragedies on my course allowed students to support each other through many traumas. Also if an individual was going through personal problems then other members of the group would take on extra work in order to ease the pressure on them. This gesture would normally be reciprocated in the normal course of things.

As can be seen from the examples presented, co-operation is of the utmost importance for an individual to progress and succeed on the programme.

The importance of adopting a co-operative pedagogy in terms of student learning and experience, and ensuring course content matches this pedagogy

A co-operative approach to programme delivery provided a successful strategy for completing assignments and earning the MMCCU qualification; Alan recalls that:

... we were able to play to individual students' strengths, whilst through group working be able to compensate for any individual weaknesses ... particularly in our tragedy prone group ... co-operative learning would probably have been the only way that many of us would have survived the course.

This reinforces the ethos of the programme that success (both student and programme) is measured in terms of how many students achieve the qualification, not on individual grades. The programme's co-operative pedagogy also (and perhaps most importantly) facilitates the transfer of knowledge and skills between students. Such an approach benefited Alan:

... in my own case, an IT manager from a Canadian retail co-operative was able to advise me on the IT aspects of an assignment and I was able to reciprocate by helping him with the financial parts.

This process culminated in the development of one student's grammatical skills, which were 'very poor' at the beginning of the programme; with the help of his peers, this student became 'as good as anyone on the course at putting a paper together'.

Insights and Lessons for UK Higher Education Institutions

From my experience of analysing the MMCCU programme I believe there is much we can learn for implementing such a programme in the UK.

1. Application to higher education e-learning/distance education programmes

The use of a co-operative learning pedagogy in MMCCU is believed to have contributed to a very high level of student retention; figures for 2006-2010 show that MMCCU retained at least 85% of its students. There are a range of factors associated with student retention rates but co-operative learning has been shown to have a positive correlation with lower numbers of students dropping out of e-learning/distance education programmes.

2. Application to business schools

The MMCCU programme has shown that there is a very strong case to be made for ensuring course content and instructional design are strongly aligned. MMCCU could also act as an example of best practice for academics who wish to incorporate co-operative learning or the study of co-operatives into their master's level curricula.

3. Application to co-operative studies in higher education

In terms of the UK co-operative movement's ambition (see Ridley-Duff, 2011; Murray, 2010) to develop a co-operative university or even just a co-operative business school, the MMCCU programme can be drawn on heavily to assist in course and instructional design. Firstly, considering there are (and have been) a number of UK co-operative managers enrolled on the programme, it can be assumed that there is a market for this type of qualification here in the UK. MMCCU's approach has sought to provide as much value as possible to students by understanding their commitments (work and otherwise) and developing content specific to their roles as co-operative managers. A cursory analysis of the size of the co-operative movement in the UK reveals an opportunity for UK higher education institutions to develop master's level co-operative programmes, specifically for managers of co-operatives. MMCCU provides a template for those who wish to do similar. To my knowledge, there is only one offering in the UK that seeks to fill this gap in the market.5 Secondly, the ethos of the MMCCU programme has interesting applications for academics seeking to develop co-operative skills in students; co-operative knowledge is dependent on appropriate content but developing skills is much more difficult and placing an emphasis on group achievement rather than individual will go some way to creating the UK's next generation of co-operators.

The Author

Diarmuid McDonnell is a Knowledge Transfer Partnership Associate with the University of Aberdeen, Scotland and is currently working on a two year project developing learning and teaching resources on the topic of democratic enterprise. Working in collaboration with the Co-operative Education Trust Scotland, he is working on undergraduate and postgraduate texts with a view to introducing these materials into Scottish Higher Education Institutions. His research interests include co-operative and employee-owned models of enterprise, co-operative learning and the application of co-operative practices in virtual learning environments.

References

ICA (1995) *Statement on the Co-operative Identity.* International Co-operative Alliance [online] Available at: http://www.ica.coop/coop/principles.html.

Johnson, D W and Johnson, R T (1999) "Making Cooperative Learning Work." *Theory into Practice* 38: 2, pp67-73.

Johnson, D W, Johnson, R T and Holubec, E (1991) *Cooperation in the Classroom.* Minnesota: Interaction Book Company.

Murray, R (2010) Co-operation in the Age of Google. Manchester: Co-operatives UK

Ridley-Duff, R (2011) Co-operative University and Business School: Developing an institutional and educational offer. Discussion paper (unpublished), Sheffield: Co-operative and Social Enterprise Summer School.

Saint Mary's University (2010a) *About the Program – Overview.* 29 September 2011. Available at: http://www.smu.ca/academic/sobey/mm/about.html.

Saint Mary's University (2010b) *Residency and Method of Delivery.* 02 October 2011. Available at: http://www.smu.ca/academic/sobey/mm/about_res.html.

Slavin, R E (1980) "Cooperative Learning." Review of Educational Research 50: 2, pp315-342.

Treisman, U (1985) "A Study of the Mathematics Performance of Black Students at the University of California, Berkeley." PhD dissertation, University of California-Berkeley *Dissertation Abstracts International* 47: 1641-A.

Tyler-Smith, K (2006) "Early Attrition among First Time eLearners: A Review of Factors that Contribute to Drop-out, Withdrawal and Non-completion Rates of Adult Learners undertaking eLearning Programs." *Journal of Online Learning and Teaching.* Available at: http://jolt.merlot.org/Vol2_No2_TylerSmith.htm, accessed 29 September 2011.

Walker, A J (1996) "Cooperative Learning in the College Classroom." *Family Relations* 45: 3, pp327-335. Williamson, V M and Rowe, M W (2002) "Group Problem-Solving versus Lecture in College-Level Quantitative Analysis: The Good, the Bad, and the Ugly." *Journal of Chemical Education* 79: 9, pp1131-1134.

Notes

- 1 I am referring to the International Co-operative Alliance (ICA) statement on co-operative identity, which can be accessed on its website www.ica.coop.
- 2 Co-operative learning could act as a barrier though, and care must be taken to address any concerns students have regarding this method of instruction. Unfortunately, data is not available describing how the MMCCU programme co-ordinators address this issue.
- 3 Research on the link between co-operative learning and student retention rates is rather thin on the ground but some studies have found a positive correlation between the two (Treisman, 1985; Williamson and Rowe, 2002). Further research is needed to clarify the precise influence co-operative learning has on student retention rates, especially in distance education.
- 4 From my research, students do not appear to have any problem with the lack of face-to-face contact on the programme. This probably reflects the mature nature of many of the students undertaking the programme. That is not to say that such an approach is replicable here in the UK; students differ in their capabilities and support needs, and this should be taken into account when designing an e-learning course.
- 5 MSc/PgDip/PgCert Co-operative and Social Enterprise Management at Sheffield Hallam University. There is also an MBs in Co-operatives and Social Enterprise delivered by University College Cork in Ireland; this is also an e-learning programme.

