

2014-6

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Recommended Citation

Fitzsimons, Margaret (2014) "Engaging Students' Learning Through Active Learning," *Irish Journal of Academic Practice*: Vol. 3: Iss. 1, Article 13.

doi:10.21427/D7842T

Available at: <https://arrow.tudublin.ie/ijap/vol3/iss1/13>

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Engaging Students' Learning through Active Learning

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Abstract

This paper discusses a project carried out with thirty six final year undergraduate students, studying the Bachelor of Science in Business and Management and taking the module Small Business Management during the academic year 2012 and 2013 in Dublin Institute of Technology. The research had two separate objectives, 1) to engage in active learning by having students work on a consulting project in groups for a real life business and 2) to improve student learning. The Small Business Management previously had a group assignment that was to choose an article related to entrepreneurship and critic it and present it to the class. Anecdotally, from student feedback, it was felt that this process did not engage students and also did not contribute to the key competencies necessary in order to be an entrepreneur. The desire was for students on successful completion of this module to have better understood how business is conducted and equip them with core skills such as innovation, critical thinking, problem solving and decision making. Student buy in was achieved by getting the students to select their own groups and also work out between each group from a one page brief provided by the businesses which business they would like to work with. It was important for the businesses to also feel their time spent with students was worthwhile so they were presented with a report from the students at the end of the twelve weeks and invited into the College to hear the presentations from students. Students were asked to provide a reflection on their three key learning points from the assignment and to answer specific questions designed to understand what they learnt and how and their strengths and weaknesses. A survey was sent to the businesses that took part to understand

their experiences. The results were positive with student engagement and learning rating very highly and feedback from the businesses demonstrated an appreciation of having a different generational perspective helping with their projects. The modules was successfully expanded for 2013 and 2014 to take account of feedback by increasing the weighting of the assignment for students, by introducing a reflection every two weeks and by keeping a log and minutes of all meetings with the businesses.

Keywords: Action based learning, Active learning, Engagement, Experiential learning

Introduction and Context

Much has been researched and written about student engagement in higher education.

Trowler (2010), for example defines student engagement as

...being concerned with the interaction between the time, effort and other relevant resources by both students and their institutions intended to optimise the student experience and enhance the learning outcomes and development of students and the performance, and reputation of the institution (p.3).

There are three dimensions associated with student engagement. Fredricks, Blumenfeld & Paris (2004) referred to behavioural engagement (complying with rules and norms), emotional engagement (students' reactions in the classroom), and cognitive engagement (students invest in their learning and enjoy a challenge). Students must be empowered to learn and without empowerment, students will not be in a position to take responsibility for their own learning (Sanders *et al.*, 2011). Active learning strategies are considered the most effective for deep learning (Peters, 2011), and are becoming the preferred choice to be used in teaching entrepreneurship (Asvoll & Jacobsen, 2012; Shariff, Hasan, Mohamad & Jusoff, 2010; Ulrich, 2009).

The purpose of this paper is to examine the experience and learning of fourth year undergraduate students in an entrepreneurship module asked to undertake a project in teams with a real business, and present the outcome and a report to the businesses. The research question addressed how the quality of entrepreneurship student learning can be enhanced by action based learning.

The background for the work is that in 2011 and 2012 when a lecturer took over teaching Small Business Management, a key assessment area was the selection of an article in an area related to the module (for example finance) and a presentation to the class. Students

undertook this in 2011 and 2012, but on reflection given the nature of the module, it was felt there must be a more appropriate method of assessment that would result in deeper learning. The feedback from students was negative, work was repetitious and similar to other modules, and they felt very academic and not in the true spirit of entrepreneurship. Some positives were that it helped prepare students analyse journals for their dissertation project and it focused them on keeping up to date with key research topics. It seemed that the negatives outweighed the positives and the assignment was not entrepreneurial and did not focus sufficiently on the skills needed to be an entrepreneur. By changing the method of assessment, the learning outcomes, such as understanding the attributes needed for running a business and the personal strengths and weaknesses of a student would be better understood. Enterprise skills include communication, teamwork, problem solving, initiative, planning, organisation, self-management, learning to learn, technology, negotiation and networking (Jones, 2006). The assignment of students working with businesses to provide a report on a real consulting project in teams is designed in a learner centred environment to enhance all these skills. To set up and run a business, there is a need to understand from the start that the business person will not be operating in a vacuum. It is essential that the entrepreneur can relate to other business people and customers and be able to communicate with them effectively. To grow a business network is vital, and it was felt that these skills can only be understood through experience and action, and must therefore be interwoven into the learning outcomes of the module from the outset.

Literature Review

The module being taught was taken by students with an interest in entrepreneurship as part of their undergraduate business degree. This led to choosing topics to research in business education and entrepreneurship and how best to teach entrepreneurship. Different subjects

require different teaching, and being an entrepreneur is all about taking action and requires the key skills already outlined. The most appropriate literature seemed to be in the field of active learning, particularly in how it relates to entrepreneurship and business.

This project is based on a change of the module assessment to support active student learning. Research would indicate that a lack of active involvement by students in their learning decreases the learning effectiveness (Wynn-Williams, Whiting & Adler, 2008). As active learning by its nature involves action and doing and immersing oneself into a project, there should be an appropriate measure of assessment. After a review of existing literature and consideration of various assessment methods, it was decided that the most suitable assessment strategy for these students would be to produce a report for businesses by working in groups and presenting to several businesses demonstrating desired key skills such as teamwork, communication, critical thinking and problem solving.

An approach used by educators to encourage student engagement is the case method. Case studies have a known start and end point, whereas in entrepreneurship the two points are unclear (Shepherd & Douglas, 1997). This may not make them the best choice for teaching entrepreneurship. Enterprise educators need to use pedagogical approaches that enable a diverse range of students to master specific learning outcomes (Jones, 2006).

Therefore, other approaches were investigated. Problem-based learning (PBL) has been found to enhance skills and competencies desired by the workplace (Adler & Milne, 1997; Raux, 2012). It also enhances analysis and evaluation skills and increases motivation (Milne & McConnell, 2001; Ramsay & Sorrell, 2007). Students studying entrepreneurship will either run a business or most likely be entrepreneurial within an established business;

therefore they need to work on different real life problems for which they have to find solutions. PBL on its own was not considered the most appropriate to support the skills required. While PBL would encompass problem solving and critical thinking, it does not necessarily forefront entrepreneurial skills such as networking and communication. It was felt that these could be better achieved by having the students work on a consulting project.

Active Learning in Entrepreneurship

Active experiential learning which involves students working with real clients on projects has been used extensively in information systems classes (Abrahams & Singh, 2010; Gabbert & Treu, 2001; Klappholz, 2008; Mitra & Bullinger, 2007; Tadayon, 2004; Tan & Phillips, 2005). Lucas, Cooper, Ward & Cave (2009) in a study of more than four hundred engineering undergraduates in the United Kingdom found that in order for an enduring effect on entrepreneurial intent, authentic experience must be part of the design of the module. Providing the students with a real-life understanding of working in current business environments as part of the module can enhance their learning experience; as Smart & Csapo (2007) argued, learning by doing is student centred.

Businesses report that a person's ability to work collaboratively, think critically, and solve problems is an important hiring consideration. It has been noted that education programmes need to do more to promote learning in these areas (Paulson, 2011). Brzovic & Matz (2009) followed the progress of business and communication students from a US University competing in teams to solve a business problem posed by a Fortune 500 Company. The company adopted some of the suggestions, and it was found that the presentation aspect allowed students demonstrate communication to businesses and to grow professionally.

Neck & Stoddard (2006) describe Babson's Foundation Management Experience where all first year students experience the cycle of entrepreneurship by creating and running a new business. Student consulting projects can benefit students by giving them confidence in providing solutions to a business owner, and the business owner can benefit from the students' solutions (Heriot, Cook, Simpson & Parker, 2008). Feedback from the businesses is vital to let students know how their contribution is recognised in the outside environment, and also to reflect the full effect of this collaborative learning (Zapatero, Maheshwari & Chen, 2012). By working as a team on a life project for businesses, creativity and knowledge has been shown to be enhanced (Laverie, Madhavaram & McDonald, 2008).

Constructive alignment must be taken into account for balancing learning outcomes with activities and assessment (Jones, 2006). The changes made to the module learning outcomes meant that the teaching method had to be altered. From the start, the students had to become part of the teaching approach. They had to realise they were taking responsibility for their own learning, and that there was going to be no perfect solution to their assignment. It was important that they had awareness that each group was allocated a different project so they were very much relying on their own group members. By introducing a blog, students were encouraged to reflect as they progressed on the project and it also ensured they continued to work consistently on the project. By keeping records of meetings and engaging fully with clients, students were motivated to work continuously on the project and could not complete it in a short period at the end of the module. Teaching included workshops delivered by guest speakers to help students understand how to engage with businesses, and how to grow a business through contacts. By networking with businesses, they were starting to develop communication and networking skills. Each class involved open communication on the progress to date and sharing experiences with other group members. These key skills were

being initiated from the outset. Jones (2006) has argued that by facilitating enterprise-related learning outcomes through learning activities that facilitate a learner centred approach using deep engagement, constructive alignment is enhanced.

Reflection is accepted as a practice to facilitate lifelong learning (Chaharbaghi & Cox, 1995; Larkin & Beatson, 2014). For the purposes of this current study, student reflections can ensure alignment and transferability of learning outcomes and the reflections can also inform teaching methods (Crossman & Kite, 2007; Jones, 2006). From reviewing the blogs as they progressed, it was evident that the students were being challenged and encouraged to find solutions to present to the businesses. This ensured they engaged in self-directed learning and had to rely on their group members to work together to produce a report of which they could be proud. While the previous journal article was also conducted in groups, it was evident in some cases the group members divided up the sections and worked individually to do their parts before pulling it together as one piece. This went against the idea of group work for this module. With the new method of assessment, this was no longer possible. The students were meeting the business as a group and as the nature of the work required varied, in order to produce a good report, they needed to continuously work together and share tasks as a group. Jones (2006) believes that student reflection aims to provide students with an understanding of their personal strengths and weaknesses and their contribution as individuals and as group members. By embedding reflection in the assessment in this way, it has been suggested that students can better learn from and understand their experiences in their assignments (Chaharbaghi & Cox, 1995; Larkin & Beatson, 2014).

Key aspects from the literature that informed the design of the module was that active learning can promote deeper learning, and reflection can encourage lifelong learning. By

working in groups on a project for real businesses and meeting with entrepreneurs, students were encouraged to keep working on the project and reflecting continuously as they progressed. It caused students to think beyond a grade and to focus on producing something they could bring forward into their future learning and practice.

Research Design

The extant literature has highlighted the suitability of active learning with student reflections built into the assessment. The chosen assignment and assessment for 2012 and 2013 was to match students with small businesses and get them to undertake a project in groups; presentation of the work took the form of a final written report to the business and an overall presentation to the class and the businesses. This change of assignment and assessment from presenting a group journal article (written and orally) was for the purpose of increasing student understanding of the skills needed in running a business and the entrepreneurial attributes required. Thirty six 4th year business students (25 male and 11 female) selected 'Small Business Management' (an entrepreneurial module). The businesses were chosen from 'Business Networking Internationally', a networking group of businesses that is made up of different chapters (groups) of one business per trade or profession that meet weekly. To secure the businesses, three chapters were visited at 6.45am on three mornings and a pitch was given to the businesses; each business that was interested was then asked to send a brief project outline to the lecturer. In the end, thirteen different projects were secured. An overview of the businesses and the briefs given to students can be seen in Appendix 2. The businesses ranged from estate agents, insurance brokers, accountants, self-defence trainers, nutrition patch and website design. The project briefs ranged from using social media to enhance businesses to targeting a specific market for the client. Every student was given a copy of the briefs in class and students self-selected groups of three; all came to mutual

agreement regarding the business they chose which ensured buy-in from the start. The students then had to make contact with their business by phone within the next two days and arrange an initial meeting within a week with their business. One business agreed to donate a cash prize to the best group presentation. The assignment project brief attached in Appendix 1 was given to students. Students spent twelve weeks working on the projects and then presented to all the businesses on a specific night and provided a written report to their business. They also presented a written report for grading, along with a group log and an individual reflection addressing key learning points; they were asked if anything could have been done differently in order to help them learn more effectively.

The students kept a weekly log of progress and at the start of each weekly class; a half an hour was spent obtaining feedback from the students regarding their progress and interaction with the businesses. As part of their assessment, students were asked to present a written reflection. The pedagogic issues included finding the businesses, engaging students and including an element of self-reflection after the process was completed.

Two methods of feedback were received from businesses. A survey of 10 questions was sent to each business individually (Appendix 3). Five businesses completed the questionnaire, giving a 38% response rate. In order to achieve more detailed feedback, a focus group interview with three businesses that took part in the project was also undertaken. The questions asked can be seen in Appendix 4. The businesses were asked for feedback on their experience in working with the students, key strengths and weaknesses of the projects, and if key skills were demonstrated which would enhance employment opportunities or entrepreneurial skills.

Research Findings

The results of the data collected were separated into two strands and feedback was explored from both the businesses and the student perspectives. The feedback from the businesses was designed to measure the success of the project and also to engage the key stakeholders in the process in order to see how it could be improved for the future. It was important to garner continued support from the businesses involved in order to repeat this project in the future and to secure participation from even more businesses.

Overall the majority of businesses were very positive about their experiences working with the students. From the five businesses that answered the survey, the main strength of working with the students that were highlighted was their work ethic and enthusiasm. Four of the five businesses mentioned this, and from talking further to the businesses on the presentation night, this was also alluded to by eleven of the thirteen businesses involved. The main weakness highlighted was a lack of communication between businesses and students. This was taken into consideration and the assignment was amended for 2013 and 2014 to include minutes after each meeting to be communicated to business to ensure both parties understand what is being worked on.

The commitment and motivation that drove the students to give this assignment their best surpassed all prior expectations. Students put aside the fact that this counted for a small element of their overall grade for the year and strove to excel. From their presentations and reflections, a number of key skills such as team work, initiative, innovation, problem solving, critical thinking and personal growth were clearly demonstrated. The professional nature of the presentations and the use of technology such as video clips demonstrated skill sets being merged to produce the finished product. Students recommended the module to the next

year's cohort and also thanked the lecturer for the opportunity to work on such a dynamic assignment. Of surprise was the overall commitment by students and businesses, and the strong collegial atmosphere during and after the assignment. The real confirmation of the success was after only two meetings in 2013 and 2014 when the project was oversubscribed; feedback from the business on the excellent student work had filtered through to other businesses, and more people want to be a part of a clearly successful initiative.

When the businesses were asked about the attributes they would like students to have if employed by them, *ability* was the top three for four of the five businesses, *initiative* was in the top five for three of the businesses and *hardworking* was in the top five for three of the five businesses who answered the survey.

The top nine key learning points identified by the students are shown in Table 1 below.

| Key Learning Points | Identified by this number of students |
|---|--|
| The importance of communication | 10 |
| Effective teamwork | 7 |
| The value of networking | 4 |
| Using social media in business | 4 |
| Time management | 4 |
| Value of experience of working with real businesses | 4 |
| Marketing on a budget | 3 |
| Be able to think outside the box | 2 |
| Value of working with different cultures | 2 |

The importance of communication was highlighted by students from the dual angle of communicating with the businesses and with each other. This was vital for students to ensure they continued on the right path and were working towards delivering to the expectations of their client. Networking was better understood by students from having experienced it. The current generation of student is considered to be well positioned to explore leading edge technologies, so it was interesting to see how they identified the importance of social media

for businesses, and also the learning that they had to undertake to market a business as opposed to using social media solely for communicating with friends. The enterprise skills that the students felt they had acquired included communication, teamwork, problem solving, planning, organisation, self-management, technology and networking. What was surprising was the effectiveness of this assignment at helping students master key attributes required to be an entrepreneur.

Students were asked if anything could have been done to help them learn more effectively, based on the many aspects of the assessment, and a number of themes emerged on effective learning, their project experience, and active learning in projects.

Effective Learning

Students responded very positively to the projects and engaged well with the businesses, as these students indicated:

I don't believe I could have learned any more effectively.

Student A, student working with water company

I am struggling to think of a different way this project could have been conducted which would have allowed me to learn more effectively. This was one of the most engaging projects I have done in my entire college life and I felt that being introduced to the company and getting the brief off them really gave the impression that I was working in the company, driving me to give my all.

Student B, student working with nutrient patch business

There is no doubt that this project was an extremely beneficial and valuable experience. I personally think it was a very effective learning platform that would be hard to beat in terms of learning from someone outside the college environment.

Student C, student working with consulting business

The feedback from students highlights the importance of active learning and engaging in a real life setting. Their problem solving skills were challenged in the project which Paulson (2011) believes is vital for success. In addition, their creativity and depth of learning was

enhanced, which Laverie, Madhavaram & McDonald (2008) argue is a key aspect of active learning in projects.

Student Project Experience

Students were asked for feedback on their views on working on the project and to provide details on the experience they had undertaken. The assignment engaged them and they became interested in making recommendations to the business they were working with, as shown by these two students working on different business briefs:

I can honestly say that I don't think I ever worked harder on an assignment because it encompassed so much (i.e. a presentation, individual log, group report, frequent meetings, more research than usual etc. At the beginning I probably saw this as just another assignment that I wanted to get finished, but as it went on and I became very interested in the experience of making practical business decision that could really affect a company, I wish I had queried things even further.

Student D, student working with self defence business

This is the first project that I have encountered over the last four year in college that has required us to take decisions and form recommendations based on our own research and analysis, where there is no clear literature to use as a guide.

Student E, student working with construction company business

Problem solvers and critical thinkers are necessary in business. Through self-directed learning and using their initiative, students were able to apply their own research skills to complete the assignment.

Active Learning in Projects

Active learning helps provides the key skills that employers want (Sheets, 2011). The integration of the students' prior knowledge was brought to bear in this assignment and it also enabled them to engage with real life businesses and add value to the products and services on which they were working.

This was so unlike many of my other subjects, it really put all my knowledge to the test. This really prepared me for the real world and I am really happy I chose this module and undertook this work.

Student F, student working with accountant on using social media

Furthermore, students appreciated the practical nature of the assignment and the fact that it brought them into the real business world by helping them apply knowledge acquired from different subjects together into this assignment. Horan (2009) has argued that active learning is a valuable learning process linked and embedded in a business.

By working with a real life business and the problems that they have encountered, it allows students to put all the work that they have learnt in college into practice and I think this is a great idea because it gets the students so involved.

Student G, student working with a supply shop on a marketing strategy

Overall I found the entire experience a very positive one as I fully immersed myself into the world of modern professional business learning valuable communication and learning skills. I will take a lot away from this project.

Student H, student working with accountant on data management system

I felt this was a very beneficial assignment, and much more practical than any other assignment I have done. I feel like I have learnt valuable lessons from working with the client and more comfortable and confident with the business culture, which will help me when I finish college.

Student I, student working with web design company on marketing strategy

I felt this was a very worthwhile process and a great idea to show us the role of a consultant looking at a business in the real world, most people seemed to have enjoyed it. It wasn't the usual essay that we had to write it was a much more practical assignment which increased the interest levels dramatically.

Student J, student working with insurance business

The Businesses' Perspective

The focus group interview found that the standard of work achieved of the groups was very varied and some students did not seem to “get it” or understand the business. More research could have been undertaken by the students in certain areas such as marketing and finance and not just a focus on social media. One comment in particular reflects this:

All seemed to veer to Social Media solutions, without asking how these businesses had established themselves without it. Social Media – only one of many marketing channels; others largely ignored.

Business A, owner of water company

In order to ensure this does not happen in future years, the assignment was amended to include detailed research regarding the history of the business and how it established and grew. This will ensure students understand what has been tried in the past and what worked and what did not work as well. There were two very positive responses from Business B and Business C which focused on the positive students' attitudes and also the different generational perspective:

Students' attitudes and grasp impressed me.

Business B, accountant

Overall, it was a worthwhile exercise, the real benefit was others, of another generation, looking at our business and putting their wrap on them.

Business C, owner of engineering business

One business that answered the survey was very negative regarding the whole experience of working with the students, and failed to see any strengths of the assignment. While the survey was anonymous, there was one business that disengaged from the very start of the project. When the business was allocated three male students, he phoned me and said "he had been hoping for girls". This was unexpected and the lecturer tried to encourage him to expand on his reasons for this and he responded that he wanted a female perspective for his business. It was pointed out that the three male students had selected his business and that the age group of the students were in any case not his target market; so if he could engage with the assigned students, they in turn could survey females if required for his project. He lost interest and had minimum communication with them. The fact he told the male students at the initial meeting that he would have preferred females resulted in the project getting off to a negative start which was difficult to rectify. Frequent contact was maintained with all students throughout the assignment, and this particular group said they learned much from his

behaviour regarding how not to behave in business and how not to interact with clients. They also developed key skills for working with a group member who is not cooperating fully. The experience, while not providing the intended outcome, did provide key learning. However, overall feedback from students and businesses were extremely positive which reinforced the success of the project.

Businesses were asked to list the three most important benefits of participating in the project and they responded that it included inspiring the business owner to access the problem, getting a younger generation's opinion, stimulating new ideas and the lateral thinking of students. Four out of the five businesses that responded to the survey said they would take part in such a project again. Three businesses implemented solutions which the students provided and one was considering it. This is an 80% success rate and demonstrates the clear benefit for businesses in participating, as well as for students.

Conclusions and Recommendations

The study concludes with a summary of the impact of the active learning strategy and the range of potential skills and learning which can be developed with students in an entrepreneurial module. Students demonstrated a keen interest in learning across the twelve weeks of the project. In many cases, marketing students veered towards social media solutions, an area with which their generation is comfortable. However it is important that they explore all options as this is only one of many marketing channels.

This project achieved what it set out to do; it enabled students to learn effectively in an active, authentic setting and provided them with enhanced life skills which they could use in their future careers. It benefited businesses by providing a different generational perspective

and solutions that had real value for their businesses. Enterprise skills that were desired were demonstrated by students including communication, teamwork, problem solving, initiative, planning, organisation, self-management, learning to learn, technology, negotiation and networking.

The assignment was amended for 2013 and 2014 to include a weekly blog kept individually by students which is designed for self-reflection. It was also amended to ask to meet frequently with businesses throughout the assignment and communicate weekly to ensure both sides were in agreement regarding the route the project was taking. It is important to enhance communication skills given that the businesses identified them as vital, and the students also highlighted their importance. By including a blog and more frequent communication with businesses, this skill should be enhanced in 2013 and 2014. Some further changes could be made to the project such as encouraging students to spend some more time with the business in order to better understand the history and legacy of the company, and it is also important to ensure that the student feedback to the business is more formal and on an on-going basis, for example by incorporating meeting notes.

Overall, students engaged in the project wholeheartedly, and achieved more than just a grade from the process. The project will be maintained in future cohorts of the module and the findings from this study used to inform further module redesign.

References

- Abrahams, A.S., & Singh, T. (2010). An Active, Reflective Learning Cycle for E-Commerce Classes: Learning About E-Commerce by Doing and Teaching. *Journal of Information Systems Education*, 21(4), 383-90.
- Adler, R.W., & Milne, M.J. (1997). Improving the quality of accounting students' learning through action-oriented learning tasks. *Accounting Education*, 6(3), 191-215.
- Åsvoll, H., & Jacobsen, P.J. (2012). A Case Study: Action Based Entrepreneurship Education How experience problems can be overcome and collaboration problems mitigated. *Journal of Entrepreneurship Education*, 15, 75-97.
- Brzovic, K., & Matz, I.S. (2009). Students advise Fortune 500 company: Designing a problem based learning community. *Business Communications Quarterly*, 72(1), 21-34.
- Chaharbaghi, K., & Cox, R. (1995). Problem-based Learning: Potential and Implementation Issues. *British Journal of Management*, 6(4), 249.
- Crossman, J., & Kite, S. (2007). Their perspectives: ESL students' reflections on collaborative community service learning. *Business Communications Quarterly*, 70(2), 147-165.
- Fredricks, J.A., Blumenfeld, P.C., & Paris, A.H. (2004). School Engagement: Potential of the Concept, State of the Evidence. *Review of Educational Research*, 74(1), 59-109.
- Gabbert, P., & Treu, K. (2001). Reality check: working with meaningful projects in and out of the classroom. *Journal of Computing Sciences in Colleges*, 17(2), 191-198.
- Heriot, K.C., Cook, R.G., Simpson, L., & Parker, R. (2008). The Use of Micro Student Consulting Projects as an Alternative to Traditional Field-Based Student Consulting Projects: An Exploratory Study. *Journal of Entrepreneurship Education*, 11, 59-74.
- Horan, J. (2007). Business Driven Action Learning: A Powerful Tool for Building World-Class Entrepreneurial Business Leaders. *Organization Development Journal*, 25(3), 75-80.
- Jones, C. (2006). Constructive alignment: A journey for new eyes. *Journal of Enterprising Culture*, 14(4), 291-306.
- Klappholz, D. (2008). Organizing and delivering real projects for real clients courses. *Journal of Computing Sciences in Colleges*, 23(4), 254-256.
- Larkin, I., & Beatson, A. (2014). Blended delivery and online assessment: Scaffolding student reflections in work-integrated learning. *Marketing Education Review*, 24(1), 9-14.
- Laverie, D., A., Madhavaram, S., & McDonald, R.E. (2008). Developing a learning orientation: The role of team-based active learning. *Marketing Education Review*, 18(3), 37-51.

- Lucas W.A., Cooper, S.Y., Ward, T., & Cave, F. (2009). Industry placement, authentic experience and the developing of venturing and technology self-efficacy. *Tecnovation*, 18, 738-752.
- Milne, M.J., & McConnell, P.J. (2001). Problem-based learning: a pedagogy for using case material in accounting education. *Accounting Education*, 10(1), 61-82.
- Mitra, S., & Bullinger, T.A. (2007). Using formal software development methodologies in a real-world student project: an experience report. *Journal of Computing Sciences in Colleges*, 22(6), 100-108.
- Neck, H., & Stoddard, D. (2006). Babson College nominates The Foundation Management Experience (FME) for USASBE's Innovative Entrepreneurship Education Course, 2006 Excellence in Entrepreneurship Education Awards, United States Association for Small Business & Entrepreneurship. Retrieved: 10, May 2014 from https://c.ymcdn.com/sites/www.usasbe.org/resource/resmgr/Awards/USASBE_Innovative_Course_200.pdf
- Paulson, E. (2011). Group Communication and Critical Thinking Competence Development Using a Reality-Based Project. *Business Communication Quarterly*, 74(4), 399-411.
- Peters, R.A. (2011). Enhancing academic achievement by identifying and minimizing the impediments to active learning. *Public Administration Quarterly* 35(4), 466-493.
- Ramsay, J., & Sorrell, E. (2007). Problem -Based Learning. *Professional Safety*, 52(9), 41-46.
- Raux, D.J. (2012). An effective active approach for teaching accounting in the 21st century: using active learning, an online course management system, and a student response system. *Review of Business Research*, 12(4), 86-100.
- Sanders, M.L., Boss, A.D., Boss, R.W., & McConkie, M.L. (2011). Increasing student engagement and learning: Using big hairy audacious goals as an empowering semester project. *Public Administration Quarterly*, 35(4), 494-519.
- Shariff, A., Hasan, N., Mohamad, Z., & Jusoff, K. (2010). The Relationship between Active Teaching and Learning with Graduate's Entrepreneurial Intention and Interest. *Interdisciplinary Journal of Contemporary Research in Business*, 2(1), 283-294.
- Sheets, B.H. (2011). Action Learning in the College Classroom. *Business Education Innovation Journal*, 3(2), 30-5.
- Shepherd, D., & Douglas, E. (1997). Is management education developing, or killing the entrepreneurial spirit? *Proceedings of the 1997 International Council for Small Business World Conference*. Retrieved: 10, May 2014 from <ftp://ns1.ystp.ac.ir/YSTP/1/1/ROOT/DATA/PDF/SME/dshepherd.pdf>
- Smart, K.L., & Csapo, N. (2007). Learning by Doing: Engaging Students through Learner-Centered Activities. *Business Communication Quarterly*, 70(4), 451-7.

- Tadaton, N. (2004). Software Engineering Based on the Team Software Process with a Real World Project. *Journal of Computing Sciences in Colleges*, 19(4), 133-142.
- Tan, J., & Phillips, J. (2005). Incorporating service learning into computer science courses. *Journal of Computing Sciences in Colleges*, 20(4), 57-62.
- Trowler, V., & Trowler, P.(2010). Student engagement literature review. Retrieved: 10, May 2014 from <http://www.heacademy.ac.uk/assets/documents/studentengagement/StudentEngagementLiteratureReview.pdf>
- Ulrich, T.A. (2009). Entrepreneurially-Minded Undergraduate Business Students' Educational Preferences. *Journal of Entrepreneurship Education*, 12, 93-109.
- Wynn-Williams, K., Whiting, R.H., & Adler, R.W. (2008). The Influence of Business Case Studies on Learning Styles: An Empirical Investigation. *Accounting Education*, 17(2), 113-128.
- Zapatero, E.G., Maheshwari, S.K., & Chen, J. (2012). Effectiveness of active learning environment: Should testing methods be modified? *Academy of Educational Leadership Journal*, 16(4), 101-114.

Appendix 1

Working with Small Businesses

This case study asks you to assume the role of members of the small business. Each team will be allocated a different brief from the business you are working with.

Consideration should be given to the market the business operates in and their key competitors and requirements.

The Business:

Please consult your initial group brief and please make contact with business by Monday 4th February 2013 to arrange a meeting in order to receive a more detailed brief.

Key dates and output:

- Select and agree your group in class on Thursday 31st January 2013.
- Arrange to meet your business in early February 2013 in order to get a detailed brief from them regarding the project.
- Spend two to three hours a week on project from February until 8th April 2013.
- Groups will make a presentation to an assessment team after 8th April 2013 including representatives from small businesses. The presentation will be strictly limited to a ten slide power point presentation with annotation. Each group will have ten minutes to present and five minutes for Q&A. In the interest of fairness, timeslots will be strictly managed. The presentation will address each of the questions asked and culminate in three qualified recommendations for action.
- In addition to the presentation pack, individual group members will submit a learning log, this is due for submission by Thursday 25th April 2013. Extensions will not be given.

DT 365 Small Business Management Project

Grading guideline for group project

Project worth 30%

- Group to keep a log outlining brief from business and then timing of meetings and work done each week to reach end result. Note time spent on project and work done. One to two pages per week. **10%**
- Report to be given to business, solution for their brief. Graded on meeting brief, contents, professionalism and feedback from client. **15%**
- Presentation at end as outlined. Graded by team on professionalism and it should outline brief and end result. One to two slides on brief and remainder on solution (max 10 slides in total). **5%**

| |
|--|
| Learning Log worth 10% – submit INDIVIDUALLY on the day of the case submission. |
|--|

Points for analysis

1. In the context of your learning from the case, please describe your three key learning points. Please provide a brief rationale for each (~600 words total).
2. Please draft a learning log encompassing some of the following (~1,000 words).

- Describe the learning situation or event – not just the objectives but what did you initially perceive you were setting out to find and what did you anticipate the problems were going to be.
- What did you learn and how did you learn it? – not the conclusions, analyses and recommendations but
 - What were the problems you faced in the case research?
 - This is a learning exercise. What you learn from mistakes is important, not the mistakes themselves.
 - What strengths did you bring to bear on the project? What weaknesses did you encounter in the course of the project?
 - How could you have learned more effectively?

Please use 11 pt font size, 1.5 line spacing and adequate margins.

Slides due: 18th April 2013, presentations 22nd April and overall report 25th April 2013.

Marks: 40% [group 30%/individual 10%]

Penalty for delayed submission: 5% per day or part thereof

Appendix 2

Overview of Businesses involved in the project

| Business Sector | Project Overview |
|-----------------------------------|---|
| Nutrient Patch | Market penetration of new market |
| Self Defence | Marketing plan to provide self-defence on ships |
| Water Company | Replace water mains – marketing plan |
| Website Design | Marketing/sales plan for eDentist.ie |
| Coaching | Sales plan for specific training course |
| Insurance | Impact of insurance ad through social media |
| Construction | Marketing and sales plan |
| Supply company | Promote and grow business |
| Accountants | Design social media strategy to grow business |
| Estate Agent | Marketing Craddock Estates |
| Accountant | Formal procedure to capture information |
| Business acquisition and disposal | Identify and analyse SME sector |
| Engineers | Coordinated social media strategy for business |

Appendix 3

Survey Questions sent to Businesses

- 1) What skills did students demonstrate when working with you that would be important in the workplace?
- 2) Outline three strengths of working with DIT students on this project.
- 3) Outline three weaknesses of working with DIT students on this project.
- 4) Name three changes you would suggest for this project.
- 5) Did you notice any changes to the students as they progressed through the project. Please expand.
- 6) For your business what were the three most important benefits of participating in the project?
- 7) Would you take part in a similar project again working with DIT students?
- 8) Please outline the top five attributes in order of importance (with 1 being the most important) that you expect from a potential employee for your business:

| | |
|---------------------------------|---------------|
| Initiative | Social skills |
| Want to see the company succeed | Imagination |
| Hard working | |
- 9) Are there currently any skills you would like potential employees to have competing to your business that you currently find lacking?
- 10) Did you implement any of the solutions the students recommended? Please list parts you implemented.

Appendix 4

Focus Group Questions

- 1) What was your experience in working with DIT students?
- 2) What were the main benefits of the project to you?
- 3) Any suggestions for changes for next year?