

# **PROMOTING LEARNING SKILLS THROUGH TEAMWORK ASSESSMENT AND SELF/PEER EVALUATION IN HIGHER EDUCATION**

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## **ABSTRACT**

In the education sector, teamwork assessment and self/peer evaluation are widely applied in higher education nationally and internationally. This assessment is designed to encourage students to promote and improve their skills in teamwork, communication (writing, interpersonal interaction and cultural awareness, and presenting), critical and creative thinking (problem solving and decision-making), Information Technology literacy, and information literacy. Beside the above, this assessment will improve work performance and productivity and increase self-confidence in a range of situations. These skills are developed by formative and summative feedback, collaboration, and cooperation between students and the lecturer. This study aims to discuss the development of teamwork assessment and self/peer evaluation in the BT2 undergraduate unit at an Australian university to promote students' skills and to prepare them for the workplace in the future, as most of these skills are indispensable not only from the academic perspective but for business as well. This study provides empirical evidence from 267 students, based on quantitative and qualitative data derived from two sources. The first is the anonymous informal feedback collected during the semester, while the second (formal) source of students' evaluations and perspectives towards the BT2 unit is 'eVALUate', the anonymous online system for gathering and reporting students' perceptions of their learning experiences at the university. The students' remarks show their satisfaction with this assessment, as it develops specific skills for the current study and for the future workplace, i.e. time management; problem solving, decision-making, cultural awareness, presentation, communication and meeting a deadline.

## **KEYWORDS**

Teamwork assessment, self/peer evaluation, learning skills, higher education, Australia

## **1. INTRODUCTION**

From the business perspective, it has been noted that Information Systems practitioners have been eagerly exploring the need for effective skills, i.e. teamwork, critical thinking, writing, communication, and oral and written presentation, among Information Systems graduates (Lanning et al. 2011; Van Deursen & Van Dijk 2009). Thus, university academics have started to integrate these skills in their curricula and units to assist students in university life, their future workplace and life in general. To align with businesses' needs and desires, a teamwork assessment and self/peer evaluation was developed and integrated in the Business Technology (BT2) unit to motivate and challenge students to explore and investigate the strengths and weaknesses of the new technologies in the marketplace and present the outcomes as a report in an academic style. Furthermore, this assessment will identify how these technologies will assist businesses to improve their performance, increase productivity, and raise their awareness and variation in the workplace. The teamwork assessment discussed innovative topics, namely 'fiber to the home' (FTTH); security, the Internet, and the latest operating systems; mobile technologies and Internet telephony; 2015 new laptops; wireless technology, i.e. WiMax (Worldwide Interoperability for Microwave Access); green technology; cloud computing; IPv6; and virtualization. Teamwork assessment and self/peer evaluation are becoming an essential part of BT2 unit, to encourage students to learn, improve and develop communication skills (such as writing and oral presentation), to develop excellent relationships with their peers, and to exchange ideas and knowledge in relation to the unit in general and the assignment in particular. The teamwork assessment and self/peer evaluation were released in week one of the semester, with the necessary information from the

marking guide, strategies on the presentation and structure of reports, and guidelines on plagiarism and referencing style. The self/peer evaluation aims to encourage each student to think about and understand how well s/he and her/his partner performed the team activity, and to develop their teamwork skills. Each pair submitted one peer-reflective and one personal (self-reflective) comment on what s/he has done for this assignment, and a copy of her/his notes on the resources that s/he developed or located in this assignment. The self/peer reflection questions encompassed the following headings: (1) Individual roles and responsibilities; (2) Generating and creating ideas/strategies; (3) Research; (4) Collegiality; (5) Organizational skills; (6) Final outcome/product.

Furthermore, students were asked to complete the self/peer reflection as well as the peer reflection comments section. The former included three questions or tasks – (1) what did s/he learn from this group activity (in terms of the process of working in teams – not content/information)? (2) What would s/he need to change in the way s/he worked with her/his partner in order to make future team activities more successful? (3) List three strengths that you have in team working and two weaknesses that you need to continue to improve, while the latter included one question that asked the student to list three strengths and two weaknesses that s/he had identified in her/his partner from this team-working assignment. Each student uploaded their evaluation and draft resource material to the blackboard FLECS facility, and later the lecturer checked and assessed the group's work and identified how well the pair functioned. Finally, this assessment provided the students with an opportunity to inform the lecturer if there were any problems with the pair interactions, the division of workload, or other aspects. On the basis of this information, the lecturer had the capacity to assign each student a different mark based on his or her efforts to complete the assignment well. This paper will present an Australian perspective on integrating teamwork assessment and self/peer evaluation in higher education. This study is organized as follows: (1) teamwork assessment and self/peer evaluation; (2) methodology and research question(s); (3) BT2 Participations, (4) BT2 Assessments, (5) Results, (6) Discussion and Lessons Learned, (7) Conclusion.

## **2. TEAMWORK ASSESSMENT AND SELF/PEER EVALUATION**

Teamwork assessment and self/peer evaluation have become widely used in university courses, including those on computing and information systems (Lejk, Wyvill & Farrow 1996). It has been noted that the integration of teamwork assessment and self/peer evaluation in the higher education curriculum would develop skills in communication, leadership, time management, problem solving and decision making (Gielen, Dochy & Onghena 2011; Oldfield & MacAlpine 1995; Weaver & Esposto 2011). Furthermore, this assessment will provide more interesting, effective, and exciting learning experiences for students and the lecturer, as plenty of new ideas and perspective will be generated, and more discussion and debate will occur (Lanning et al. 2011; Nulty 2011; Weaver & Esposto 2011; Webb 1995). Furthermore, the literature review confirmed (Diggins 2004; Gillies & Ashman 2003; Lanning et al. 2011; Pavolvich, Collins & Jones 2009; Steensels et al. 2006) that students who have completed assessments in teamwork mode would be able to work collaboratively with others in the university and in the workplace in future; the significant concept behind this assessment is to develop and promote students' skills for the lifelong learning process.

BT2 is a core unit in the double/single major in the Bachelor of Commerce degree (information systems and information technology, information technology and digital design, information systems and internet communications, information systems, and information technology). The BT2 unit focuses on hardware, software, operating systems, networking, LAN protocols, network services, and UNIX scripting. According to the university policy (Curtin University n.d.), each unit must promote two to three professional skills: i.e. communication (writing, interpersonal interaction and cultural awareness, and presenting), critical and creative thinking (problem solving and decision making), teamwork, IT literacy and information literacy. The BT2 unit promotes the following professional skills: (1) Critical and creative thinking – problem solving; (2) Critical and creative thinking – decision-making; and (3) Teamwork. Integrating these skills in BT2 assists students to (1) identify problems and analyze the main features; (2) identify, implement and evaluate strategies for the resolution of problems; (3) generate pioneering solutions; (4) accept each other's ideas within the group and gather all these ideas to generate a logical argument to solve the problem of the assignment; (5) manage the time effectively, which involves meeting requirements set by others; (6) manage projects effectively, which involves the organization and co-ordination of group work; finally, (7) negotiate

successfully with others, which involves getting people to move from a position they prefer to a position that suits all parties. As for the teamwork assessment and self/peer evaluation in BT2, it allows students to develop the following skills: (1) communication, information literacy, information technology literacy and teamwork skills, (2) evaluating how teamwork is beneficial in distributing the workload (ensuring individual accountability), creating participation and involvement, making better decisions and generating a diversity of ideas. To allow the smooth development of these skills amongst the students, an icebreaker technique was adopted in the lab session in which the students were asked to introduce themselves to the lecturer and the other students simultaneously. The icebreaker questions included name, degree, current occupation (if any), experience in computers, and education in computers; ‘Why did you select this unit?’, and ‘What do you expect to gain from this unit?’ This technique was very useful in the lab session for allowing students to gain more information about their peers with respect to studies, knowledge and work experience. In week two, the students chose their peer for the team working assessment from the same lab cohort, to monitor and check their progress for the assessment. Furthermore, the procedures for conducting this assessment were explained in the lab session and in the lecture with respect to the report writing task, plagiarism and referencing. Also, to emphasize the importance of these procedures, a presenter from the communications skill center in the university was invited to emphasize the importance of report writing, plagiarism and referencing, as a useful handout showing different examples with respect to the above procedures was presented to the students. Students were monitored during the whole process, and if any conflicts occurred between team members in relation to teamwork assessment, or if students did not appear to be getting along, a contact would be established with students in order to assist them to finalize and submit the teamwork assessment and the peer- and self-reflection on time. Furthermore, after the assessment was submitted the self/peer evaluations were checked and compared to decide if the teamwork contract between the pair was workable. Nevertheless, if a major difference occurred in the self/peer evaluation, then students would be contacted to clarify the situation and later each student would receive a different mark for the assessment.

Furthermore, based on students’ formal and informal feedback, slight changes were carried out to the teamwork assessment and self/peer evaluation. These changes included allocating marks to the self/peer evaluation to emphasize the value of this assessment, and two approaches were introduced and integrated into the teamwork assessment and self/peer evaluation: (1) student expectation process; (2) teamwork agreement and timeline. The former was intended to assist students to choose partners who had similar expectations to themselves and who were aiming for similar grades for the group assignment, as the icebreaker technique became unpopular in the lab session. The latter assessment was introduced since in previous semesters many students had trouble in finalizing the assessment because of the deadline. To prevent this problem, a teamwork agreement and timeline were signed by the pair and submitted to the lecturer during week three of the semester. During the lab session, the lecturer tracked the students’ progress on the basis of the teamwork agreement, as students identified which task activities should be completed in each week. The lecturer provided formative feedback to tackle any problems immediately and to improve the presentation, structure, and layout of the assessment. Some outstanding feedback was received from the students regarding the recent changes, as the majority of the students agreed that these approaches allowed students to manage their time efficiently and to complete the assessment on time. Finally, more comments from the students indicated that the teamwork agreement and timeline allow them to: (1) finalize the assessment promptly, and achieve better planning and preparation, (2) learn new skills and knowledge from the other group members, (3) split the workload effectively according to the agreement and (4) organize the assessment work and reduce time pressure.

### **3. METHODOLOGY AND RESEARCH QUESTION**

The mixed methods approach (quantitative and qualitative methods) was used in this study to minimize discrepancies in the findings and provide a substantial amount of data to identify the positive and negative aspects of the adoption of teamwork assessment and self/peer evaluation in the BT2 unit (Creswell 2003; Crump & Logan 2008; Gilbert 2006; Harrison & Reilly 2011; Hesse-Biber 2010; Maudsley 2011; Molina-Azorin 2011; Teddlie & Tashakkori 2009). Currently most researchers and scholars are in favor of mixed methods in a single research study, since this mixture allows researchers to have a comprehensive understanding of the data collected through their research, by a combined analysis of text and statistical data.

Creswell (2003) proposes that mixed methods are an approach for collecting, analyzing and integrating both quantitative and qualitative data in a single study to understand the problems and to identify the strengths and weaknesses behind the study. By the same token, Wiggins (2011, p.47) claims that “the strengths of each methodology (flexibility and intimacy for qualitative, generalizability for quantitative) make up for the other’s weaknesses (low generalizability for qualitative and rigidity and objectivity for quantitative)”. In this study, the data were collected using quantitative and qualitative methods via anonymous students’ formal and informal feedback. Informal feedback was collected during the fourth week of the semester. The informal feedback was designed to give the lecturer some idea of how students felt about the unit and learning experiences so far in the semester. The informal feedback was analyzed and shared with the students in order to carry out the changes before the end of the semester. Questions in the informal feedback included: What are the positive aspects of this unit? What do you like about the lecturer? Do you have any suggestions or recommendations for how the learning experience can be improved? (Please provide specific suggestions.) What do you need the lecturer to continue doing, to stop doing, and to start doing? As for formal feedback, ‘eVALUate’ is an anonymous university feedback system that usually runs at the end of the semester.

This feedback mainly focuses on the unit as well as satisfaction with the teaching. The formal feedback included responses to the following statements: the learning outcomes in this unit are clearly identified; the learning experience in this unit helps me to achieve the learning outcomes; the learning resources in this unit help me to achieve the learning outcomes; the assessment tasks in this unit evaluate my achievement of the learning outcomes. Moreover, the feedback on my work in this unit helps me to achieve the learning outcomes; the workload in this unit is appropriate to the achievement of the learning outcomes; the quality of teaching in this unit helps me to achieve the learning outcomes. Further, I am motivated to achieve the learning outcomes in this unit; I make best use of the learning experience in this unit; I think about how I can learn more effectively in this unit; and finally, overall, I am satisfied with this unit. In this study the researcher will examine and investigate if teamwork assessment and self/peer evaluation will assist students to improve and promote their learning skills (Curtin University n.d.). The learning skills are communication (writing, interpersonal interaction and cultural awareness, and presenting), critical and creative thinking (problem solving and decision-making), and Information Technology literacy and information literacy skills, as they have become crucial for information systems graduates.

#### **4. BT2 PARTICIPANTS**

In this study, the participants are 267 students who completed BT2 between 2006 and 2010. Most of these students are studying towards a double/single major in the Bachelor of Commerce degree (information systems and information technology, information technology and digital design, information systems and internet communications, information systems, and information technology). The BT2 focus is on operating systems and the networking basics, e.g. local area networks. A majority of BT2 students come directly from high school, and thus has little or no work experience. BT2 students are mainly from Australia and Asia (China, Hong Kong, Indonesia, Iran, Japan, Malaysia, Pakistan, Singapore, Sri Lanka, Taiwan, Thailand, and Vietnam); 75% are Asian, while 25% are Australian. It was noted that nationality and culture played an important role in the BT2 unit via the teamwork assessment, discussion, and debates in the lab session. The Asian students shared their knowledge in information technology and their computer experience by uploading the latest technology news and information on the blackboard, while the Australian students shared their work experience and understanding through discussions and debates. Feedback on BT2 confirmed that “learning to work with people with English being their second language always establishes a challenge but it has taught me some skills which I can use later when communicating with people from different countries”, and from the unit you “gain experience in how to work ‘with people of different cultures and countries’”.

#### **5. BT2 ASSESSMENTS**

The assessments for BT2 are divided into three: teamwork assessment and self/peer evaluation (30%), mid-semester test (30%), and the final exam (40%). These assessments focus on critical and creative thinking, problem solving and decision-making, and teamwork. The teamwork assessment consists of a set of

evaluation exercises (three to four questions) to familiarize students with the newest technology in the marketplace. These exercises are selected based on the most recent technology in the market to motivate and challenge students to explore and investigate the strengths and weaknesses of the new technologies in the marketplace, while the self/peer evaluation is designed to encourage students to think about and understand how well s/he and her/his partner performed the team activity, in order to develop communications and other skills. The mid-semester test and final exam consist of short-answer questions and case studies, in order to assess and examine students' higher-level thinking skills and knowledge, on the basis of the unit learning objectives, the practical case study, and the lecturer's formative and summative feedback during the semester.

## 6. RESULTS

Integrating teamwork assessment and self/peer evaluation in the BT2 unit was essential to promote and improve learning skills among BT2 students. This assessment assisted BT2 students to develop excellent relationships with their peers, sharing and exchanging ideas and knowledge in relation to the unit in general, and specifically to the assignment. This assessment has become the favorite for BT2 students, since it was well monitored and structured by the lecturer. From week one, the lecturer released the assessment information, namely assessment questions, presentation standard, guidelines for report writing, self/peer evaluation schedule, teamwork agreement and timeline, and finally the marking guide. In week three, the teamwork agreement, and timeline were submitted during the lab session to the lecturer. The lecturer and students must keep a signed copy of the agreement, and the lecturer monitored the agreement periodically. Integrating this assessment into BT2 prompts and enhances learning skills, develops good relationships between students, and encourages them to learn other skills besides the teamwork. It was noted from students' formal and informal feedback that the teamwork assessment and self/peer evaluation was well liked among the students. Students confirmed that new knowledge and problem-solving, decision-making and technology skills were promoted and improved: "The teamwork assessment taught us how we should behave in a group discussion and how we should work to get the tasks finished quicker but with good quality results." "Teamwork is the synergy that really helps in producing great stuff." "Team work is about using other members' ideas along with your own to resolve a problem – as the saying goes, 'two heads are better than one'". Additionally, students were very pleased with the teamwork assessment, as they indicated: "Teamwork assessments are dynamic, and basically teach you how to handle people and their personalities." "We made good friends for the future and have learned more about the topic." Students learned and developed specific skills from this assessment beside the teamwork skills, and these skills will assist them in the current study and for the future workplace: i.e. problem solving, decision-making, cultural awareness, presentation, communication skills, and meeting a deadline. Students stated, "From this group activity we learn that it is very important to get along with someone. We need to support each other in our work. No matter from what background they come, everyone should be treated equally, since in real life experience, different people might have different points of view and it is very important to try to understand each other and support each other's decision." Furthermore, "although team work can be difficult, it helps with learning patience and being open to other peoples' ideas," and "I have learned that showing respect and being patient is very useful in team working. Listen first and then give your opinion and try to show your appreciation for the effort that your team member has made."

Furthermore, other skills such as time management and meeting a deadline were promoted and developed among BT2 students by completion of the teamwork assessment. Students commented: "Doing team work and team assignment is a good way for me/us to learn how to prepare, how to manage my/our time, and it develops my/our ability to socialize and meet new people." Students also confirmed that "working with the team, especially if s/he is a shy student, our member group will encourage me/us to ask questions during the meeting." "It is important to determine pre-arranged deadline schedules. Communication is important; plan to finish work well before the due date to allow time to fix potential problems." "We work together not only in the BT2 unit, but also in other units as a group, to complete other assessments." BT2 students did not restrict their feedback to developing and promoting the skills area, but confirmed that completing this assessment will prepare them for the workplace and for their careers in the future. "The type of information generated from the assignment will help me throughout my career." "The Team Working Assessment will

help me in participating in teamwork as we are going to face this teamwork in our real life.” Furthermore, to confirm the teamwork assessment’s success, students must listen to and respect their partner’s opinions, and students commented that “the Team Working Assessment teaches me how to work in a team and do work effectively to make a satisfactory outcome”. “Supporting and listening to other group members’ opinions is an important factor in group success.” From the informal feedback, students indicated that, without the lecturer’s commitment, encouragement, and formative feedback, the assessment could have failed. Students stated that the lecturer is “very energetic and full of current information”; “she tries hard to make the unit interesting; at the beginning of each lecture she always tells us what is happening in the news regarding IT.” In addition, “I like her for being able to resolve our learning to the practical in a real.” “She explains materials well and is friendly and approachable.” “She helps everyone who is in difficulties or having problems with the computer or the unit.” Finally, she “provides good real life situation news, articles and updates as well”, and, finally, our lecturer is “witty, clear, precise, and humorous”. Furthermore, it was noted that students were pleased with the BT2 learning experience and feedback, as well as expressing overall satisfaction (see Table 1). Table 1 indicates that the BT2 average in items 2, 5 and 11 in unit evaluation are higher than the university average. These outcomes provide the lecturer with more confidence to carry on with the current assessments, including the teamwork assessment and self/peer evaluation, and to impart formative and summative feedback to the students aligned to promote and improve their communication skills.

Table 1. eVALUate results – Unit Evaluations for BT2 from S1 2006 – S2 2010 (93% response rate)

Year/Semester	Students enrolled	Response rate	Item 2 Learning experience		Item 5 Feedback		Item 11 Overall satisfaction	
			Unit	University Average	Unit	University Average	Unit	University Average
2006/S1	54	19%	100	81	90	70	100	78
2007/S1	32	47%	100	82	93	73	93	82
2007/S2	25	56%	93	82	86	74	86	81
2008/S1	29	59%	100	83	94	76	100	82
2008/S2	26	69%	89	82	83	77	89	83
2009/S1	36	47%	100	84	100	76	100	83
2009/S2	29	62%	89	84	83	77	88	83
2010/S2	16	56%	100	85	100	79	100	84

Beside the quantitative results, students were keen to provide some qualitative responses in relation to the BT2 unit: “This is a pretty tough unit, but I think we can learn a lot of potential information from this unit for future use as an IS student.” Furthermore, “it is useful in application to real life”; “the unit is very helpful for the students who would like to continue their career in the IT area”; it is “very well organized, the material taught is well structured, organized, and well taught; lots of useful documents, lab notes etc. ... given to students; useful windows functions, facts, features taught”. Students also perceived the BT2 unit as “looking at the real life situation of the technology world and providing up-to-date information”; it has a “very logical and paced structure, the work is not over the top and you still are doing things.” The feedback from eVALUate (formal feedback) was not limited to the unit evaluation; students also presented their views on the teaching evaluation (see Table 2).

Table 2. eVALUate results –Teaching Evaluations for BT2 from S1 2006 – S2 2010 (25% response rate)

Question: The Lecturer:	S1 06	S 1 07	S2 07	S1 08	S2 08	S1 09	S2 09	S2 10
Is well organized	100	100	100	100	100	100	100	100
Communicates clearly	100	100	78	100	77	83	90	100
Is approachable	100	100	100	100	100	100	100	100
Provides useful feedback	100	100	100	91	85	100	90	100
Appears knowledgeable in this subject area	100	100	100	100	100	100	90	100
Is enthusiastic in teaching this unit	100	100	100	91	93	100	100	100
Is an effective teacher	100	100	100	100	85	100	90	100

Students offered the following comments about the lecturer: “The best aspect about the lecturer is that she is specific about her areas of assessment; this enables students to review those areas, and get back to her if

need be.” “She explains the lecture well and offers help when asked, and she is great when confronted to discuss a topic on an individual basis as she observes the level of the student and is able to adjust her explanations and examples to suit the student.” “She is very up to date with industry-relevant information regarding the unit, and is able to explain the concepts being taught in the unit clearly.” “The best lecturer I have ever seen. Easy to approach, provides very effective information for us, and she never delayed in response to our queries.” “[Our lecturer] is one of the best lecturers I have ever had! I am sure that all of the students will feel the same as me, she is the best lecturer at the university, no one is better than her.” The results from the mixed methods endorsed the study research question, as students confirmed, after completing the BT2 assessments, that they had learned new skills in the areas of communication (writing, interpersonal interaction and cultural awareness, and presenting), critical and creative thinking (problem solving and decision making), Information Technology literacy, and information literacy. Finally, students corroborated that the new skills will be useful in university life, the future workplace and life in general.

## **7. DISCUSSION AND LESSONS LEARNED**

This experience was interesting and an outstanding achievement from the lecturer's perspective, as the majority of the students indicated in their informal and formal feedback that completing the BT2 assessments allowed them to promote and develop their communication skills for university, future workplace, and life in general. The teamwork assessment and self/peer evaluation was designed on the basis of the literature review and the regular feedback from students. This assessment was a challenging exercise for the lecturer and the students simultaneously, as the lecturer provided formative feedback to her students in order to tackle any problems immediately and improve the presentation, structure, and layout of the assessment, while students were keen to present a weekly report regarding their assessment progress based on the team agreement. Additionally, from the lecturer's perspective, regular feedback prevents students from repeating the same mistakes and improves their learning behaviour and thinking skills, especially concerning report writing, research, and using Endnote software. On the other hand, summative feedback informs students about their level of performance when they reach the end of a topic or specific assessment task, or at the conclusion of the unit. As a result of using both formative and summative feedback, the number of requests for extensions dropped dramatically, and the extra time and effort that were put into the planning and organization of cooperative learning tasks were rewarded by an increase in students' levels of satisfaction with the teaching and learning experiences. On the basis of the literature review and students' feedback (Bates 2010 ; Gul & Boman 2006; Jaques & Salman 2007; Neus 2011; Nulty 2011; Wolcott et al. 2002 ; Yang, Newby & Bill 2008), the author definitely recommends the integration of teamwork assessment and self/peer evaluation and time agreement in higher education. These assessments will encourage students to work as a team, and to improve their communication skills, including interpersonal interaction, negotiation, conflict resolution, listening, and patience with others, and their skills in the areas of leadership, brainstorming, research, writing, problem solving, and decision-making. Finally, on the basis of the students' outstanding overall satisfaction, the author is now considered a teacher-leader in teamwork assessment in the school, and she now works with her colleagues to support and implement this assessment in the school curriculum strategy to match the university graduate attributes and to promote and improve students' learning skills.

## **8. CONCLUSION**

This study has investigated the incorporation of teamwork assessment and self/peer evaluation in the higher education sector, specifically at the undergraduate degree level. The literature review confirmed the significance of this assessment in higher education, as students would improve their collaboration, cooperation, and communication skills, which have become essential for the lifelong learning process and future workplace. This paper discussed the strategies and techniques that were adopted for the teamwork assessment and self/peer evaluation in the BT2 unit. This assessment was a challenging exercise for both the students and the lecturer, as the lecturer always provided formative feedback to her students in order to tackle any problems immediately and improve the presentation of the assessment. The regular formative feedback prevents students from repeating the same mistakes and improves their critical thinking, self-confidence and

learning behaviour; also, students were keen to complete their tasks on time according to the team agreement. Furthermore, it was confirmed that students improved their communication skills, including interpersonal interaction, negotiation, conflict resolution, listening, and patience with others, and their skills in the areas of leadership, brainstorming, research, writing, problem solving, and decision making. Finally, it is recommended that this assessment should be implemented in higher education to meet the needs of students, university, and the workplace, as these skills are essential and critical in higher education in our time. In the future, the same exercise will be implemented for a postgraduate unit to examine the similarities and differences between students' perception of teamwork assessment and self/peer evaluation. Furthermore, more research will be carried out to discuss the self/peer evaluation template, especially the strengths and weaknesses of the partner.

## ACKNOWLEDGEMENT

Special thanks to Dr. Shelleyann Scott for her support during this study.

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