

# KNOWLEDGE EXCHANGE THROUGH COLLABORATIVE LEARNING COMMUNITIES

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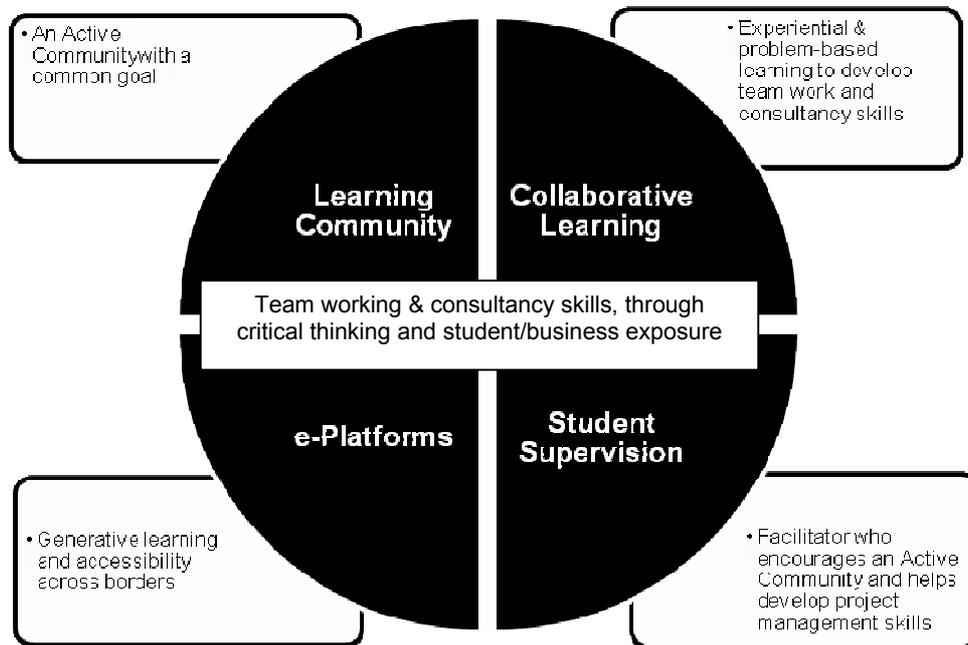
**Abstract** Purpose – To investigate how Collaborative Learning Communities (CLC) can be developed and managed in Higher Education Institutions (HEI), involving international HEI partners, business clients, students and staff, with the aim of delivering real value to all parties involved. Design/methodology/approach – Using a case study approach, the paper elaborates on the creation of two CLCs on the modules Electronic Marketing (BA (Hons) Marketing) and Collective Enterprise (Master of Business Administration). Findings – The traditional in-class teaching needs to be extended using multiple platforms if HEIs are to deliver a collaborative student learning experience. The facilitation and management of the CLCs is most effective when supported by online and offline communication channels and supervision. Originality/value – The paper extends the current understanding of CLCs whilst also providing significant insights into the challenges of managing such CLCs in practice. This is useful to other HEIs wanting to integrate external parties in their student learning communities.

## Introduction

The paper explores key areas that are important to establishing successful Collaborative Learning Communities (CLCs) and provides insight into two CLC programmes within the University of Hertfordshire Business School in the United Kingdom. The uniqueness of the CLCs lies in the inclusion of regional and international partners, including overseas Higher Education Institutions (HEIs), business clients, academic staff and students. The concepts are effective due to being mutually beneficial, operationally feasible, cost-effective and transferrable onto other University faculties beyond Business and Management. The CLCs have provided Hertfordshire students a unique learning experience, whilst also helping the institution to differentiate its student offer. We will discuss how CLCs can be built, address challenges within the communities and how these were successfully executed.

## Literature review

We have identified four key areas that are essential to the creation of effective CLCs with the aim of developing students' team working and consultancy skills through collaborative participation (*see Fig. 1*). In the following sections we will give a brief overview of these four areas whilst also identifying reasons for integrating CLCs within programmes and modules in HEIs.



**Figure 1:** Key Drivers for Effective Collaborative Learning Communities (CLCs)

### Learning communities

According to Burgoyne and Reynolds (1978 in Tosey 1999) a learning community is an “umbrella term to describe learning situations where a group of people come together to meet specific and unique learning needs and to share resources and skills” (p. 403). Cross (1998) defines a learning community as “Groups of people engaged in intellectual interaction for the purpose of learning” (p.4). The author (p.10) further argues that the use of learning communities may indeed enhance students’ readiness for the workplace whilst also “educating them for good citizenship”. Wenger (1998) distinguishes a community from a team in that a community is “defined by knowledge” rather than by task, and exists as “participation has value to its members” (p.4). The exchange of mutually beneficial value is essential to the success of CLCs. Significant elements of our CLCs were experiential and problem-based learning through business integration and international student/staff collaborations. Referring to Wenger’s (1998) Stages of Development for communities (see Fig. 2) the aim was to reach the stage of an Active community, engaging all participants in the set activities and sharing valuable knowledge to enhance the final outcome.

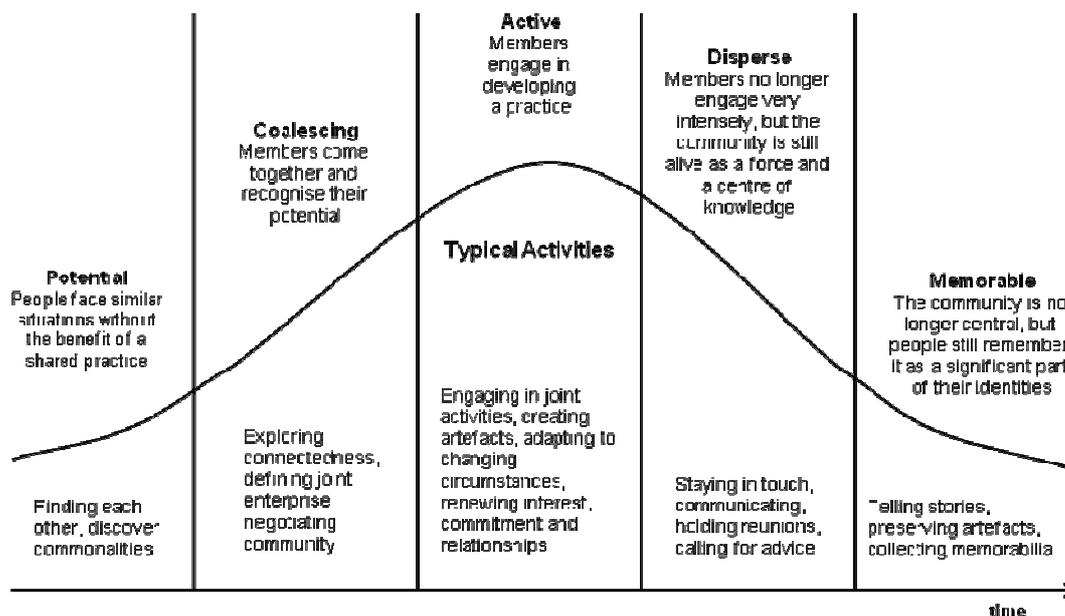


Figure 2: Stages of Development (source: Wenger, 1998)

## Collaborative learning

According to Doolan, Thornton and Hilliard (2006) students working together tend to develop deeper learning due to their active participation in the learning, compared with students who work in “competitive and individualistic settings” (p.8). Gupta (2004) claims that those students who collaborate, as a consequence, often deliver better outcomes. Kolb (1984) inspired by Lewin (1951) created the Learning Cycle based on the belief that people learn through experiences (Cowan, 1998). However, having experiences does not always lead to learning (Honey and Mumford, 1992) and therefore it is important to encourage students to use different learning styles to strengthen the individual learner’s ability to go through all stages of the Cycle (Mumford, 1996) and be in control of their own self-development (Vince, 1998). In combination with experiential learning, the CLCs lead students to problem-based learning, a constructivist learning approach (Savery and Duffy, 2001) defined as “an understanding of one’s own knowledge needs, application of knowledge to novel problem solutions, collaboration and lifelong learning” (p.3). Using experiential and problem-based learning does require the module tutors supervising student teams to be more involved in the projects whilst also building local and global learning communities (Doolan et al., 2006). Several authors have established the need for processes and guidance for participators who take part in collaborative learning (Hartley, 1999; Maor, 2003). The role of the student supervisor will be presented below.

## Student supervision

Staff supervision of student teams is significantly supporting collaborative learning, student progression and development. Supervisors should provide students with guidance and direction that help them to understand how to interact with fellow students as part of a CLC. According to Fry, Ketteridge and Marshall (2009) the supervision of projects requires both the supervisor and the supervised students to use their project management skills to manage the progress of the work. Day (1998 in Fry et al., 2009) puts forward that it is a challenging task for the supervisor to find the right balance between getting too involved in the project and being too detached. Ideally, the supervisor should take on the role of ‘facilitator’ as this offers “the greatest potential for

student learning” (Fry et al., 2009). The supervisor should encourage dialogue with the supervised students throughout the project and help them plan the work, setting realistic deadlines (Stone, 1994).

### **e-Platforms for collaborative learning**

The main purpose of adopting e-learning is to enhance the students’ learning experience by adding value to the teaching and learning activities (Poon, Low and Yong, 2004). The benefit of using online communication channels to manage collaborative learning is the level of transparency and flexibility such platforms provide for all involved. This makes it easier for the teaching team to intervene or contribute when the students need guidance or feedback and also for peer-to-peer support and feedback within the teams (Crook, 2003). Pilkington, Bennett and Vaughan (2000) argue that when students work together in online teams the key to success is to encourage students to take ownership of the set tasks and manage these within the team, including delegation of work. Bonk (2004) argues the use of e-learning can encourage “generative learning” among students rather than “passive reception”. Several skills seem necessary for students to have in order for this to happen including self-discipline, cognitive engagement and technology self-efficacy (Poon et al., 2004).

### **Case studies**

In the following section, we present two case studies that explore the development, management and execution of CLCs in practice. Similar for the case studies is that both modules enable the high-performing students to benefit from intensified engagement without an upper ceiling, whilst the others benefit from the peer learning and collaborative nature of the modules. Particular for case study 1 is the embedded competitive work placement scheme, whilst case study 2 has a strong focus on international collaborations with business and HEIs.

#### **Case study 1: Electronic Marketing, BA (Hons) Marketing (Level 5)**

The undergraduate students on the Electronic Marketing module work in teams and each team is allocated a ‘real’ digital marketing agency and business client. The module teaching team and agencies identify key challenges faced by the business clients and based on this, business briefs are developed for the students to work on. As such, the tasks students are set are ‘real’ issues currently experienced by the organisations. The module has a significant competitive element as students are required to submit a Commercial Project Pitch in order to win a work placement with their agency. The Pitch is a presentation of the recommendations and ideas the students have gathered four weeks into the module and is assessed by the digital marketing agencies and the teaching team. The students who best demonstrate creativity and ability to develop viable business solutions are awarded a 3-day work placement with their agency. During the placement the winning teams further develop their ideas and strategies for the business brief with close guidance from the agency. The module culminates with a highlight event, e-mktgEDGE, attended by business delegates, staff and students. Students are invited to attend the event which includes several workshops by industry experts and a debate amongst a distinguished panel of e-marketers. As part of the assessment students submit a reflective discussion and recommendations for their client based on the insights gathered from the placement, workshops and the debate. The Electronic Marketing CLC Development Cycle below (see Fig. 3) demonstrates the process-driven nature of the initiative, facilitating an ongoing contribution for students and community partners.

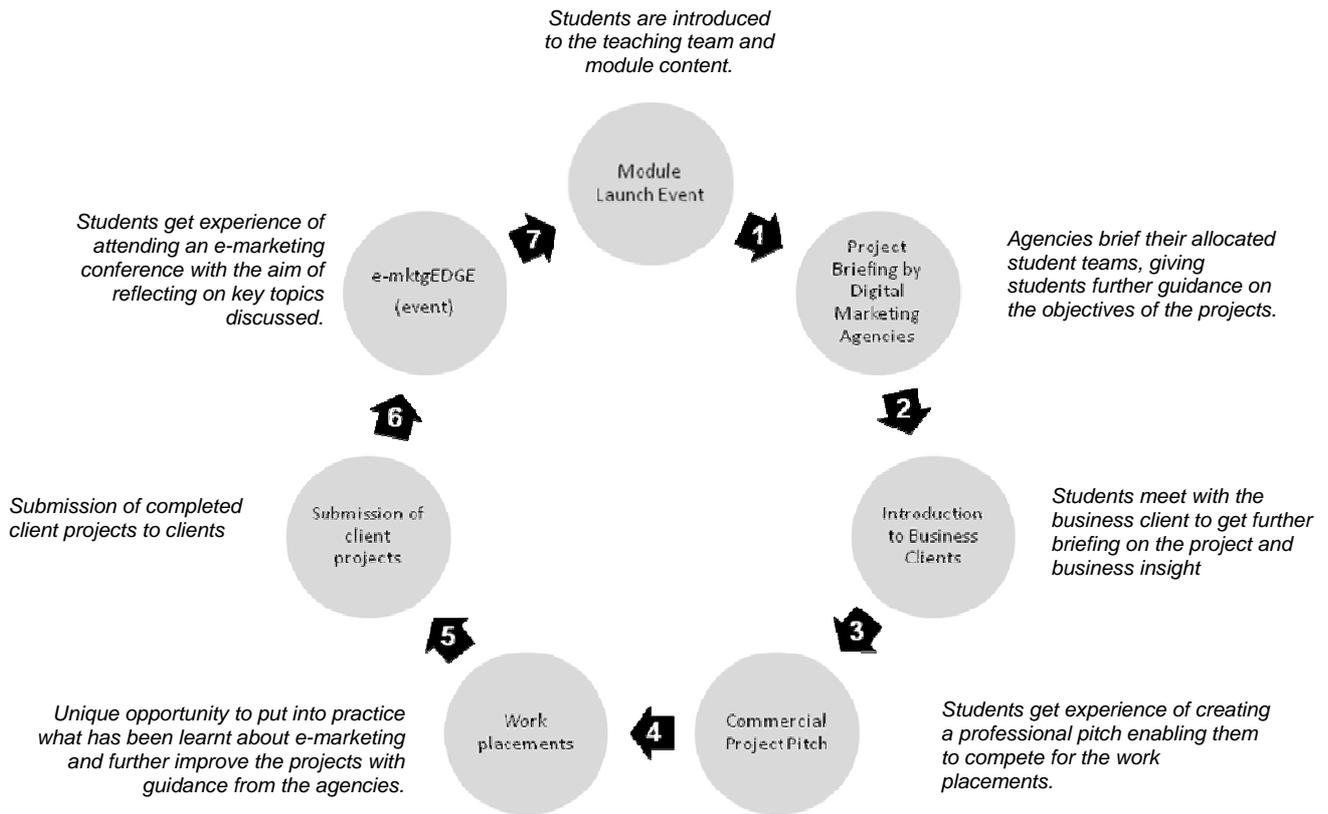


Figure 3: The Electronic Marketing CLC Development Cycle

### Case study 2: Collective Enterprise, MBA

In the innovative Collective Enterprise module students are partnered with other MBA students studying at HEIs across the world, to work as collaborative teams on international business issues. Business briefs are provided by leading international organisations such as IBM, Xerox, Harman International, Sunmark, Herbert Retail and the Global Marketing Network. The international students working with Hertfordshire MBA students come from several overseas educational collaborators such as Fordham University and Texas Tech University in the US and Birla Institute of Management Technology (BIMTECH) and International Institute of Leadership and Management (IILM) in India. Within a workshop-based environment student teams build up a four-stage business proposal by applying collective learning (see Table 1). The alliances further enable students to broaden their own experience, learn how to work as part of an international consultant team, and gain a view of current global business challenges and sustainable solutions.

Table 1: Four-Stage Business Proposal & Assessment Strategy

Collective Enterprise - Business Project - Client/Partner Institution Perspective			
<b>Business Problem/Objectives</b> Client Briefing - 2 page summary of challenge - specific	<b>Business Internal/External Analysis (Desk Research)</b> Additional Support –	<b>Business Internal/External Analysis (Primary Research)</b> Access to client's	<b>Business Strategy Development (Report/Presentation)</b> Presentations and

problem, internal or external issues, or potential opportunity. Presentation to student groups (2 - 3 students per client)	periodic telephone or Skype sessions between the group/client. Access to internal documentation – market reports, strategy documents or other data.	customers, suppliers and sales channels - using the clients' existing channels to conduct interviews, surveys and focus groups - in addition using partner institutions access to relevant market sector.	Final Report - attendance at final presentation of findings and recommendations. Review and comments on final report from student groups.
<b>Partner Institutions</b> Briefing - same as for student briefing - access to client brief and video of initial presentation.	<b>Partner Institutions</b> Analysis of available desk research on end-market - reports, articles and published materials on the internet.	<b>Partner Institutions</b> Primary Research – conduct survey, interviews and focus groups, agreeing content with UH group	<b>Partner Institutions</b> Strategy Development – joint development of final report and recommendations
<b>Delivery</b> Part-time - October, 2010 Full-time - February 2011 Report - 4 page overview of problem and anticipated approach	<b>Delivery</b> Part-time - October 2010 Full-time - February 2011 Report - 12 page synopsis of internal and external challenges and identified gaps in knowledge	<b>Delivery</b> Part-time - December 2010 Full-time - March-April 2011 Report - 12 page overview of research findings - summarizing desk and primary research.	<b>Delivery</b> Part-time - January 2011 Full-time - May/June 2011 Report - final report (30-35 pages) - outline of business problem, findings, strategy options, recommendations.

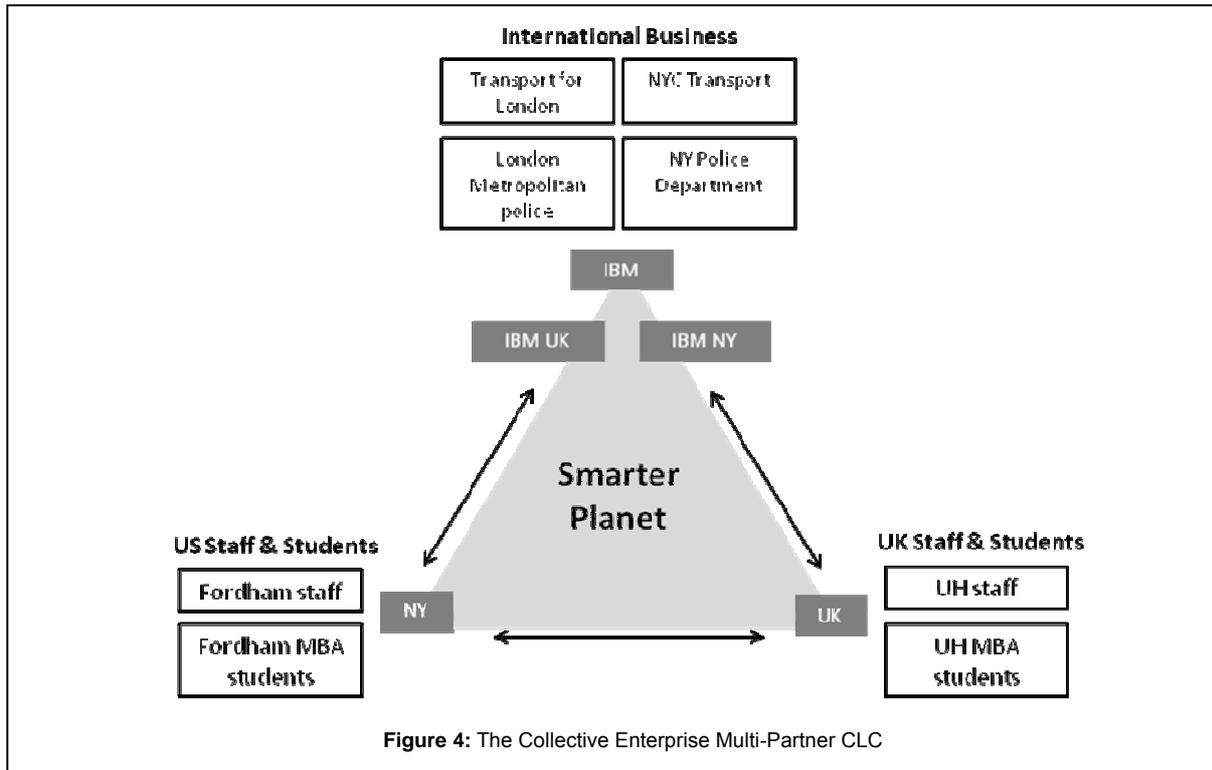


Hertfordshire - IBM - Fordham CLC

Students are partnered with other MBA students from Fordham University in the US and together they form a transatlantic team, bringing different perspectives and skill sets to bear on the business challenge (See Fig. 4). During this initiative the students focus on IBM's 'Smarter Planet' programme and investigate two key areas:

- How the smarter use of technology can provide improved solutions to metropolitan transport issues using a comparative analysis between London and New York, two of the busiest cities in the world,
- How smarter technology can create safer communities and neighbourhoods and reduce crime in New York and the suburbs of London

The Hertfordshire and Fordham MBA students travel to each others' cities to initially meet each other to form teams and to conduct research, visit and interview key personnel at IBM UK and US, Transport for London, New York Police Department and the Metropolitan Police in London. The projects are exclusively group-work based and each of the progressive stages is assessed by the academic team who supervises and manages the research, evaluation, analysis and strategic implications.



**Discussion**

The CLCs create multiple benefits for parties involved and provide further opportunities for students who are keen to improve their performance on the modules, gain exposure to real businesses, creative agencies and overseas institutions, whilst adding valuable experience to their curriculum vitae. The Electronic Marketing and Collective Enterprise CLCs are unique due to their external partnerships and interaction with students located at overseas and transatlantic institutions. A Key Features Summary of each case is presented in Table 2, followed by a discussion in which we address the challenges faced and ways in which these were overcome.

**Table 2: Key Features Summary**

Case Study 1	Case Study 2
<b>Electronic Marketing - BA (Hons) Marketing</b>	<b>Collective Enterprise – MBA</b>
Embedded digital agency work placements Transferrable skills and employability Experiential nature/learning  Commercial project pitch Use of e-platform Competitive nature	Client-partner aspirations International HEI contribution Team work across cultures and geographical boundaries Transferrable skills and employability Business interaction/interface via presentation Progressive nature replicating real business scenarios Use of e-platform

**Knowledge exchange with business clients & partner institutions**

Engaging with multiple parties and working towards a common objective is often a challenge. Persuading businesses to work with HEIs can initially be a challenge until tangible benefits are realized. The outcome of the collaborations is knowledge-based, for example innovative and creative business solutions and fresh thinking on business operations and marketing. Early discussions with potential outcomes helps curtail uncertainty where clear objectives, progression routes and activity plans are agreed. A high level of accurate communication is necessary in order for all parties to understand how they can add value to the CLC.

At the start of the CLC process, students and the teaching team attend a project briefing with the business/agency giving members of the CLCs an opportunity to further clarify the business briefs and deliverables. During the semester the students and the supervisory teams continue the close relationship with the business clients/agencies/HEIs. The progress is evaluated based on the projects' activity plans. For the Collective Enterprise CLC, the supervisors have a proactive role to play at each stage of the project that includes taking part in Skype conference calls with the partner HEIs. Once the triangular relationship has developed and the parties have gained a good understanding of the deliverables, the supervisors may chose to devolve communications and monitor project progress through shared e-platforms.

As the projects progress, it may be required for some of the deliverables and objectives to be reviewed. Whilst in a commercial environment this may be acceptable and necessary, in an academic CLC, this might be more difficult to achieve due to assessment deadlines. However, with well-established triangular relationships between business, students and academics, key deliverables can be effectively reviewed and a move towards an Active Community is achieved (Wenger, 1998).

Essential to a successful CLC is the delivery of viable and executable business solutions by the student teams for the business clients. Being one of the main purposes of the CLC, it is interesting to see how students understand and interpret the business challenges they are presented with. Students on the Electronic Marketing module who had been on the agency work placement felt they had been able to put theory into practice and had gained a better understanding of how creative agencies work. The knowledge gained during the placements was the basis for the students' assessed projects. Yorke and Knight (2006) claim that "practical problem-working and contributory skilled practices are often components of success in employment" (p.12). This is supported by Greenbank, Hepworth and Mercer (2009) who suggest that students exposed to work experience and practical decision-making during their degree are better equipped to enter the world of employment upon graduation.

Majority of the students on both modules succeeded and delivered real value to their business clients – a fine example of effective knowledge exchange through CLCs. However, some students failed to fully engage with and make use of the opportunity. This can be attributed to the lack of prior exposure to real business operations, causing some anxiety and discomfort, especially at the initial stage of the project (Hoffman and Ritchie, 1997).

### **Engaging students**

It was clear that the level of student engagement varies where some early adopters start addressing the business challenges from the start, whilst others may lag behind. It is at this stage that the supervisors need to ascertain the level of student engagement in order make swift progress through the pre-planned stages of the project. Understanding the level of engagement, group dynamics and the challenges faced by the students early on in the process is critical to delivering an exceptional student experience.

In the Electronic Marketing module the supervisory team effectively used the stronger students to encourage others by using peer learning strategies. This helped motivate others and to provide the necessary confidence to the rest of the team. The progressive nature and the staged assessment strategy for Collective Enterprise CLC in particular, helps keep complex team structures working at an even pace. The staged structure drives the short term objectives where regular evaluative meetings facilitate future actions. Moreover, the staged approach to assessment helps students to learn, understand and apply complex business concepts more easily where advanced knowledge is built. For supervisors to better understand the cultural dimensions of the groups and to proactively act to ensure the progression of the projects, effort must be made to obtain the student profiles and curriculum vitas prior to the project start.

Timely student engagement, ability to work within teams and plan ahead challenged some students and affected the level of activity within the CLCs. Team working skills are increasingly becoming important to enhance employability and graduate attractiveness (Kayes, Kayes and Kolb, 2005). Therefore, it was important for the supervisors to help the students by monitoring weekly progress online and provide feedback on a continuous basis. The effective use of StudyNet (University of Hertfordshire's virtual learning environment) was essential to support and engage the students, whilst providing them with the "flexibility, convenience and accessibility" to work and collaborate on their projects outside class (Balaji, 2010, p.2). Students were further supported through access to the teaching material and additional reading and information (Pena-Shaff and Nicholls, 2004). This provided some students an opportunity to catch up with missed sessions and continue to take part in the group work. As part of the CLCs some students found it a challenge to encourage non-participating members to contribute, attend group meetings and generate new ideas. Two reasons can help explain the lack of student engagement experienced despite the resources invested by the teaching team; firstly, the very nature of CLCs, as collaborating online is not a learning style that accommodates all learners and some students may find the collaborative element stressful (Laurillard, 2002). Secondly, it is not unusual for students to be unhappy about their fellow group members, due to poor work ethics and commitment (Kayes et al., 2005).

### **Learning styles and cultures**

Education systems and methods are culturally dependent and therefore students from different parts of the world acquire different learning styles (Hofstede, 1986). The students on the Collective Enterprise module come from over ten different nations (including UK, India and Nigeria) and are required to work with other student teams at US and Indian partner HEIs who also have a broad ethnic mix including African American, Indian, Korean, Italian and Chinese. Many of these students have studied at different HEIs prior to enrolling on the MBA and gained work experience employed in a variety of business sectors. The differences in ethnicity, prior education and work experience impact the group dynamics within the CLCs. According to Adams, Kayes and Kolb (2004) groups that display differences in "personality, education, special skills and background" achieve better results than more homogeneous groups. However, these differences are also displayed in differing traits of learning styles (Belbin, 1981). McLoughlin and Oliver (2000) mention several cultural issues that impact the instructional design and use of e-platforms. Among these are the importance of understanding learners' needs and preferences; the tutor's role in providing appropriate feedback and monitoring the online activity. They also suggest that collaboration and co-construction in terms of encouraging students to work in teams and sharing knowledge are impacted by cultural variances. However, proactive supervision and close monitoring of progress by supervisors, online as well as face-to-face, facilitated the

students' understanding that different skills and abilities within a group can be used to strengthen the overall group performance (Kayes et al., 2005).

### **Multiple platforms to deliver collaborative student learning experiences**

The successful CLCs discussed in this paper are much dependant on the smart use of technology in order to create effective knowledge sharing amongst the participating collaborators. Several communication channels were used including StudyNet, Google Documents (online file sharing platform), Skype, Video Conferencing and telephone. Selecting the appropriate combination of e-platforms and collating the information to a central hub is critical for the continuous progression of the CLC. The student teams were reliant on StudyNet and in particular the dedicated group spaces, where students project-managed their assessment and deliverables through virtual discussions within the team, uploading files, relevant reports and scheduling meetings. Balaji (2010) argues that an online discussion forum can be used to "address issues through argumentative and collaborative discourse" (p.1) and encourages active participation (Thomas, 2002). The use of e-platforms was essential in helping the student teams and to update businesses, creating a single learning community.

e-Platforms act as reliable facilitators to enhance experiential learning and are directly linked to a successful CLC. The challenge lies within the level of adaptability of the chosen e-platform and the extent to which participants of the CLC identify the e-platform as the central hub for sharing information. The use of an e-platform should not replace the face-to-face interaction between the CLC partners, as although students may be comfortable using technology, they still prefer a face-to-face interface (Stonebraker and Hazeltine, 2004; Jeffries, Thornton, Parkhurst, Dooland and Alltree, 2004; Jeffries, Quadri and Kornbrot, 2006; Barrett, Rainer and Marczyk, 2007).

### **Conclusions**

The success of these CLC initiatives will depend on how learning communities exchange knowledge efficiently and effectively. The teaching team may chose to use selective e-learning platforms as accessibility and sharing of information is critical to the successful progression of a CLC. These create a readily accessible platform for communication across the CLC to exchange knowledge and ideas, brainstorm and more importantly arrive at sustainable business solutions.

Undergraduate students get a feel for what it is like to deliver viable solutions to real business challenges whilst understanding the complexities involved with working in teams, liaising with business managers and staff. Postgraduates on the other hand get the opportunity to formulate strategies that are critical for business growth in a safe and supported environment providing them with essential business exposure through live international business integration.

The long term success of learning communities will always depend on the deliverance of mutual benefits to all parties involved in the CLC. Whilst experiential learning will become essential for business graduates, creating win-win relationship will be important for the sustenance and continued participation by businesses.

The benefits of CLCs outweigh the limitations. As the world becomes smaller through the use of e-platforms it enables students to widen their exposure. HEIs will be required not only to internationalise its curriculum but also ensure built-in business integration activity, placements and live client interaction in order to produce graduates who have the right skills, knowledge and exposure. Funding these CLC activities may be a challenge to HEIs. However, it is believed that as long as the student groups can deliver real value to businesses, organisations will see HEI-

initiated CLCs as a source of inspiration and new thinking that deliver viable business solutions for the future.

### Recommendations

Based on the above, a number of recommendations are suggested;

No.	Recommendations
1	Open access to chosen e-platforms by business clients, overseas partners and creative agencies may facilitate enhanced knowledge exchange
2	Cross-modular assessment to reduce over-assessment and ensure a better, more effective assessment regime reducing anxiety and undue pressure
3	Introduce clear and applicable mechanisms to evaluate individual student contribution to CLCs that will encourage students and ensure a fair assessment and rewarding scheme
4	Actively invite businesses to collaborate with HEIs, including the expansion of international business integration on all University programmes
5	Timely guidance to be provided to students on team working and benefits of peer learning will assist the adoption of CLC-based assessment
6	HEIs must invest and adopt advanced project management and data sharing software to facilitate better, more effective CLCs

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