

## **Students' Perception of Collaborative Learning, Conflict Management and Satisfaction in a Private Educational Institution Learning Environment: An Asian Case Study**

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### **Abstract**

*This paper presents the role of collaborative learning in an Asian educational institution. The paper describes the current private education landscape, particularly learners of today, who embrace the 21<sup>st</sup> century learning skills. The concept of collaborative learning is contextualised with an emphasis on Johnson and Johnson's five key elements of collaborative learning. In this research study, questionnaires were sent to students from an Asian educational institution of which twenty eight responded. The research participants unanimously concurred that they were satisfied with the use of collaborate and blended learning.*

**Keywords:** Collaborative learning, Cooperative learning, blended learning, Post-secondary education, Student-centred.

### **Introduction**

Globalisation has led to many nations becoming more dependent on one another for political, economic, and social well-being. The ever-changing technology landscape not only influence how we live and work but also much of social interaction. Given a more assimilated society, the capacity to work together willingly has become one of the core survival skills in the global workforce (Foyle & Shafto, 1995). In this respect, it is not surprising that even the educational landscape have undergone much fundamental changes, one of which is teaching students how to communicate, collaborate, and work effectively. Engaging in self-discovery and learning has become the basis of education (Cheng, 2003). In fact, the 21<sup>st</sup> century framework cited possessing core literacy skills is just one of the four core competencies expected of learners to acquire in the work place (Partnership for 21<sup>st</sup> century, 2011). Learners are expected to acquire entrepreneurship, creativity, and innovation skills. Workplace ready graduates with critical thinking skills, competency in communication, ability to work collaboratively and utilising information, media and technology skills are the 21<sup>st</sup> century competencies (Partnership for 21<sup>st</sup> century, 2011). The findings of several empirical researches (Felder & Brent, 2007; Lea et. al., 2003; Shimazoe & Aldrich, 2010) suggested that collaborative learning has become an essential learning tool to engage students. On the other hand, other studies questioned its relevancy and effectiveness to Asian students (Gillies et. al., 2008). The studies cited that Asian learners were passive learners, shy, highly competitive and preferred instructor-led instead of students-centered (Gillies, et. al., 2008). Hence, this paper seeks to appraise the feasibility and effectiveness of collaborative learning as part of teaching and learning activity amongst Asian students.

### **Theoretical framework and summary of the literature**

Collaborative learning has its roots from constructivism concept whereby knowledge is actively constructed (Mascolo, 2005). There are two types of constructivism, cognitive and social constructivism knowledge. Cognitive constructivism believed that learners learn better if knowledge were constructed by learners themselves.

On the other hand, social constructivism views the important role of social interaction among learners and teachers to gain knowledge and ideas (Powell & Kalina, 2009). Vygotsky 1978 believe that learning is an integral part of learning where learners interact with other learners and they are also more adaptive to the learning environment (Powell & Kalina, 2009). The results of cooperative learning lead to deeper understanding and better internalization of knowledge among learners (Powell & Kalina, 2009). Today's learner are characterised by behavior such as multitasking, multiple competencies skills [critical thinking, problem solving, prefer to communicate and collaborate offline and online] and involved in application based learning (Jerald, 2013). Learners are also utilising more and more of digital communication tools such as emails, social media (Facebook) to encourage collaborative and experiential learning (Barr & Tagg, 1995). In order for our efforts at education to be successful and comprehensive, educators must pay special attention to students who come from different social, cultural backgrounds with different education experience. Supporting this, Barr & Tagg (1995) noted that learners must require a seismic shift in paradigm from that instructional to learner-based perspective. While in the past, the focus was on educators to transfer disciplinary knowledge and content to learners. Being learner-centered, it focuses on learners instead with the aim to promote learning amongst learners (McCombs & Whisler, 1997). To this end, Felder & Brent's (2007) work indicated that learner-centred practices will enable learners to be more motivated in their learning as it engages them, better retention of knowledge, more positive towards to subject as there are increased understanding leading to higher self esteem (Felder & Brent, 2007; Lea, et. al., 2003)

### ***Collaborative learning***

Collaborative learning requires learners to work together toward a common goal (Johnson & Johnson, 1989, 1999) and jargons such as collaborative and cooperative learning are used interchangeably. Johnson & Johnson (1989) a key proponent of the concept termed it as cooperative learning. Essentially cooperative learning is the use of small group that requires learners to work together in order to maximize individual and each other's learning (Johnson et. al., 2007). Bruffee (1993) described collaborative learning as an approach to learning whereby students are required to work together to achieve group task through negotiation and consensus. Why the use of collaborative learning is important in today's context? Felder & Brent (2007), Lea, et. al. (2003) and McCombs & Whisler, (1997) provided insight into the benefits of cooperative learning in facilitating learning. Among the many reasons include collaborative learning, promotes active learning where it consist of any learning activity engaged by students other than passively listening to instructor's reaching (Faust & Paulson, 1998). As learners established strong foundation and deeper understanding of subject content, it will in better academic results. Learners would feel more motivated in their studies with improved grades and boost their self-esteem which may well result in higher learner's retention. From the social viewpoint, learners in the process of working in groups or collaborative activities would also develop their interpersonal, oral communication and social skills (Van den Bossche et al. 2006). Therefore, from the learners prospective, it will shape their personality and be more confident.

Extant literature reveals that there are several frameworks on cooperative learning by various authors. Cooperative learning framework by Johnson and Johnson best illustrate the characteristics of cooperative learning. In addition, the pioneering authors in this area of research suggest that there are five elements in Johnson and Johnson cooperative learning which are; Positive interdependence; Individual accountability; Face-to-face interaction; Interpersonal and small group skills; Group processing (Felder & Brent, 2007). Positive inter dependencies knowledge's that every member in a group is indispensable and team members rely on each other to achieve the goal. There are possibly also joint rewards. Individual's goal achievement are positively correlated (Johnson et. al., 2013) If any member fail to do their part, everyone suffers (Felder, 2007) hence, structural independence (Johnson, et. al., 2013).

Individual accountability takes place whereby all learners in a group are held accountable for doing their fair share of the work and mastery of the learned materials (Felder, 2007). This requires assessment by all members in a group both individually and on a group basis. Individual assessment can be given and instructor is encouraged to "visit" and observe learners discussion. Consequently, instructor keeps track of the member and also group process. Timely feedback can therefore be provided to learners so that they are kept informed of their progress. Each member has a personal responsibility for completing one's own share of work and to also support and assist other members in the group so that learners learn together which could also result in being able to perform higher as individuals (Johnson, et. al., 2013).

Face-to-face interaction is essential to promote successful interaction which could result in positive interdependence. Group members are encouraged to provide feedback, challenging reasoning and encouraging one another (Felder, 2007). As Johnson (2013), asserted doing so would result in higher cognitive development of learners to solve problems and peer learning. Group members therefore participate in joint-celebration success. Interpersonal and small group skills takes place where in the process of social interaction with group members, it result in trust building, improve interpersonal and communication skills (Johnson, et. al.,2013). Members in the group are exposed to other group members' divergent views which may differ from their own. They learn to debate, evaluate the various options available and accept a "solution" that is in the interest instead of individual. As such, conflict management skills can be improved and better at resolving differences (Felder, 2007; Johnson, et. al., 2013). Group processing requires group members to set goals, have the attitude to review their own activity in areas which the group has done well or other areas which could improve. The group goals may therefore be revised or changed as a result. (Felder, 2007). Continuous improvement is a key result of such process (Johnson, et. al., 2013).

### ***Methodology and interview protocol***

This exploratory study is concerned with learners in XYZ Academy, a local Private Educational Institution (PEI) based in Singapore. More specifically, "Building and Managing Strategy" and "Consumer Behavior" modules under the undergraduate program are identified for research purpose. These two modules are selected to exhibit collaborative learning in action. Moreover, collaborative learning activity is required to meet the learning objectives. This study involved fifty three students combined. It served as a run up to a larger scale study that would involve more respondents across wider field of disciplinary study and different cohort of students. The research study involved the use of sampling method in evaluating the satisfaction level amongst Asian students with regard to cooperative learning. Quantitative research method was being used and the main data collection method was a set of questionnaire posted via "Google forms". The identified sampling population consisted of both graduate and current pool of students – degree graduates and higher diploma in business in the School of Business. Email was sent to 68 students requesting for voluntary participation. These students were of mix gender from different nationalities such as China, Cambodia, India, Indonesia, Laos, Malaysia, South Korea, Singapore, and Vietnam. Their age ranges from 17 to 45 years old. The questionnaire consisted of mostly multiple-choice questions and several open-ended questions which allowed respondents to express their opinion. It is divided into several sub-sections that cover the five key elements of Johnson and Johnson cooperative learning. The elements were; Positive (outcome) interdependence between members, Individual accountability, Face-to-face interaction, Development,& improvement of interpersonal skills and Regular self-assessment of group functioning.

### ***Research questions***

- a) What is students' satisfaction level with regard to collaborative learning among Asian students?
- b) How do students feel about working in groups? Assess whether e-communication tools (whats app, social media, e-platforms such as, moodle, student portal, etc.) are the preferred mode over face-to-face interaction.
- c) How do students work together in conflict management and communication amongst one another?
- d) Which is the most preferred mode of communication use among group members? Is face-to-face interaction still valid?

### ***Findings***

By the end of the two-week period, a total of 53 (or 78%) students responded. The results were compiled and analysed. The key findings are as follows;

#### **Positive interdependence**

During the interviews, two questions were asked, the first question being whether they recognize group member was needed to complete the assignment, 7 (or 13%) respondents preferred not to have any group member, and would rather complete the assignment themselves. 32% selected 'to some extent' only and 55% (29 out of 53) indicated that group member is needed. The second question is related to recognizing the benefit of having several of your classmates participating and completing the assignment. The results, 7% (4 out of 53) saw no benefit, while 21% (11 out of 53) saw only some benefit. However, 72% (38 out of 53) acknowledged the benefits of having team members participating and contributing towards the completion of the assignment.

### **Individual accountability**

However, several participants acknowledged that individual accountability relates more to lecturer preparedness in ensuring that each team members are held accountable instead of relying on their team members to do the majority of the work. Four questions were asked, majority of the responded selected lecturers were very clear in communicating instructions (96%), all respondents did acknowledge that lecturer “visit” each team to observe, assess orally and provided timely feedback. Majority 43 (or 82%) of respondents cited there were considerable discussions that took place amongst team members concerning areas to improve. 40 (or 75%) respondents cited face-to-face interaction did take place majority of time, 46 (or 86%) respondents did check with one another for understanding.

### **Face-to-face interactions**

For face-to-face interaction, two questions were asked. 40 (or 75%) of the respondents responded extensive use of face-to-face interaction while another 13 (or 25%) cited moderate use of face-to-face interaction. Group members check with one another for understanding (challenging or reasoning, listening attentively). A majority of 86% (46 out of 53) respondents cited yes, some checking and challenging questions were being put forth to members.

### **Interpersonal and small group skills**

In the interview, four questions, which relate to trust level and conflict management, were asked. 46 (or 86%) of the respondents indicated some to high level of trust, while only 7 (or 13%) mentioned no trust at all. It was no surprise why the trust level were high as the next question asked on whether trust was already high at the beginning or developed along as the project progresses. Most respondents expressed trusts were gradually developed along the way, start being acquaintance and gradually increase to have mutual trust and respect. In terms of conflict management, 44 (or 83%) of respondents chose conflict management were good being able to resolve most conflicts or disagreement. Only 2 (or 4%) mentioned it was not effective at all while the remaining 7 (or 13%) cited conflict management ability only sometimes able to resolve.

### **Group processing**

Participants were asked two questions, one being a multiple-choice question whether they recognize their team mates contribute a fair share of the effort. A fair majority, 40 (or 76%) selected team mates did contribute, while 11 (or 20%) mentioned the effort contribution is only some extent. The remaining 2 (or 4%) respondents said no contribution at all. The second question is an open-ended question where respondents were asked to express what worked well and what did not. Answers provided on what work well included citing group members put in much effort to ensure task at hand was completed at the highest level and managed to put aside personal differences to ensure group success. On areas which did not work well included mis-communication due to the cultural differences being the most frequently cited and having a member of the group which needed encouragement and persuasion to complete task on time. In the area of communication with technology via “Whats app” being most frequently used (30 or 57% respondents), while short-messaging (SMS) only used by some (3 or 6%). The remaining 20 respondents (or 38%) used all of them. Overall, 42 (or 79%) respondents preferred to work in teams rather than individual and 47 (or 89%) did recognise having group project would benefit them to prepare for their workplace and 41 (or 78%) were satisfied concerning cooperative learning. The result at the end of the survey did differ to some extent from the initial questions asked, where only 29 (or 54%) respondents responded valuing team members and 39 (or 72%) saw positive to large benefit in contrasts to 11 (or 21%) respondents for some benefit only.

### **Limitations of Study**

There are several limitations in the research study. The first being the relatively small number of respondents involved in the study. In addition, it focused on students from the Business cohort only. In order to ascertain whether collaborative learning is viewed positively, it may include students from other disciplines e.g. Mass Communication, Hospitality, Information Technology and even Psychology students. Moreover, students at different level of studies could participate in the research for example, foundation, diploma and degree levels. The research study is conducted in a relatively short period of a month. While steps are taken to minimize biasness or sampling error, having a planned research study would certainly improve accuracy and minimize the biasness.

There are only two categories of questions used in the study vis multiple-choice question and open-ended questions. This may limit the answers provided by respondents and also having scale ranking would enhance better measurement of satisfaction level. The 20 questions in the questionnaire, may be increased and ensure thoroughness.

### ***Summary of findings, implications, and conclusions***

The results on the whole do support the notion that conducting cooperative learning is feasible and that students have a positive view. Cooperative learning activity can be used to enhance learning experience along with “flip classroom” concept. The results obtained did dispel the presumption or stereotype view that Asian students are passive learners, shy to participate, individualistic and preferred instructional based teaching. 21<sup>st</sup> century learning is here to stay. (Gillies, Pham & Renshaw, 2008).

However, there is a need though to recognise learning challengers and precautionary steps can be taken.

### ***Learning challenges and opportunities***

Despite the strength in collaborative learning, there are several learning challengers in the implementation of cooperative and blended learning. In addition to highlighting the learning challengers, possible solutions or ways to resolve the challengers are provided as well. Learners are uncertain of what is expected of them, goals set could be too vague. It is therefore important for instructors to provide very clear instructions even before the session begin, “set house rules” and defer judgment if there are unresolved areas. Specifying the rationale of working collaboratively is an important start, laying out expectations for both individuals and groups are needed as well (Johnson, et. al., 2013). These may include; group interest precede over self-interest, every member of the team has a chance to share his or her opinion and teamwork is essential where every member of the team needs to participate and contribute their fair share of work. In the specific classes conducted, each member of the team would “take responsibility” to be an expert for a task or mini case to ensure equal distribution of workload and contribution. This degree of involvement often challenges and redefined assumed power relationships between instructors and learners, (and between students and students), a process that at first can be confusing and disorienting (Romer and Whipple, 1990). Team performance or proficiency level varies quite substantially from group to group. To avoid homogenous group formation (similar academic standards, close ally or some culture of members in a group), heterogeneous mix of learners in terms of gender, ethnicity and academic performance so that no one group is at a disadvantage and instill peer learning (Smith, 1996; Felder & Brent, 2007). Each member in a team is of varying standards of knowledge competency or even communication skills, good mix of members from different culture or ethnic group.

### ***Curricular accomplishments and challenges***

To address situations of unequal workload distribution or contribution among team members, assignment of roles to team members on a rotational basis, keeping the group small (ideally four learners to a team) and instructor walk around the class and listen to discussions. The different roles include the role of leader (which is to assign task, set deadline and lead in discussion), recorder (minute taker during team discussion or feedback provided by instructor) and checker to ensure there are errors, and expectations are met. There would therefore be a fairer share of workload among members in a team. In addition to role assignment, “jigsaw” technique in which each student becomes task or min case expert (Faust et. al., 1998) is used as well. Furthermore, introvert learners would also have a chance to take the leader role as well. Instructors are highly encouraged to visit each team and observe their discussion, offering timely feedback where needed and also to informally assess team members (Felder et. al., 2007).

To ensure individual accountability, peer evaluation in which each member rate and evaluate one another at the end of each meeting session to ensure members are accountable to one another (Felder, 2007; Johnson et. al, 2013).

### ***Pedagogical activities and discrepancies***

There could be learners who are introvert, shy or knowledge gap and slow to keep up with the team progress. In this regard, “think pair share” create a “safe” learning environment (Faust and Paulson 1998) whereby pairs of students form discussion group initially. In addition, “air time” of 3 – 5 minutes provided the opportunity for each learner to speak out or voice their opinions.

By providing a comfortable learning space, hopefully as the session progresses, the shy learners would feel more comfortable and start to socialize with the rest of the group members. Once learners are quite comfortable (typically after two or three sessions) with working with classmates which they may not know well, they would feel more comfortable when a larger team of four members are formed eventually. For members in the team are experienced knowledge gap, to promote healthy relationship among team members, the more proficient learners are encouraged to be a mentor to other members in the team (McCombs & Whisler, 1997). They need to be aware of the importance of positive interdependence since every member is indispensable to the teams' success or failure to meet the goals set (Johnson et. al., 2013). In the progress of acting as a mentor, not only would it promote peer learning resulting in better relationship, it in fact it could also enhance the motivation to learn for both groups of learners. For the learners who experience knowledge gap, team members are there to assist. As for the more proficient learners, they could also feel high higher esteem since they know act as a mentor (Felder, 2007). Instructors who are making rounds of visit to each group could observe, use cues, prompts, probing questions and Socratic questioning to induce critical thinking among learners (Faust & Paulson, 1998; Rachel, 2002). Scaffolding technique is particularly useful to facilitate learners to build on prior knowledge and internalise new information, assist in cognitive development initially and support is gradually withdrew support (Rachel, 2002). This not only would build learner self-confidence but also close knowledge gap and move up to the next level of learning consistent with Vygotsky (1978) "zone of proximity development" (Rachel, 2002).

There is a high chance that disagreement and divergent opinions are inevitable. In arriving at the group solution, there will be "promotive interaction" (Johnson & Johnson, 1989) whereby learners initially with diverse viewpoints share their respective opinion, challenge one another assumptions, brainstorm various solutions and finally decide on the chosen solution which all group members eventually agree. This is where collaborative learning promotes active and deep learning. In addition, lecturer would visit each group to observe how their discussion progresses and early intervention could be rendered to close differences in opinions gaps. In addition to discussion within groups, at the end of each session, a sharing and de-brief session was conducted in the form of "world café" style (The World café, 2013) where each team is given a chance to share their opinions or comments with the rest of the class. This way, invariably enhanced the knowledge exchange. Learners also experienced divergent views of group member. The instructor then provides an overall feedback on how the teams' performance vis-a-vis areas that are exemplary and conversely where improvements can be made. Problem-based learning (PBL) instruction, commonly used in higher education, frequently is built around collaborative learning strategies. This can be traced from the work of John Dewey. Dewey endorsed discussion-based teaching and asserted the importance of giving students direct experiential encounters with real-world problems expressed in terms of abstract theories of pedagogy and learning abound within the educational literature (e.g., Koschmann et. al., 1996; Norman, 1988; Norman & Schmidt, 1992; Schmidt, 1983)

### **Overall**

The above discussions provided insights into various literature studies on learning, particularly social constructivism to cooperative learning. In addition, literature studies have indicated cooperative learning can be a good teaching strategy to encourage blended learning, primarily on the basis that it enriches learners' experience in the course of learning. More specifically, in cases where the learning objectives specify the requirement to work collaboratively in teams, solve more complex cases and those that require deep thinking. By coming together with face-to-face interaction, it also helps to develop learners' social interaction skills, form richer relationship among peers and also encourage peer learning. As learner interpersonal skills are developed, by working collaboratively, it also helps to better prepare learners for workplace in the near future. The experiences shared by learners while pursuing their undergraduate studies too pointed several positive experiences including seeing the benefits of having team members complete the task, face-to-face interaction is extensive and trust level were gradually build time over time. In addition, there were also peer support, encouraging and checking on one another. A large majority of learners see the value in preparing them in the workplace. On the whole, it was a good learning experience worth investing. Though collaborative learning has many positive aspects that provide a foundation to develop cognitive, social and problem-solving skills, implementing do poses some learning challengers and corresponding solutions are suggested to overcome learning challengers including the use of "think-pair" share to better prepare learners prior to working collaboratively, how groups are to be formed, the importance of instructors visiting teams both to observe and assess learners to the assignment of roles.

It is hope that educators could consider to use collaborative learning as a learning activity in their classes where it stimulate not only students but teachers. Given the collaborative learning process models, what it means is to question, learn, and understand in concert with others. Learning collaboratively demands responsibility, persistence, and sensitivity, but the result can be a community of learners by which everyone is welcome to join, participate, and grow.

### Notes

1. In order to honour the confidence of the CEO and the PEI's officials who were interviewed in the course of this research, their names, and complete job designations are omitted here. Nonetheless, where data source is reported from an interview, the interviewee is identified by their course/programme.
2. In order to preserve the anonymity of the respondents, their actual names are not provided.

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