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Innovating an integrated approach to collaborative eLearning practices in higher education: the case study of a corporate communication e-platform

Introduction

Recent two decades have seen burgeoning interests in proliferating online collaborative learning practices in a competitively learner-driven, professional education environment (Pagagiannidis 2013; Sandars 2003; Sandars et al. 2007). Particularly, McConnell (2000) observed the appeal of online discussion boards lies in the rapid interactivity between online users or learners. Consulting from the management side of e-businesses, Hall (2007) highlighted that employees as learners gain in productivity, group solving, adaptability and competence, as their online sharing increases. Such online collaborative learning gains are encapsulated in five approaches he recommended (2007), namely, community building, knowledge transfer and sharing, process and workflow, team learning, and networked learning.

Extending the notion of e-learning technology applications from e-business to professional education, Perez-Greene (2005) argued that academics stand to benefit from the transformative e-learning technologies in teaching and learning because such innovations not only explain why educational institutions drive for meeting internal efficiency demands but also reveal the market reality that learners themselves are already technologically savvy and demanding. In a similar vein, Giles (2009) advocated broadening the scope of international economic affairs in the globalization epoch by incorporating flexible learning needs into student-centered pedagogy (as quoted in Son

2016). Heeding this call for a pioneering attempt to link innovative collaborative learning to eLearning strategies in an online MBA course, Son (2016) in a conference paper publication outlined an integrated collaborative eLearning model, comprising four components of collaborative-innovative lessons, flexible multimedia learning tools, customized active learning activities and integrated learning environment.

Notwithstanding general insights into the vast benefits of eLearning and collaborative learning strategies, which appear either depicted on their own right or hanging singly in the conceptualization balance in prevailing empirical research, studies in designs and implementation of an integrated pedagogic approach toward eLearning and collaborative learning practices in a professional educational development context remain few and far between. This article will address this dire need to bridge this gap between a compartmentalized approach toward innovative collaborative pedagogies and empirical research inquiry into a comprehensive case study of blending collaborative eLearning strategies in a Public Relations (PR) and Corporate Communication (CC) university course context. The present study follows through a three-year project case entitled, Corpcommsynergy, which examines how learners perceive an integrated eLearning and collaborative approach in an e-platform implemented in a PR/CC course at a Hong Kong university. The ensuing sections will cover an extended literature review, methodology, quantitative cum qualitative findings and discussions on factors influencing positive learning experience via a collaborative eLearning approach, and conclusions embodied in this empirical study.

Integration of eLearning and collaborative learning in Public Relations/Corporate Communication education

Increasingly, higher education institutions have turned to eLearning applications to deliver a broad array of market solutions to enhance knowledge and performance of teachers and students (Rosenberg 2001). eLearning refers to using new technologies in enhancing learning or learner support (Laurillard 2006), which serves the higher education sector undergoing transformation in a rapidly digitalizing world (Williams 2002). Studies have focused on a variety of relevant aspects, ranging from pedagogical issues, such as how an e-course should be developed (Goodyear 2005; Lee and Reigeluth 2009) and how teachers and students perceive adopting eLearning in course delivery (González 2010; Mondi, Woods, and Rafi 2007). Modes of eLearning encompass all forms of telecommunication and computer-based learning (Bates 2005; Dwyer, Barbieri, and Doerr 1995; Palloff and Pratt 2007; Yang and Liu 2007). eLearning students engaged in interactive discussions carried out on these online forums create a simulated socio-cultural environment in which to explore and co-construct their knowledge (Gulati and Gardens 2006).

eLearning as an ICT-based higher education innovation reaps tremendous pedagogic benefits but its efficacy also rests upon due consideration of learner factors, particularly, online community practices. eLearning solutions offer a learner-centered, virtual learning community in which to co-construct knowledge in an independent learning mode (Lai 2015; Zhu et al. 2009). Significantly, Minasian-Batmanian (2002) contends that computer expertise, technology access and motivation levels of the students play a crucial role in determining effective eLearning experience while students' eLearning quality is linked to their perceptions of eLearning environment (Ginns and Ellis 2007). Common factors contributing to effective eLearning resolve around online community

practices in facilitating independent learner strategies and motivation in educational processes (Kim 2000; Preece 2000; Rennie and Morrison 2013). However, as Cuban (1986, 2009) as well as Zhao and Parks (1995) contended, technological potentials do not guarantee direct educational benefits. Studies have shown that developing e-courses is complicated as many online courses lack careful logistic-technological considerations in practice (Carr-Chellman and Duchastel, 2000). In ascertaining the merits of online community practices said to be associated with effective eLearning solutions, it behoves online pedagogic innovation studies to consider the concept of collaborative learning in higher education context.

Collaborative learning as a pedagogic paradigm embodies a social constructivist view towards teaching and learning (Osman et al. 2011). It enhances quality of active student learning in promoting exchanges of ideas and experiences (Carini and Kuh 2003; Chickering and Gamson 1987; Elliott and Reynolds 2014). In higher education context, it involves various pedagogies that encourage students to work together to grasp a subject matter (Osman et al. 2011) and produce more powerful academic results than individualistic or competitive learning approaches (e.g. Carlsmith and Cooper 2002; Johnson and Johnson 1981; Osman et al. 2011; Springer, Stanne, and Donovan 1999). This approach not only cultivates students' academic competences, critical thinking and self-confidence, but also develops their social skills such as communicative ability and a sense of responsibility (e.g. Bowen 2000; Gardener and Korth 1996; Prichard, Bizo, and Stratford 2006), and thus fosters both cognitive and social qualities (D. W. Johnson, R. T. Johnson, and Stanne 2000).

Effective collaborative learning, highly dependent of mastering group dynamics, may hinge on three factors. The first factor recognizes the group-structuring conditions as pivotal in effective collaborative learning, such as group composition, group size and nature of the tasks, etc. (Dillenbourg et al. 1996; Webb and Palincsar 1996). Another factor is associated with learners' and teachers' cognitive-psychological attributes. Jones and Issroff (2005) identified three main areas in students' online learning collaboration: the learning settings, the online community and the role of computers in helping social-emotional development. ICT development is a third factor driving collaborative learning. For instance, a longitudinal study by Alavi, Wheeler, and Valacich (1995) found students who used desktop videoconferencing to be more committed and bonded with group members. As Zhu et al. (2009) reiterated, a collaborative eLearning environment is essential in determining the students' performance in an eLearning course.

Yet, many previous studies tend to focus on the benefits of blending eLearning and collaborative learning practices in university-wide, instead of disciplines-specific, higher education contexts (e.g. Alkhalaf et al. 2011; Ginns and Ellis 2007), let alone an integrative approach of eLearning and collaborative learning in public relations (PR) and/or corporate communication (CC), popular fields within business communication disciplines. Integrating eLearning and collaborative learning methods, though perceived as distinct pedagogies in higher education, serves a common educational goal of facilitating effective and interactive knowledge construction process, especially for students in PR and CC, two closely related disciplines in Hong Kong (Ngai and Ng, 2015). Studies on PR/CC education have covered a big variety of topics, ranging from professional aptitudes for PR practitioners (Ragas, Uysal, and Culp 2015; Swanson 2011) to curriculum design for PR and even CC pedagogy (García 2010; Shen and Toth 2013). Coombs and Rybacki (1999) criticized that PR educators are rather slow in utilizing new technologies in the classroom and research on PR pedagogy lags behind. Indeed, the research landscape on PR/CC pedagogies reveals a pressing need to examine virtual learning applications and collaborative learning in the

professional education field. Recently, the Commission on Public Relations Education reports (1999, 2012) has reviewed the latest developments in the field of PR education urging the field stakeholders to heed innovative pedagogic practices. Henceforth, blending of eLearning and collaborative learning could hail as resourceful and novel means of gaining professional knowledge. The following part addresses the pedagogic thrusts of blending collaborative learning with eLearning, using PR/CC education as a case in point.

Corpcommsynergy- a collaborative eLearning platform for PR/CC

The field of PR/CC education has come of age to usher in innovative and learner-centred pedagogic practices. PR/CC is a relatively new profession and discipline emerged in 1920s in the wake of economic reforms in US and UK and escalating scepticism from the public towards sizeable enterprises at the time (Cornelissen 2011). Not until 1970s did the Commission on Public Relations Education make initial recommendations on PR education (Commission on Public Relations Education, n.d.). PR/CC education gradually entered its growth stage in the 21stcentury. As a young discipline, the challenge facing PR/CC educators is even greater since they could only draw from limited insights in the field literature to develop a viable approach to enhance students' learning experience.

Another impetus to render this new initiative of a collaborative eLearning platform in the context of PR/CC education is a critical response to the slow progress of adopting ICT and the inertia towards online delivery methods vis-a-vis traditional delivery methods among PR educators (Commission on Public Relations Education 2006, 2012; Coombs and Rybacki 1999). Besides, some PR scholars have explored the possibility and effectiveness of the application of IT

technology (e.g. Barry 2005; Kent et al. 2011; Swart 2014) and the employment of collaborative learning methods in PR teaching and learning (e.g. Lubbers 2011), resonating with our study's intention to explore the possibility of blending eLearning and collaborative learning and seek out an innovative and cost-effective approach of implementing a quality online-based professional communication curriculum.

To deem whether the contended innovative approach can help universities achieve the aforesaid goals, the research team designed and launched a collaborative eLearning platform called 'Corpcommsynergy' on Blackboard Learn¹ to build a learning community to aid both undergraduates and postgraduates students in the minor programme in Bilingual Corporate Communication (BCC) and Master of Arts in Bilingual Corporate Communication (MABCC), respectively, offered by the Department of Chinese and Bilingual Studies (CBS) at the Hong Kong Polytechnic University (PolyU).

Pedagogic approach of Corpcommsynergy

Corpcommsynergy as an eLearning platform in facilitating CC learning features a student-centered approach of self-learning, knowledge sharing, and collaborative learning (Lai 2015; Zhu et al. 2009). Indeed, a student-centered pedagogy in eLearning initiatives is considered effective in enhancing students' learning experience and thus well received among universities (Chickering and Gamson 1987; Elliott and Reynolds 2014; Harju and Åkerblom 2015). Such an approach creates a two-way educational process where knowledge is co-constructed among students themselves and between the students and the teachers (Elliott and Reynolds 2014). Actually, adopting this approach does not lessen workload for the project team, as it has been suggested that

the presence and guidance of the deliverer is crucial to effective eLearning and collaborative learning (Finegold and Cooke 2006; Osman et al. 2011). Instead, the thrust of the project lies in the eLearning platform's potent learning activities and interactions to ensure a rewarding learning process (Garrison, Anderson, and Archer 2001; Khosa and Volet 2013).

Design and Construction of Corpcommsynergy

The pedagogic approach of Corpcommynergy emphasized four definitive characteristics in designing and constructing the collaborative eLearning platform. The characteristics are 'Informative', 'Facilitative', 'Interactive', and 'Sharing'. Seven components are built around these four characteristics to fulfil the objectives of the eLearning platform (Please refer to Figure 1 for the sitemap of Corpcommsynergy).

[Figure 1 near here]

'Informative' and 'Facilitative' are two important characteristics of Corpcommsynergy emphasized to fortify students' self-learning and active learning of CC via ample multi-media resources, ranging from print media, electronic media to social media. As such, e-resource access to a richly informative database on Corpcommsynergy facilitates students' learning process (Mondi, Woods, and Rafi 2007; Sarkar 2012). The project team has made use of the content area of Blackboard Learn to construct content pages like 'Research Skills', 'Useful Resources', and 'Infopacks' since the content area allows the construction of multiple content folders and the mixand-match of multi-media resources to provide abundant and diversified learning resources for students. We have also adopted the 'Glossary' page from Blackboard Learn (renamed as CC

Glossary) to compile a glossary of professional terminology of corporate communication for students' easy reference. Together, these sessions constitute 'Learning' session of the platform. (Please refer to Figure 2a The portal of Corpcommsynergy).

[Figure 2 near here]

'Research Skills', 'Useful Resources', 'CC Glossary', and 'Infopacks' are constructed for students to retrieve the relevant CC resources to complement their studies. First, 'Research Skills' introduces the basic procedures and skills for conducting proper communication research. Second, 'Useful Resources' consists of recommended journals and books and relevant journal papers covering the topics taught in CC courses for both programmes. Third, 'CC Glossary' offers definitions of CC key terms. Fourth, 'Infopacks' features content folders containing useful information and authentic case studies in CC to enhance students' knowledge applications. These four integrative components form a comprehensive online database supporting self-directed learning with easier access and retrieval of relevant resources (Laurillard 2006; Rennie and Mason 2004). Moreover, the project team proactively facilitates students' engagements, providing learning and emotional support in the discussion forums by addressing students' questions and guiding them in topic discussions, and thereby delivering the learning experience in an active, meaningful and instructive manner (e.g. Ginns and Ellis 2007; Khosa and Volet 2013; So and Brush 2008).

'Interactive' and 'Sharing' as crucial characteristics of the eLearning platform are also manifest in 'Biweekly Discussion', 'CC Wikis', and 'CC Blogs', reinforcing virtual-based, interactive and collaborative learning (Chickering and Gamson 1987; Woods and Ebersole 2003). We have

employed Blackboard Learn tools such as 'Discussion Board', 'Wikis', and 'Blogs' to constitute the interactive and sharing session of the platform.

The design of 'Biweekly Discussion' with assigned fortnightly questions, among others, train students' critical thinking skills, as echoed by Yang, Newby, and Bill (2005) on the interrelationship between questioning and critical thinking skill development. A discussion forum consisting of different topics was created by the project team via the blackboard function of 'Discussion Board' and students could access the forum to discuss the topics, share their opinion and raise questions. Interactions among the stakeholders (the project team, participating teachers and students) create a two-way communicative, social-cultural environment, which simulates the transactional real-world systems in which users can explore and co-construct their knowledge (Gulati and Gardens 2006).

Besides, the 'Sharing' characteristic of the platform hinges on students' sharing of thoughts, ideas, and experiences in the discussion forums. A variety of social media tools, such as 'CC Wikis', and 'CC Blogs', reinforced virtual-based, interactive and collaborative learning (Chickering and Gamson 1987; Woods and Ebersole 2003). Students could share their case studies and mini research projects via the 'CC Wikis' and post the output of their written and/or oral tasks created in the workshops via the 'CC Blogs'. These tools foster sharing and collaborative learning since Wiki users share their resources or co-construct knowledge on the platform database. The unimpeded sharing of experience among peers characterizes the discussion forum where students reciprocate ideas and inquiries of their own accord.

Research questions

Following the full launch of Corpcommsynergy, the present study examines users' perceptions and identify significant factors influencing students' learning experience on the collaborative eLearning platform. As our reviewed literature suggests, eLearning quality is closely linked to their perceptions of eLearning environment (Ginns and Ellis 2007), which engenders the first research question:

1. How did the students perceive the collaborative eLearning platform?

On the potential of developing and implementing an integrated approach via a collaborative eLearning platform in PR/CC learning, two further research questions were raised:

- 2. What were the most significant factors contributing to the students' learning experience via the collaborative eLearning approach based on the reported literature?
- 3. Were there other factors contributing to students' learning experience in the collaborative eLearning platform?

Methodology

Implementation and participants of Corpcommsynergy

The project was initiated in October, 2013 and the pilot stage of the project took place at the semester one of 2014/15, and during the semester students from two core subjects in BCC were invited to use the eLearning platform. At the end of semester one of 2014/2015, the project team conducted the first round of evaluation after its pilot run by reviewing the submitted reflective journals and the learning experience shared in discussion forums from December, 2014 to January, 2015. The project team revised the design and operations of the platform based on the users' and team members' feedback.

Subsequently, the platform was scheduled to a full launch of the project from the semester two of 2014/15 through to the academic year 2015/16. During the full launch period, over 200 students enrolled in BCC subjects offered by both Minor programme in Bilingual Corporate Communication (BCC) and Master of Arts in Bilingual Corporate Communication (MABCC) became eligible users of Corpcommsynergy, while the project team (consisting of subject teachers and a project associate) were engaged in promotion and participation in the eLearning platform activities. At the end of semester two of 2014/2015 and 2015/2016, the project team conducted two rounds of evaluation via semi-structured interviews and surveys to review the design and operations of the platform to smoothen students' learning process (Mondi, Woods, and Rafi 2007; Sarkar 2012; Yang, Newby, and Bill 2005). Even though the project launch period was concluded by the end of academic year of 2015/16, the project team has continued to make the eLearning platform available to the users enrolled in BCC and MABCC.

Data collection

To address the research questions, user statistic reports of the eLearning platform, data from four semi-structured interviews, forum discussion content and reflective journals submitted by students are collected for the evaluation of the platform. Chickering and Gamson (1987) contend that the quality of the learning experience is reflected by the degree of students' activeness in the educational process. Through quantitative and qualitative data from students' statistic reports and semi-structure interviews, we oversee students' learning progress and examine their activeness on the platform. Forum discussions and reflective journals make for an in-depth understanding of learners' experience in the learning process (Wong et al. 1995, 50). Thus, delving into the forum discussion and reflective journals helps gauge students' learning experiences on the collaborative eLearning platform (hereafter as 'the eLearning platform').

Students' usage of sharing activities and participation in the discussion forum from the statistic reports for four semesters from 2014 to 2016 is examined so as to evaluate the impact of the innovative approach on their learning in CC. To probe for 'more information and clarification of answers' (Barriball and While 1994, 330), the project team studied all 90 posts in the discussion forum published by students from late 2014 to 2015, and 35 reflective journals submitted by students in December 2014.

Four semi-structured interviews were also conducted in May, 2015, whereby four frequent student users of Corpcommsynergy from both 3-year curriculum and 4-year curriculum were invited to attend a 40-minute, semi-structured interview. It comprises five questions: 1) user's usage of the eLearning platform, 2) how users perceive the design, 3) functions of the eLearning platform in facilitating their learning, 4) users' experience with collaborative eLearning activities, e.g. their participation in the discussion forum and sharing of CC Wiki and Blog, and 5) users' suggestions for the improvement of the eLearning platform.

Data analysis

For RQ 1, the analysis included four parts: 1) tracking the frequency of students' visit and materials sharing, as well as students' participation in the discussion forum; 2) scrutinizing qualitative data from the students' interview; 3) conducting content analysis on paragraph basis to examine the 90 posts (i.e. 179 paragraphs in total) published by students in the discussion forum using Johnson and Johnson's collaborative learning behavior model (2001) (see Appendix I for the coding scheme description); and 4) coding and analysing students' tonality (negative, neutral and positive) results on a sentence basis in all 35 reflective journals (i.e. 208 sentences in total).

For RQ2, a content analysis was conducted to code 140 sentences in the reflective journals where positive tonality was observed based on various factors relating to students' learning (as identified in reported literature). These factors included 1) a sense of belonging to a learning community (Rennie and Morrison 2013); 2) the design and facilitation of online courses in terms of knowledge construction and delivery (Garrison, Anderson, and Archer 2001); 3) Positive perception and active participation of students towards eLearning (Ginns and Ellis 2007; Minasian-Batmanian 2002); 4) the structuring of the collaborative groups (Roschelle and Teasley 1995); 5) Attitude and active participation of the students towards online collaborative learning (Finegold and Cooke 2006; Jones and Issroff 2005; So and Brush 2008); and 6) instructors' guidance (Finegold and Cooke 2006; Khosa and Volet 2013; Osman et al. 2011) (see Appendix II for the exemplification of the factors). Since multiple factors could be found in one sentence, double coding is allowed in the examination of RQ2. As for RQ3, we critically reviewed all 35 reflective journals to identify any other factors contributing to students' learning experiences in the eLearning platform.

Inter-rater Checking

To ensure inter-rater reliability in coding various variables, one of the authors and one trained coder have co-coded 30% of the posts (including 57 paragraphs from 27 posts out of 90 posts) in Biweekly Discussion Forum and 31.4% (including 57 sentences from 11 journals out of 35 journals) reflective journals for conducting the inter-rater checking. All items coded have reached at least 90% percentage of agreement and all items have reached k value of 0.75 or above. (see Table 1 for the result of inter-rater checking on various coding items).

[Table 1 near here]

Statistical analysis

An analysis of variance (ANOVA) cum post hoc Tukey test was employed to test the results in connection with the research questions regarding the differences between the collaborative behavioral categories, tonalities and factors contributing to students' learning in the eLearning platform. To properly compare the means between these variables, we have run the ANOVA test on posts and journal bases, respectively.

Findings and Discussion

Students' perception towards the use of a collaborative eLearning platform

Evidence from statistics reports and interview data

Students' acceptance of the eLearning platform was gauged by the visiting frequency and use of the platform revealed from statistics reports, responses in the interviews, content in the discussion forum as well as tonality presented in their reflective journals. As shown in Figure 3, the three major components including Research Skills, Useful Resources and Infopacks offered by

Corpcommsynergy were frequently visited by the students over the four semesters in two academic years (including the pilot run period). Infopacks, in particular, recorded the highest accumulative visiting frequency, followed by Useful Resources and Research Skills. The visiting frequency was partially driven by the assessment design in BCC subjects where case studies and case discussions are the major assessment components found in the most BCC subjects. This could be corroborated by the responses of the students interviewed since all of them found Infopacks very useful. A year 3 student commented that Infopacks contains relevant case studies and supplementary materials, which stimulates her thinking and facilitating her learning outside the classroom at her own convenience, transcending the limits of traditional face-to-face education (Smith, Ferguson, and Caris 2001).

In fact, all the interviewees identified two or more functions on Corpcommsynergy to help them build a better foundation of the topics covered in the CC subjects, or prepare for the project assignments outside the classroom. Students perceived it as a useful online assisted-learning platform to complement the shortage of traditional face-to-face education as well as accomplishing their own learning goals or the learning outcomes as outlined in the enrolled subjects.

[Figure 3 near here]

Since collaborative learning and knowledge sharing are core values underpinning the design of Corpcommsynergy, the level of collaborative learning and sharing practices was determined by considering the number of posts by the students in the discussion forum and materials shared by the students in the forum, CC wiki and CC blogs. It is found that there is steady growth in 1) the number of posts created in the Biweekly Discussion Forum and 2) the amount of learning materials

including case studies, corporate communication writings and reading materials shared in the discussion forum, CC wiki and blogs (See Figure 4). Students were found to take great interest in posting and interacting with each other in the discussion forum as well as being keen on sharing case studies in the subject matters. Indeed, some posts even indicated that students have taken an active role in leading or advising their peers in discussing CC related issues. Below is a dialogue captured from the 'Biweekly Discussion 2' showing Student B advised her fellow classmate Student A to ensure the quality of data collected via an online questionnaire for a CC project.

Student A: 'I agree with all my classmates' opinions about the two means of data collection: quantitative and qualitative. However, I have a question about the quantitative method. Since the participants of the questionnaire survey are not always that cooperative, they usually do the questionnaire in a hurry or not very carefully. Thus the results may not be very faithful, which may influence the final conclusion we will make. Is there any way that we can deal with this?'

Student B: 'I think it would be one of the limitations if we conduct an online questionnaire, and I also think that using the traditional method to ask the interviewees one by one will make the result more convincing. However, it would be a time-consuming method. Normally, after creating the online questionnaire if you inbox the interviewees on facebook or email them to share the link, maybe you can state the importance of this questionnaire first, and then ask them to fill in the questionnaire in a more serious way. I believe it will help.'

The active participation in interactive and sharing sections on Corpcommsynergy may be attributed to adequate learning and emotional support provided by peers and the project team as members in

the online learning community. Three out of four interviewees indicated that they have participated in the discussion forum or shared their works on Corpcommsynergy and two expressed that they found both interactive and sharing sections useful for their studies since they could have the chance to learn from and interact with their peers as well as seek support from the project team when necessary. Taken together, the findings reveal that adequate learning and emotional support from the online community is positively linked to successful online collaborative learning. Johnson (1981) suggested that peer relationship is key to the success of collaborative learning since knowledge is not simply transferred from instructors to students but it is co-constructed actively among the members of the learning community (Alavi 1994; Whipple 1987).

[Figure 4 near here]

Reflections from the discussion forum and reflective journals

To further examine the students' acceptance towards the collaborative eLearning approach, the content from the discussion forum and the tonality of the reflective journals submitted by the students in the eLearning platform were coded and analyzed. Firstly, 90 posts created by the students from the discussion forum are examined. Around 56% (n = 23) students who participated in 'Biweekly discussion' created at least two posts in the forum and almost 40% (n = 16) students created three posts or even more.

Using the Johnson and Johnson's collaborative learning behavior model (2001), a highly diversified collaborative learning behaviour pattern is observed, since all categories and subcategories in the model are uncovered. It is noted that most students made contribution (77.7%)

while some of them (11.2%) sought input when they participated in the online discussion. Only 1.7% of students monitored the group progress (see Table 2).

[Table 2 near here]

Significant differences are witnessed between Contributing, Seeking Input, and Monitoring (Mcon 1.5444 vs. Msee 0.2222, p <0.001; Mcon 1.5444 vs. Mmon 0.0333, p <0.001). The result reveals that a significant amount of users identified with pedagogic approach of the eLearning platform and they have been contributing actively by giving help and feedback, discussing, explaining, sharing resources and knowledge with others. Among the sub-categories, it is found that 41.9% of paragraphs written in discussion forums pertain to explaining or elaborating students' points of view in relation to the theme discussed. Besides, a certain proportion of paragraphs are found to be written to share knowledge (18.4%) and resources (10.6%). Students usually shared what they know about the theme of discussion or responded to issues brought up in the discussion and sometimes they would even share the consulted literature by providing references or links with others. The active idea expression and knowledge cum resources sharing suggest that students perceive the online discussion platform as an effective collaborative learning tool.

As shown in Table 2, help-seeking appears to be the major behavior within the Seeking Input category since 16 out of 20 paragraphs (85%) are about seeking assistance in the discussion through describing the difficulties faced and asking questions. This implies that a safe and convenient space is guaranteed by the discussion forum with adequate learning and emotional support, such as offering feedback to students' posts, answering questions, so that students become comfortable to raise questions in the forum.

Students' behaviors in the discussion forum indicate that they treated online discussions as a usual, effective, comfortable learning tool to facilitate their studies. Students appreciated the discussion forum in Corpcommsyergy as a facilitative learning tool. One student has even expressed her expectation of more information exchange and discussion in the future in the forum. Indeed, the frequent expression of ideas and proposal, resources and knowledge sharing, and question raising demonstrate that students were motivated by this new pedagogic approach since adequate support was offered to students, who have been allowed to ample space and time to plan before production (Cheng 2000).

The tonality analysis discovered that most students expressed positive views (67.3%) towards the platform where some students (31.3%) remain neutral. Only 1.4% of negativity is found. As reflected in Figure 5, significant differences are witnessed between the positive, neutral and negative tonality studied (Mpos 4.0000 vs. Mneu 1.8286, p<0.001; Mpos 4.0000 vs. Mneg 0.0857, p<0.001; Mneu 1.8286 vs. Mneg 0.0857, p<0.001).

[Figure 5 near here]

A majority of student users found the collaborative eLearning approach useful in facilitating their learning of PR/CC. The student comments below (extracted from the Reflective Journals) attest to the effectiveness of the platform in terms of facilitating acquisition of the subject matters:

'Personally, I like Corpcommsynergy very much as it included and organized lots of readings for different topics.' *Extracted from Reflective Journal 3*

'My classmates, the project team and I have interacted with one another to discuss various topics including our learning expectations and experience of CC as well as the way we collect and handle our research. Not only do these discussions, which are rarely carried out in classes, clarify my research concept and broaden my horizons on the ways to learn CC from the academic to the practical aspects, but also enable me to reflect my own learning of CC and make improvements to sustain my learning journey.' *Extracted from Reflective Journal* 20

Students' reflections generally found that Corpcommsynergy offers useful learning resources because it caters vast learning materials covering a wide array of topics in the CC subjects, a safe and convenient space for users to interact in, and adequate learning opportunities to examine pertinent CC issues beyond the classroom environment. The blending of eLearning and collaborative learning approaches in Corpcommsynergy appears welcomed by students taking CC subjects since it empowers users with extra resources to cope with their subject assignments and projects, as the eLearning platform forms an online community in which to share resources, co-construct knowledge and support one another.

Factors contributing to the positive learning experience via the integrated learning approach

Since a significant level of positive tonality is observed in students' Reflective Journals, coding the positive-toned sentences in the journals seems sensible to reveal the factors contributing to students' positive learning experience. The tonality data suggest that 'Design and facilitation of online courses' (n = 110, 78.6%) and 'Positive perception and active participation of students towards

eLearning' (*n*=62, 44.3%) are the prominent factors contributing to students' positive learning experience in the eLearning platform. Significant difference is witnessed between the factors examined. (See Figure 6)

[Figure 6 near here]

The extract below from the Reflective Journals confirms a student's conceptual alignment with the 'Design and facilitation of online courses', a salient factor for grasping such fundamental notions as 'corporate identity, image and reputation':

'For example, when our lecture cover about the corporate identity, image and reputation, the infopack in the Corpcommsynergy will have similar or related case for me to learn deeply.' Extracted from Reflective Journal 7

In keeping with the programme ethos of the Minor in BCC and MABCC—'To equip students with language/sign-mediated and culture-specific communication skills, and knowledge of Corporate Communication conducts and practices, with reference to the rapid growth of globalisation and the multilingual, multicultural environment in Greater China', student users of the eLearning platform of Corpcommsynergy project met their curricular needs of collaboratively acquiring and reinforcing professional knowledge in CC norms and practices. This is achievable by means of the key project component of 'Infopacks' through which accessible and resourceful online content folders containing useful information and authentic CC cases augmented and bolstered students' analytic abilities in acquiring conceptual norms and applying practical field knowledge in bilingual, semiotic and intercultural communication contexts.

The factor of 'Positive perception and active participation of students in terms of eLearning' is also found to have a positive impact on students' learning in the collaborative eLearning platform. In this digital age of Generation Y learners, it is contended that their learning style is typified by a higher technology competency (Yeaton 2008) and thus they would be more comfortable in using online resources to facilitate their learning (McKimm, Jollie, and Cantillon 2003). A collaborative eLearning platform setting likewise offers much sought-after convenience for online learning, which overcomes constraints of traditional classroom learning and interactions. The extracts below from the Reflective Journals depict students' positive attitude towards eLearning on Corpcommsynergy:

'Corpcommsynergy is a good platform for students of the course to gain more conceptual and practical knowledge of corporate communications <u>outside the classroom with an online</u> platform during our own available time.' *Extracted from Reflective Journal 32*

'Apart from the book and notes that provided in class, <u>study online is becoming a trend</u> for current student because it is good to let student to study <u>more efficiently and effectively</u>.' *Extracted from Reflective Journal 10*

Even though no significant difference is found in the following factors- Attitude and active participation of students towards online collaborative learning (n= 24, 17.1%), Structuring of the collaborative groups (n=20, 14.3%), Sense of belonging to learning community (n= 18, 12.9%), Instructor effective guidance (n=7, 5%), such factors, especially the Attitude and active participation of students towards online collaborative learning, have nonetheless contributed to the

creation of positive learning experience for student users. The following sharing extracts from students' Reflective Journals on the 'Attitude and active participation' of students confirms the benefits of a communal online collaborative learning in CC research skill development:

'Having been involved in online education for a few months, I think the establishment of the Corpcommsynergy is a good start in the process of electronizing CC learning. Online discussions are a great way to get to know our classmates and to get to know and learn from each other.' Extracted from Reflective Journal 34

'Through actively participating in the biweekly discussion and getting the timely feedback, <u>I</u> learnt more experience in research techniques from my peers and the recommended resources also help me to know more about the fields I am interested in.' *Extracted from Reflective Journal 13*

Smith, Ferguson, and Caris (2001) argued that the asynchronous nature of online environment not only allows both instructors and students adequate time and space to ponder before reacting to the discussion themes or responses but also a sense of security as anonymous interactive learners on the virtual space. Specifically, the lack of physical presence in the platform induces a feeling of anonymity among student users even for the shy students, so that they could participate collaboratively in the learning activities associated with CC learning in the e-platform freely and actively. Besides, they (2001) added that downplaying instructors' authority in the eLearning platform is yet another factor for inducing active student participation in the virtual-learning activities.

Learning through observation- the 'non-active' learner

After critically reviewing the reflective journals, we have identified a 'non-active' learner factor in at least 5 out of the 35 journals (14%) who have found their learning on the collaborative eLearning platform rewarding and fruitful. In contrast to Ginns and Ellis's study (2007), these 'non-active' learner, who did not participate in the Biweekly discussion and were reluctant to share their ideas with the others on CC Wiki and Blogs, were able to learn from the others through observing and reading others' interaction and input in the eLearning platform.

Unlike the findings uncovered in previous study, these 'non-active' learners were able to get new insights and understand the subject matter better by reading and surfing in the collaborative eLearning platform. For instance, a student in *Reflective* Journal 9 commented, 'Although I didn't participate in the Biweekly Discussion, I also benefited from reading other students' comments about their study and difficulties.' Another extracted from *Reflective Journal* 17 mentioned, 'Due to the tight schedule, we may not have time to share the learning experience to our classmates. But I can read the feedback from my classmate and learn from their experiences a lot'. Most students, despite whether they were active or 'non-active' participants in the collaborative eLearning activities, appreciated the sharing from the others.

As stated in Reflective Journal 34, 'Interaction in a face-to-face classroom can be intimidating for some students. An online discussion can level the playing field and allow students to take time to think about their response... This new variety of communication allows learners to acquire knowledge, build confidence, and succeed in one-to-one interactions, as well as in groups.' Cultural pragmatic insights can be drawn upon to explain the observed passivity in learning style

stereotypes associated with the 'non-active' Chinese students (as reported in the Reflective Journal 34), in particular, the well-explored influences of Chinese Confucian ethics (Chan, 1999; Hing, 2013; Chang and Holt, 1994; as cited in Loh and Teo, 2017) as a plausible cultural factor.

Coinciding with the quoted student comment from Reflective Journal 34, the non-active and non-questioning Chinese learner stereotype in class can be understood in a cultural-pragmatic light: a classroom culture of non-questioning (Chan, 1999) favors avoidance of challenging the teachers in open (Hing, 2013), which are often deemed cultural-pragmatically as 'time-wastage' among fellow students, as the class collectively vie to optimize knowledge gain in a time-competitive manner (Chang and Holt, 1994). Bond (1992) further remarks that self-assertiveness is not an upheld cultural value embraced by Hong Kong students. In a questionnaire survey of 80 students in a Singaporean higher education context, Loh and Teo (2017) found that Asian learners are more open to small group learning than in public environments and suggested flexibility in dealing with passive learning style in a collaborative task setting. They cited Cortazzi and Jin (1996, 198) in arguing that just because students do not ask questions does not mean that they are 'not paying attention or mentally active'.

Conclusion

The project team set out to find empirical answers to scholarly claims about various aspects of learner-teacher benefits of eLearning and collaborative learning in innovative higher education pedagogies (on eLearning: e.g. Kim 2000; Minasian-Batmanian 2002; Preece 2000; Rennie and Mason 2004; Woods and Ebersole 2003) and on collaborative learning: (e.g. Carlsmith and Cooper

2002; D. W. Johnson and R. T. Johnson 1981; Johnson et al. 1981; Osman et al. 2011; Springer, Stanne, and Donovan 1999). In response to such curiosities beyond the reported thrusts of the two pedagogic practices on their own in higher education settings (see Bowen 2000; Elliott and Reynolds 2014; Gardener and Korth 1996; Lai 2015; Mondi, Woods, and Rafi 2007; Sarkar 2012), this study addresses the issue of how eLearning can be developed and integrated with a collaborative learning environment in such a way that facilitates students' learning in an eLearning course, as remarked by Zhu et al. (2009).

The results presented in this article have generated empirical evidence corroborating specific claims about the value of integrated learning by combining eLearning and collaborative learning in a higher education, professional knowledge cum practice, developmental context. This article has illustrated in practice how our e-learning platform of Corpcommsynergy can successfully blend eLearning and collaborative learning practices in a university-level PR/CC course design and implementation context. It works in keeping with social constructivist beliefs and socio-cultural pedagogic approaches to running higher education courses emphasizing knowledge construction through a learner community (Engstrom, Santo and Yost 2008; Lovitts and Nelson 2000) and effectiveness of e-learning technologies in academic studies (Zhang and Nunamaker 2003). The successful Corpcommsynergy experience, on the basis of student reflective comments and tonality data, fulfilled its two-fold pedagogic research objectives: first, the high feasibility and effectiveness of designing and implementing a potent eLearning platform which blends the two innovative pedagogic approaches; second, two significant factors in achieving such an integrated learning approach are identified—i.e.1) design and facilitation of online courses and 2) positive perception and active participation of students toward eLearning. Amidst the positive findings linked to the two identified key design factors of supporting the thrusts of the integrated collaborative eLearning approach, a significant novel finding of the 'non-active' Chinese learner tendency (vis-à-vis RQ3) is revealing: one-tenth of the learner participants claimed that despite their passive, non-posting participation in the online discussion forum, they have actually benefited their content learning from merely reading other participants' posts.

Limitation, Contribution and Further Studies

Despite statistically significant tonality results and well-documented qualitative user feedback on the design and implementation of the collaborative eLearning approach, this study is constrained by a limited number of student disciplines in the sample pool. The empirical results nonetheless suggest a bona-fide yet pioneering case-based inquiry into local Chinese university students' feedback toward an innovative approach in a PR/CC education context.

Substantively, this study sheds lights on how an innovative integrated learning (encompassing eLearning cum collaborative learning pedagogies) approach was successfully designed, implemented and received by learner-user stakeholders in a professional education enhancement context within a government-funded university setting. It informs academics and practitioners engrossed in profession-based higher education pedagogic innovations of a successfully integrated learning implementation case, with respect to both user feedback and significant factors underpinning its design and management aspects of Corpcommsynergy. On an innovative pedagogic implementation front, the research team pledge to make this positively learner-received and discipline-specific e-platform publicly accessible through our currently revamped departmental website at the university, apart from offering a similar course replicating the

successful Corpcommsynergy experience on Massive Open Online Courses (MOOCs) or Small Private Online Courses (SPOCs) targeting learners from other higher education institutions.

Further research needs to expand not only existing data pool of a single-discipline inquiry into an integrated learning course design and implementation in PR/CC context, the sampling coverage may possibly include other innovative integrated learning approaches across distinct professional fields in the higher education sector. Accordingly, there could be even greater student user size and more extensive case-based eLearning cum collaborative learning experimentations on the elearning platforms in such future pedagogic research studies.

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Tables with captions

Table 1. Result of inter-rater checking on various coding items

Table 2. Collaborative learning behaviour observed from "Biweekly Discussion"

Figure Captions

- Figure 1. The complete framework of Corpcommsynergy
- Figure 2. The portal of Corpcommsynergy
- Figure 3. Accumulative visiting frequency of Corpcommsynergy from the academic years $2014/15 \ to \ 2015/16$
- Figure 4. Accumulated posts and materials uncovered in the Discussion Forums, CC wikis and CC blogs
- Figure 5. Tonality towards using Corpcommsynergy (the eLearning platform) for learning CC
- Figure 6. Factors promoting positivity towards eLearning and online collaborative learning in terms of facilitating study

Notes

¹ Blackboard Learn is a virtual learning environment and course management system which is created and developed by Blackboard Inc. The system enables educators to integrate online elements with traditional courses which is conducted in the face-to-face format or to design a purely online courses.

Appendix I: Description of the coding scheme adapted from Johnson and Johnson's collaborative learning behavior model

Category	Code	Description	
Contributing	HeG	Help giving: responding to questions and requests from others	
(Con)	FBG	Feedback giving: providing feedback on proposals from others	
	RI	Exchanging resources and information with others	
	SK	Sharing existing knowledge and information with others	
	Ch	Challenging others: challenging the contributions of other members	
		and seeking to engage in debate	
	Ex	Explaining or elaborating: supporting one's own position (possibly	
		following a challenge)	
Seeking input	HeS	S Help seeking: seeking assistance from others	
(See)	FBS	Feedback seeking: seeking feedback on a position	
	Ef	Advocating effort: urging others to contribute to the group effort	
Monitoring	ME	Monitoring group effort: comments about the group's process and	
(Mon)		achievements	

Appendix II: Exemplication of factors on promoting effective eLearning and collaborative learning

Factors (Previous studies)	Examples from reflective journals
1. A sense of belonging to	"I particularly find the biweekly discussion
learning community	useful as I can exchange ideas and get to know
	what other groups are preparing for so we can
(Rennie and Morrison 2013)	learn from each other."
2. The design and facilitation of	"For instance, the Beer Advertisements info
online courses in terms of	pack allows me to know more about the cultural
knowledge construction and	differences shown by the beer ads of global
delivering.	brands and China brands; the intertextuality one
	gave me a deeper insight on how brands build
	their corporate identity or image via various
(Garrison, Anderson, and Archer	signs; while the BP oil spill and MH370 allows
2001)	me to learn more about crisis management."
3. Positive perception and active	"Apart from the book and notes that provided in
participation of students towards	class, study online is becoming a trend for
eLearning	current student because it is good to let student
(Ginns and Ellis 2007;	to study more efficiently and effectively."
Minasian-Batmanian 2002)	
4. The structuring of the	"Not only do these discussions, which are rarely
collaborative groups	carried out in classes, clarify my research
	concept and broaden my horizons on the ways
	to learn CC from the academic to the practical

	aspects, but also enable me to reflect my own
	learning of CC and make improvements to
(Roschelle and Teasley1995)	sustain my learning journey."
5. Attitude and active	"An online discussion can level the playing field
participation of students towards	and allow students to take time to think about
online collaborative learning	their responses."
(Finegold and Cooke 2006;	
Jones and Issroff 2005; So and	
Brush 2008)	
6. Instructor guidance	"Also, I actively participated in all the biweekly
(Finegold and Cooke 2006;	discussions and the prompt responses from the
Khosa and Volet 2013; Osman et	staff were very impressive."
al. 2011)	