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## TechKnow-Share: a Social Learning Framework for Group Projects

Mary Lawlor

Technological University Dublin, [mary.lawlor@tudublin.ie](mailto:mary.lawlor@tudublin.ie)

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## TechKnow-Share “A Social Learning Framework for Group Projects”

Mary Lawlor,  
School of Marketing

Contact: [Mary.Lawlor@dit.ie](mailto:Mary.Lawlor@dit.ie)

### Abstract

Many marketing students at undergraduate level are exposed to experiential learning in Years 3 and 4 where, through more varied pedagogies such as case studies and industry projects, they have a taste of real world marketing practice. It is often a challenge to engage students at second year where the theory and concepts of marketing are required to be taught, often employing a traditional passive learning paradigm (lecture based). The need to foster engagement early in a student’s learning is ever greater with a generation of students that want to construct knowledge socially and leverage Web 2.0 tools in their learning, within and beyond the classroom. The imperative to collaborate with their peers and other groups in the marketing community requires the student to develop competencies in leveraging Web 2.0 tools to enhance their experience in group projects and improve the quality of the work. The TechKnow-Share project addressed these realities with a group of second year undergraduate students that participated in the Google Online Marketing Challenge. This project also involved linkages with the Dublin Institute of Technology Hothouse companies with whom the students worked. Students were required to use a wiki for collaborative writing and webinars for asynchronous communication between students, lecturer and companies.

**Keywords:** experiential learning, meta skills, technical skills, group work, Web 2.0, wiki, webinars

### Introduction

The TechKnow-Share project was undertaken as part of a digital marketing module. The module runs over the course of one semester in a second year marketing undergraduate course and has 100% formative group assessment. The overall purpose of the project was to engage students in the practice of marketing early in their course through experiential learning using Web 2.0 tools. The project involved four partners: Google, Dublin Institute of Technology (DIT) Hothouse Companies, the Lecturer and Student groups. Google sponsor an Online Marketing Challenge by giving student teams credit to run three-week Adword search marketing campaigns for SMEs that have not yet used search marketing. The project was designed in such a way that students were required to develop their knowledge and use of Google Adwords. This enabled them to provide online advertising consultancy to DIT Hothouse companies. Students gained real experience working with a client company, received immediate feedback from their campaign and used a wiki and webinar to improve the team effort. The project process was highly structured through agreed timelines and project deliverables.

### Outline of Project

The project objectives were to:

- evaluate the Google online marketing challenge as an experiential learning project for developing industry specific technical skills
- assess the use of Web 2.0 technologies, such as wikis and webinars in improving the efficiency and effectiveness of the project
- develop a process to improve the management and outcomes of student groups.

#### *TechKnow-Share Initiative*

The Techknow-Share initiative set out to incorporate a real life learning experience for students in participating in the Google online marketing challenge. Marketing education literature informed the

design of the learning pedagogy for the project, providing conceptual frameworks for experiential learning and skills development for marketing students. The students were given training in group work and Web 2.0 tools through a webinar. They participated in two webinars to acquire the knowledge of Web 2.0 tools and update the lecturer on their progress. They learned collaborative writing skills through use of a wiki.

### *Experiential Learning*

Much of the marketing education literature points to experiential learning where students can acquire real world meta and technical skills in applied projects (Cronin 2009, Lavin 2010, Young 2010). Granitz and Koernig (2011) suggest that knowledge is socially constructed through conversations and actions with others. They further point out that Web 2.0 tools (wikis and webinars) advance experiential learning, enabling students to collaborate and learn beyond the classroom, often speeding up the production of knowledge. Considering the above meta skills classification of oral and written communication and team work, the challenge for the TechKnow-Share initiative was how to integrate meta and technical skill development in a group assessment.

Schibrowsky, Peltier and Boyt (2002) emphasise the need to blend conceptual knowledge (principles and critical thinking) with the skills required for work. Schlee and Harich (2010) use the following classification for skills:

- *Meta skills*
  - Oral communication
  - Written communication
  - Team work
- *Technical skills*
  - Software (Internet Marketing Analytics)
  - Web 2.0 (wikis and webinars)

Literature also emphasises that meta and technical skills are required, not just for entry level jobs but also for middle and upper level marketing jobs. Team work (meta skill) is considered by many authors as being crucial in the completion of complex tasks (Halfhill and Nielsen, 2007; Johnson, Johnson and Smith, 1998; Steen, 1998). Vance (2007) ranks team work skills as one of the most important attributes in graduate recruitment. This is evidenced in Chapman et al. (2010) by how Business schools have increased the number of group experiences students have in preparing them for today's group-oriented work place where they have to have developed an ability to work efficiently and effectively with others in a group. The TechKnow-Share project set out to develop these group skills in the context of experiential learning.

### *Meta skills*

Students working in groups can find the process and group dynamics complex, and often students do not have a positive learning experience (Chapman et al., 2010; Freeman and Greenacre, 2011). Students are often required to "hit the ground running" often with minimal training in group dynamics and group management techniques. This can result in intra-group conflict, lack of engagement, frustration with "free riders", (Freeman and Greenacre, 2011) and a less than optimal project submission. Katzenbach (1997) outlines the 4 Cs of effective teamwork; communication, collaboration, co-operation and compromise. To develop these skills, Prichard, Bizo and Stratford (2006) found that "prior team-skills training produced superior collaborative group work compared with that of students merely placed in un-facilitated groups".

Chapman et al. (2010) conclude from research that while groups are effective for learning, their experience can be improved by requiring groups to submit a timeline outlining the completion date for all tasks. They suggest a structured approach to group projects where the lecturer is involved not just in assessing student groups but also in managing and training groups. The TechKnow-Share

project specified that students would use agendas, minutes of meetings and reflections which were all part of a marking scheme.

### Technical Skills

The second type of skills development relevant to the TechKnow-Share project was technical skills. The increasing importance of technical skills has been documented in academic studies (Sodhi and Son, 2008; Young, 2010). Marketing positions often require that applicants possess very specialised industry skills. This, according to Schlee and Harich (2010), requires that students are competent in the use of marketing technology. Industry specific software and Web 2.0 technologies (Young, 2010), can facilitate experiential learning, improve the student overall experience (Cronin 2009) and satisfy practitioners' expectations for graduates to be technologically capable (Granitz and Koernig, 2011). The TechKnow-Share project equipped the students with skills in using Google Adwords.

### Pre TechKnow-Share Research

Prior to the commencement of the TechKnow-Share project, student experience of group work in a first semester project was analysed from reflective journals submitted by the 20 participating students. Katzenbach's (1997) framework was used to categorise their reflections into co-operation, collaboration, compromise and communication. This analysis of the students' experience of group work was consistent with the literature and directed the project's attempt to provide students with Web 2.0 tools for collaborative writing, communication and managing work within the TechKnow-Share project.

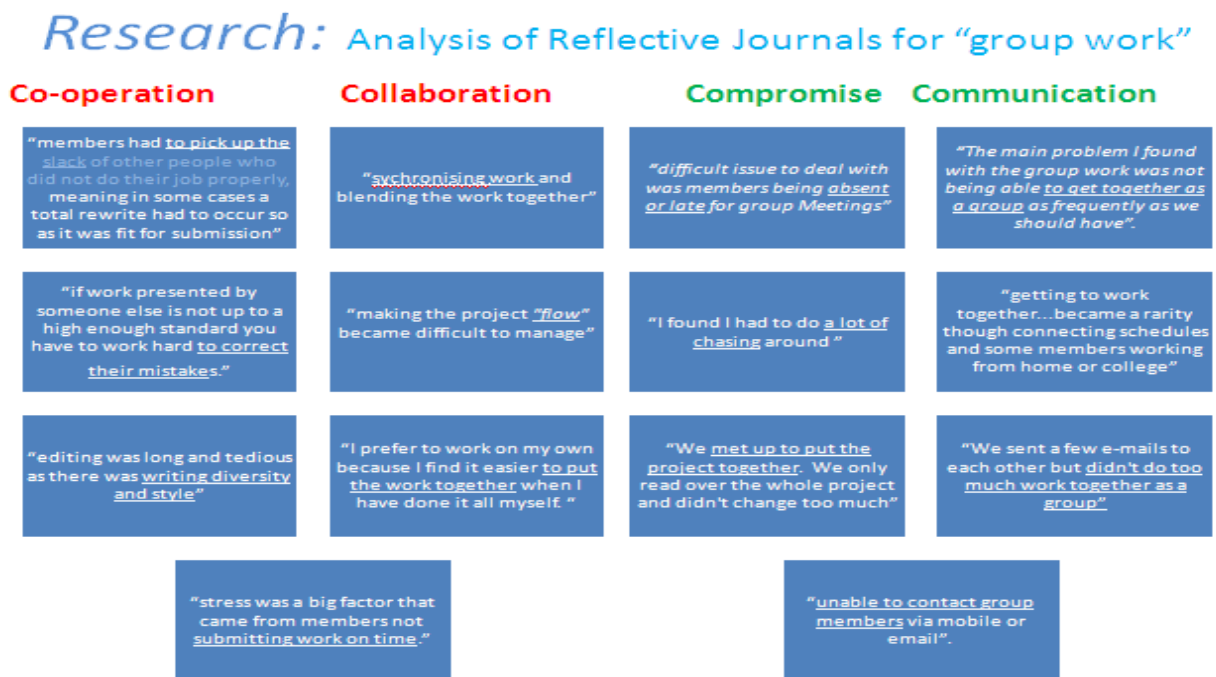


Figure 6.1: Analysis of Reflective Journals for "Group Work"

## Outline of Project

The semester long project with Google and DIT Hothouse, provided students with a dynamic learning opportunity requiring interaction with the lecturer, other students in their group and the practitioners. The Google online marketing challenge involved five student groups. Each team was given \$200 credit to manage a three week web based marketing campaign using Google's industry software Adwords. The progress of Google challenge was tracked and managed by the lecturer, using face-to-face interactions and Web 2.0 tools (Wikis and Webinars)

### *Industry Software (Google Adwords)*

The DIT twelve month Hothouse incubation programme is designed to provide entrepreneurs with business ideas, the expertise, networks and tools they need to develop highly successful global businesses. For the TechKnow-Share project, five high potential companies in the incubation stage, trading internationally were selected to participate. This link with Hothouse was considered very useful for the companies and the experiential learning component for the students and also consistent with DIT's aim of career focused learning. The selected companies had projected employment potential of ten employees in three years and a projected turnover of 1m. None of the companies had used Google Adwords prior to this project which was a requirement of Google.

The lecturer recruited the five businesses and facilitated an introductory meeting for the students and client business and a briefing for both parties. Clients were briefed by the lecturer as to the commitment involved and the expected benefits. They then met the student groups and were informed about the need for students to have access to certain company information and the company's technical/webmaster. The clients were advised that the student would act as a consultant to the client and the relationship would be between the student and the client.

In the pre-campaign strategy, students were required to give an overview of the client's business and a proposed online advertising strategy, with relevant keywords, advertising copy and the metrics used. Online tutorials on using Google Adwords and hands on computer lab work with the lecturer as facilitator provided the main structure for students learning the Adwords software. The client companies received a report from students on the conclusion of the TechKnow-Share project.

The post-campaign strategy detailed the actual campaign results, charts and recommendations for the clients. The report also required the group to reflect on the learning objectives, group and client dynamics. Students were required to continuously adjust the campaign in real time based on the decisions the group had taken and the resulting activity on the client's website. Google's 30 variable algorithm tracked the students' online activity and all changes made to the campaign. Students were assessed on their reports by Google and their lecturer.

### *Web 2.0 Skills*

*Webinars:* Two formal webinars were conducted as part of the project. Use of the webinars meant that students were able to enter the live classroom from different geographic locations. The first session began with students becoming familiarised with Wimba Live classroom, for example, use of voice board, chat and voice. In the first webinar *Learning how to use a wiki for Collaborative Writing*, students were introduced to the concepts of teamwork and collaborative writing through the use of wikis through participation. A second webinar *Progress report on Google Adwords online Marketing Challenge* was conducted after the formal classes ended and the project was still ongoing. Here, they discussed the progress of their project with the lecturer and their peers. They were graded for their participation in the webinar. Each of the two webinars was archived for students to access for reference at a later stage.

*Wikis:* Students prepared the template for their pre- and post-campaign strategies on the wiki. They were also required to use the wiki to write the reports collaboratively providing feedback on group progress through a webinar. The added feature of having the wiki documents asynchronously accessible from any location at any time contributed to the effectiveness and efficiency of the group work. The lecturer monitored the page creations and edits by each group member.

### *Management of Groups*

The role of the lecturer in this project was to act as a facilitator with the aim of improving the management and outcomes of student teams through planned co-operative activities. A process was designed to clarify the role and tasks for the lecturer, the student groups and the client companies. At the start of the project, the students were briefed on the need to appoint a team leader, plan meetings, document agendas and meetings, with a timeline to indicate the beginning and end date for all tasks. These roles and responsibilities are outlined in the following table.

<b>Lecturer</b>	<b>Student Group Dynamics</b>	<b>Client Dynamics</b>
Role: <i>Facilitator</i>	Role: <i>Leader/team member</i>	Level of client involvement
Recruit business	Meetings	Importance of Adwords to the client
Match group with client	Agendas	Access to client information
Company briefing	Minutes	Access to clients' technical specialist
Student briefing	Timeline	Student–client meetings
		Face-to-face, webinars
<i>Manage process: Group monitoring, feedback, grading</i>	Team evaluation	Student–client relationship
		Impact on clients' business

**Table 6.1: TechKnow-Share project definition of roles and tasks**

### **Project Outcomes**

Through their group based experiences as part of the Google online marketing challenge, it was felt that students developed a range of meta skills. In addition, technical skills were developed through learning how to use both Industry software and Web 2.0 technologies. These are summarised below:

<b>Meta skills</b>		
<i>Team skills</i>	<i>Written skills</i>	<i>Communication skills</i>
Co-operation	Write advertising copy	Student–student communication
Collaboration	Pre-campaign report	Student–client communication
Handling conflict	Post-campaign report	Student acts in a Consultancy role
Compromise	<b>Reflective</b> diary on learning	
Teamwork evaluation form	expectations and outcomes	

<b>Technical skills</b>		
<i>Google Adwords</i>	<i>Web 2.0 skills (wikis)</i>	<i>Web 2.0 skills (webinar)</i>
Target audience settings	Collaborative editing	Wimba Class room
Keywords	Collaborative writing	Webinar talk & text communication
Impressions, click through rates	Post comments	
PPC, CPM. Conversion rates	Hyperlinking	Interaction management
Website optimisation metrics		Accessing archived presentations
Monitor web analytics		

**Table 6.2: List of meta and technical skills developed through TechKnow-Share project**

## Evaluation

### *The Students' Perspective*

The feedback from students participating in the webinars was positive and reinforced its effectiveness and potential as a collaborative tool. Students found the technology user friendly and enjoyable to use. It was seen as a good way of communicating between groups, lecturer and clients based in different geographical locations.

Clickers were used to obtain feedback from students on the use of the wiki. Overall, students felt that the wiki enabled team members to collaborate, and improve communications with each other. In some cases, students felt that the wiki helped reduce conflict in the group as it assisted in members meeting deadlines, and work by each author could be viewed on an ongoing basis.

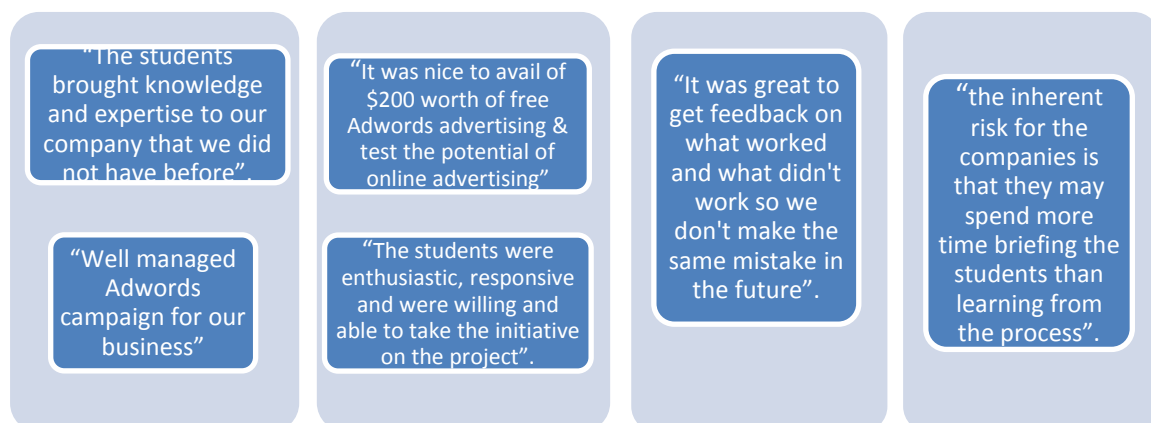


**Figure 6.2: Student feedback comments on the TechKnow-Share project**

Some students agreed that the wiki also encouraged members to take responsibility for specific tasks and enabled the work to be divided more evenly, resulting in greater transparency. Despite some groups not using the wiki to its full potential, the overall feedback suggested that it did help to improve the workings of the groups.

### *The Clients' Perspective*

After the completion of the TechKnow-Share project, the client companies were asked to provide feedback on how the Google online marketing challenge affected their business.



**Figure 6.3: Client feedback comments on the TechKnow-Share project**

The general feedback from the client companies was positive. A number of general issues emerged. The standard of consulting depended on the quality of the student groups, their relationship with the client company, their ability to deliver results from the advertising campaign and reports on their activity on schedule. This varied across groups, with some groups exceeding their clients' and their own expectations and another group falling short on promises. One company felt that the investment of their time in the student briefing was greater than the benefit of the students' contribution. Generally, companies felt that the management of the campaign by the students was professional and the student–client dynamic positive. The final feedback from Hothouse was that it was successful and an interest was expressed in participating in the TeckKnow-Share project again.

### Recommendations

A key recommendation from this TechKnow-Share project is the need for continued linkages between student projects in marketing and commercial activity within and outside Dublin Institute of Technology. There is potential for significant synergy between student and industry collaboration.

There is great potential in the design of student projects to give students the multiple learning opportunities to be technologically capable on graduation, to a business environment with increased expectation of graduates.

### Proposed Future Work

The TechKnow-Share project will continue in the academic year 2011–2012. Based on the findings of the student and client company research more support for the client companies in the form of online Adwords tutorials will be made available in advance of the project.

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### References

- Chapman, K.J. Meauter, K.L., Toy, D. and Wright, L.K. (2010) Are Student Groups Dysfunctional? Perspectives from Both Sides of the Classroom. *Journal of Marketing Education*, 32 (1), 39–49.
- Cronin, J.J. (2009) Upgrading to Web 2.0 An Experiential Project to Build a Marketing Wiki. *Journal of Marketing Education*, 31 (1), 66–75.
- Freeman, L. and Greenacre, L. (2011) An Examination of Socially Destructive Behaviors in Group Work. *Journal of Marketing Education*, 33 (1), 5–17.
- Granitz, N. and Koernig, S.K. (2011) Web 2.0 and Marketing Education: Explanations and Experiential Applications. *Journal of Marketing education*, 33 (1), 57–72.
- Halfhill, T.R. and Nielsen, T.M. (2007). Quantifying the “Softer Side” of Management Education: An Example Using Team Competencies. *Journal of Management Education*, 31, 64–80.
- Johnson, D., Johnson, R. and Smith, K. (1998) Cooperative Learning Returns to College: What Evidence Is There that it Works? *Change*, 30 (4), 26–35.
- Katzenbach, J.R. (1997) The Myth of Top Management Teams. *Harvard Business Review*, 75 (6), 82–92.
- Lavin, M. (2010) The Google Online Marketing Challenge. *ABD Journal*, 2.
- Prichard, J.S., Bizo, L.A. and Stratford, R.J. (2006) The Educational Impact of Team-skills Training:



Preparing Students to Work in Groups. *British Journal of Educational Psychology*, 76, 119–140.

Schibrowsky, J.A., Peltier, J.W. and Boyt, T.E. (2002) A Professional School Approach to Marketing Education. *Journal of Marketing Education*, 24, 45–55.

Schlee, R.P. and Harich, K.R. (2010) Knowledge and Skills Requirements for Marketing Jobs in the 21st Century. *Journal of Marketing Education*, 32 (3), 341–353.

Sodhi, M.S. and Son, B.G. (2008) ASP, the Art and Science of Practice: Skills Employers Want from Operations Research Graduates. *Interfaces*, 38, 140–146.

Steen, M. (1998) Managers Seek to Balance Individual Rewards with Group Goals. *Infoworld*, 20 (37), 91–92.

Vance, E. (2007) College Graduates Lack Key Skills. *Chronicle of Higher Education*, 53 (22), A30.

Young, M.R. (2010) Transforming the Initial Marketing Education Experience: An Action Learning Approach. *Journal of Marketing Education*, 32 (1), 13–24.