BUILDING EFFECTIVE VIRTUAL LEARNING TEAMS THROUGH ENHANCED TEAM PROCESSES

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Abstract

Information and communication technologies have changed the way how people live, learn and conduct the business activities. The utilization of virtual teams to support cooperative learning becomes a leading topic in distance education. Previous research reveals that the practices of collaborative learning through team interactions enrich students' learning experiences and prepare them to embrace the real-world problems in the team-based activities. Aligned with the philosophy of learning community, virtual learning teams have reported enhanced student-to-student engagement, raised motivation, higher student satisfaction, greater retention rates, and better academic performance with improved critical thinking, problem-solving, and communication capabilities. In this article, not only challenges are identified, but also strategies to create and facilitate productive virtual learning teams are recommended. These proposed strategies are instrumental in cultivating virtual teams and can be beneficial to instructional designers or instructors who might either integrate the team component into the curriculum or facilitate virtual teams in the online classrooms.

Keywords

Virtual Team, Learning Community, Collaborative Learning, Distance Education, Higher Education

1. Introduction

In the past few decades, the explosive developments in Internet and communication technology have transformed the philosophies of teaching and learning. Advanced communication technology allows the learners to experience computer-mediated formats regardless of time and location (Kuscu & Arslan, 2016). Technology has changed the learning infrastructure and ways of knowledge acquisition and dissemination (Borboa, Joseph, Spake, Yazdanparast, 2017). As a result of this educational transformation, a substantial proportion of institutions use online formats along with available communication technologies to implement team learning, allowing for real-time interactions with the instructors and other students in the online environment (Taras et al., 2013).

From the organizational perspective, virtual teams have formed the nuclei of the twenty-first century organizations, played a vital role in organization's structure, and enabled organizations to remain flexible and competitive (Dixon, 2017). In response to this demand, numerous higher educational institutions have embraced the team concept and utilized virtual teamwork as a valuable instructional design in the curriculum. The ability to work in a virtual team and collaborate with team members in dispersed geographic locations is an indispensable set of skills for today's learners (Topchyan, 2015). These important skills can be taught, learned, and cultivated (Taras et al., 2013). It has become paramount to develop students' effective team skills and maximize their learning experience (Hu, 2015; Grzeda, Haq, & LeBrasseur, 2008). This paper is organized as follows. First, the essence of virtual teams will be reviewed. Second, key attributes of thriving virtual teams, including trust, communication, and conflict management, will be examined. Third, the benefits of virtual teams in the online education will be discussed. Fourth, challenges of virtual teams will be identified. Fifth, drawn upon literature, strategies to form and facilitate the effective virtual learning teams will be recommended. Final thoughts are presented and concluded the paper.

2. The Essence of Virtual Teams

Formally defined, teams in the online learning environment are groups of people, who are separated geographically, use communication technologies to transcend the limits of time and distance to work together as well as accomplish tasks and common goals that require a high degree of interdependence (Hu, 2015; Makani, Durier-Copp, Kiceniuk, & Blandford, 2016; Tseng, Wang, Ku, & Sun, 2009). Team members work together to generate positive synergy through collaborative and coordinated effort (Tseng & Ku, 2011). Traditionally, audio/video conferencing, bulletin boards, and electronic mail are technologies used by the virtual team members to communicate and work synchronously (Topchyan, 2015). Apart from Web 2.0 social technologies including weblogs and wikis, Google Apps, such as Google Calendar, Docs, Mail, Maps, Sites, Talk, and Video, have also been broadly utilized in education as collaboration and communication tools as the technology continues to grow (Hu, 2015).

Teamwork refers to the team members' willingness and ability to work together in a sincerely collective manner toward common goals (Staggers, Garcia, & Nugelhout, 2008; Williams, Duray, & Reddy, 2006). Team members with teamwork orientated mind-set are inclined to support learning, which is crucial for the fulfilment of virtual learning teams (Stagger et al., 2008). Team cohesiveness is the extent to which members of a team identify themselves with the team and desire to remain part of the team (Williams et al., 2006). Team cohesiveness facilitates the team to reach its goal, effectiveness, and productivity. Highly cohesiveness teams have a propensity for overcoming obstacles. When team cohesiveness is high, interpersonal communication and the potential for learning are observed. The quality of team communication and the level of trust are also high when the team has a high degree of cohesiveness and conformity (Williams et al., 2006).

3. Key Attributes of Thriving Virtual Teams

There are three essential attributes in successful virtual learning teams, including trust, communication, and conflict management. These three key attributes can help students learn effectively, efficiently, and productively in virtual teams to accomplish tasks and achieve the desired results.

3.1 Trust

Trust is a critical ingredient in maintaining effective and cohesive virtual teams (Bulu & Yildirim, 2008; Tseng & Ku, 2011). It has been widely researched and documented as having the positive influence on team outcomes. Trust, generally, develops from a history of interpersonal interactions through those people who come to know one another (Berry, 211). Building trust in virtual teams has its great challenges (Beranek & French, 2011). In virtual teams, trust must be established through other means since team members may not have past experience to draw on (Berry, 211; Bulu & Yildirim, 2008). Trust among virtual team members is built upon the sharing of one's opinions, feelings, conclusion, and expectation of others (Tseng & Ku, 2011). A synthesis of existing research studies demonstrates that the development of trust is associated with continuous interactions and communications among the team members, which leads to better team cohesiveness and social integration of diverse views into team dynamics (Paul, Seetharaman, Samarah, & Mykytyn, 2004). As it is concluded from Bulu and Yildirim's study (2008), trust can be built up in virtual teams over time and influenced by the types of communication behaviors and interactions such as feedback, enthusiasm, social interaction, task-oriented interactions, and coping with technical problems. The teams with different levels of trust also display different communication behaviors (Bulu & Yildirim, 2008). The midpoint of the team establishment is recognized as a decisive moment for reducing or rising pattern of communication behaviors. Bulu and Yildirim (2008) asserted that initial enthusiasm and social interaction help teams build trust in the early stage of team formation; on the other hand, task-oriented interaction upholds the momentum in the succeeding stages. Trust are intensified when the division of labor and equal participation are observed (Bulu & Yildirim, 2008). Similarly, Beranek and French's (2011) investigation supported the notion that trust levels increase over the course of team development from the beginning to the end of the semester. A striking finding is that the changes in the levels of trust did not show any difference between virtual and face-to-face teams (Beranek & French, 2011).

Teams with high trust can positively impact on team effectiveness, communication, problem- solving, decision-making (Liu, Magjuka, & Lee, 2008), and satisfaction (Lee et al., 2008; Tseng & Ku, 2011; Tseng et al., 2009). Team members with a high level of trust engage in continuous and frequent communication behaviors (Tseng & Ku, 2011). They facilitate the flow and exchange of information as well as demonstrate creative, cohesive, and diversified actions

that affect the quality of problem-solving and decision-making abilities within the team. Accordingly, team members exhibit a higher satisfaction with teamwork and willingness to meet the team's goals. A teamwork relationship with high trust is likely to boost open communication, collaboration, conflict reconciliation, and commitment to the team (Liu et al., 2008). To assess the dynamic effectiveness of trust, Tseng and Ku (2011) completed a research study in an online graduate course. The results showed that the levels of trust were strongly and positively correlated with team performance and teamwork satisfaction, and the teams with higher levels of trust at the end of the course also displayed more matured teamwork development stages (Tseng & Ku, 2011).

Trust is the key to productive virtual team learning to occur, and it depends upon team members' willingness to trust their teammates and be trusted. The evidence from Olson-Buchanan and colleagues' (2007) research supported the use of teams in online learning, showing that the level of trust and cooperation among team members is a significant predictor of learning. After examining factors impacting student's knowledge sharing within virtual teams, He and Gunter (2015) uncovered that cohesion has a direct relationship with knowledge sharing while trust influences knowledge sharing mediated through cohesion. Ghadirian, Ayub, Silong, Bakar, and Zadeh (2014) argued that knowledge sharing is an influential step in knowledge acquisition. Knowledge sharing is regarded as a social occurrence in relation to social interactions and interpersonal relationships (Lin, Wu, & Lu, 2012), and it is convincingly affected by individuals' willingness to engage in the process (Ghadirian et al., 2014; Lin et al., 2012). In the high trust teams, members are more willing to engage in the learning process and share the knowledge with others (He & Gunter, 2015). It is imperative that knowledge is shared among individuals within a team, and through knowledge sharing, individuals are capable of reconstructing knowledge by accepting multiple perspectives and challenging their own understanding while considering peers' views. Eventually, the knowledge will also be conveyed and refined until it becomes common knowledge to the team (Ghadirian et al., 2014; He & Gunter, 2015).

3.2 Communication

Effective communication is eminent for the success and effectiveness of virtual teams (Topchyan, 2015; Tseng et al., 2009). Without clear and effective communication, teams could be troubled with incongruity about priorities and process for realizing objectives (Tseng et al.,

2009). The research findings from Tseng and colleagues' (2009) study suggested that clear communication will enhance a better understanding of team tasks and a stronger team commitment. Effective communication also relies on the team members' ability to build and sustain their personal relationships (Topchyan, 2015). When teams are working collaboratively, the communication tends to be frequent, open, complete, and accurate (Tseng et al., 2009). Correspondingly, individual members become more willing to respond to and assist with other's needs and requests. Developing and maintaining relationships is to ensure that individual team members work in harmony to get their work done. It requires that virtual teams maintain a strong sense of community, effective communication, socialization, and collaboration (Hu, 2015; Topchyan, 2015).

In virtual teams, communication issues mainly stem from the tools or technologies used for communication and the individual's capacity of using the communication tools (Hu, 2015; Pauleen, & Pak, 2001). A lack of timely response also generates poor communication and creates an undermining relationship. Training to develop proficiency with virtual communication channels to perform tasks and facilitate social interactions is an essential provision for effective virtual teamwork (Topchyan, 2015). One specific challenge to virtual team leaders is to manage the team processes through electronically mediated interactions (Hu, 2015; Kuscu & Arslan, 2016; Topchyan, 2015). It was found that in the online learning environment, team leaders can effectively facilitate team-based activities by utilizing some higher-context communication such as video-conferencing, for instance, AdobeConnect, Blackboard Collaborate, and Cisco WebEx, to build personal and working relationships with team members (Hu, 2015).

3.3 Conflict Management

Conflict is inevitable in teamwork. Conflict arises from the discrepancies in team members' attitudes, behavior, opinions, perceptions, thinkings, and ways of doing things (Liu et al., 2008; Tseng & Ku, 2011). Scholars no longer regard conflict as an issue in the team development. Rather, a conflict has been viewed as a significant component of team dynamics (Liu et al., 2008) because team processes are not unchanging social interaction patterns (Tseng & Ku, 2011). In the virtual learning team, conflicts could relate to the work of the team itself or the roles and responsibilities assigned to team members within the team (Staggers et al., 2008). Hence, conflict management is significant to the accomplishment of teamwork. Conflicts and disagreements can be minimized if the division of labor and equal participation in the team work

exist (Bulu & Yildirim, 2008). In the case of conflict arisen, team members must understand other's personality and how they wish to be treated in a collaborative situation. Therefore, conflict is a mutual problem to be solved in ways that benefit everyone involved (Tseng et al., 2009).

Conflict management has been well researched in social psychology. The Thomas-Kilmann's Conflict Management Model has well-defined styles for understanding and comparing interpersonal conflict handling styles (Paul et al., 2004). One of the styles in this model is collaborative style. Collaboration occurs when interaction is very important to goal attainment, and this style focuses on problem-solving in a collaborative fashion (Paul et al., 2004; Liu et al., 2008). In examining the roles of team structure, trust, and conflict in the effectiveness of virtual teamwork, Liu, Magjuka, and Lee (2008) proposed that the level of trust has a positive association with the collaborative conflict management style. In a team with high trust, team members have a tendency to cooperate with one another and expend efforts to identify conflict solutions by integrating various points of view. Furthermore, teams exhibiting a higher level of collaborative conflict management style yield higher quality problem-solving and decision-making processes. In another study, Paul, Seetharaman, Samarah, and Mykytyn (2004) explored conflict in global virtual teams and found that collaborative conflict management style has a positive impact on team performance. The findings suggested that the collaborative conflict management style positively influences team members' satisfaction with perceived participation, decision-making process, and the quality of decision (Paul et al., 2004).

4. Benefits of Virtual Teams in the Online Education

The increased integration of virtual teams into online classrooms is in part due to readily available collaboration technologies. Forming virtual teams can offer a range of benefits, including cultivating a community of learners, nurturing constructive dialogue and knowledge exchange, stimulating deeper processing of content through interaction, and encouraging adaptable alternatives to complex tasks (Kabilan, Adlinda, & Embi, 2011; Liu et al., 2008; Makani et al., 2016; Tseng et al., 2009). Subsequently, improved productivity, elevated morale, and advanced innovation are often identified in the booming virtual learning teams (Beranek & French, 2011).

Grzeda, Haq, and LeBrasseur (2008) advocated that not only course design but also student interaction and collaboration determine the success of an online course. The

collaborative team-based activities are philosophically aligned with learning community models of teaching enhancement. The social interaction of virtual teams underlines the importance of learning community in the online education (Makani et al., 2016). Conrad (2005) delineated community as "a sense of connection, belonging, and comfort that develops over time among members of a group who share a purpose or commitment to a common goal" (p. 2). A learning community, portrayed by Rogo and Portillo (2014), is a group of learners who share a common purpose, engage in intellectual interactions, as well as communicate and collaborate with their peers and instructor for the purpose of learning from others (Rogo & Portillo, 2014). The development of the learning community relies on meaningful social relationships and members' perception of their mutual dependence on each other to attain common goals (Rogo & Portillo, 2014). Members of the learning community have a sense of belonging, safety, trust, sharing, communication, collaboration, interaction, and participation (Mittman et al., 2010; Rogo & Portillo, 2014). Cui, Lockee, and Meng (2013) cited that the learning community offers an opportunity to connect learners, exchange ideas to enhance learning, create known knowledge, and engage in rewarding learning experience by taking advantage of individual strengths and various perspectives among individuals. Having a sense of community promotes learning opportunities and helps students learn and retain the knowledge since a sense of community is a fundamental component of quality online education (Rogo & Portillo, 2014).

Working together, team members have the opportunities to interact with each other, break personal boundaries, build personal relationships with teammates, and learn from different perspectives (Tseng & Ku, 2011). The creation and development of social interactions and personal relationships among team members is needed for enhancing working relationships, motivating students, and promoting student's creativity, productivity, and learning (Pauleen, & Pak, 2001; Tseng & Ku, 2011; Williams et al., 2006). In the online classrooms, team-based activities for collaboration can also raise motivation, retention rates, student satisfaction, and academic performance as students' interactions increase (Hu, 2015; Kuscu & Arslan, 2016; Williams et al., 2006). Through learner-to-learner interactions, team members complete major projects collaboratively in the team-based activities. Such a learning involves student's thinking, feeling, and acting in ways that promote both individual learning and collective learning that team members see themselves as a source of authority and knowledge (Williams et al., 2006). Interactions promote learners' active participation that brings about clarifying ideas and

transferring new ideas into knowledge. As a result of dynamic interactions with others, team members actively build up knowledge by formulating ideas into words that are shared with others (Kabilan et al., 2011; Makani et al., 2016). When students share and construct knowledge in collaborative teamwork, it could strength students' metacognitive knowledge (Tseng & Ku, 2011). Thus, social interactions in collaborative teams are viewed as important activities for developing higher mental process. Consequently, individuals in the team are predisposed to learn more because they tend to interact and share information with others more frequently (Makani et al., 2016; Williams et al., 2006). Team-based activities can meaningfully enhance instruction since such learning stimulates students to reach higher levels of knowledge, comprehension, application, analysis, synthesis, and evaluation (Williams et al., 2006).

Learners who collaborate in the online learning team help one another to clarify their thoughts together along with constructing knowledge and content that are shared with and built upon throughout the interactions and responses of others. Moreover, virtual learning teams support learner engagement in meaningful contexts, thereby increasing learning ownership (Makani et al., 2016). This interactive knowledge-building process stimulates a community of practice as an alternative means for the creation of knowledge and encourages team members to grow as mature and satisfied learners (Kabilan et al., 2011; Kuscu, & Arslan, 2016). Owing to a rich treasury of exchanging ideas, team members as mature learners assist others in solving problems with their unique contributions (Lee et al., 2009). Research has also found that the benefits of using virtual learning teams to complete projects involve better learning efficiency, improved critical thinking skills, and enhanced communication proficiencies (Tseng et al., 2009).

5. Challenges of Virtual Teams

Virtual teams could face challenges that interfere with the creation of thriving teams. It is well documented that in the online environment, the constraints of dispersed asynchronous communication context and the lack of informal interactions with limited capabilities of transmitting social cues hinder social presence and interactivity (Hu, 2015; Liu et al., 2008; Makani et al., 2016). Under such an environment, effective communication and collaboration become difficult to establish a team identify, which is imperative to the effectiveness of team performance. Undeniably, the computer-mediated communication technology has changed the dynamics of the team process by impacting social norms and relationship in the online classroom. Technological infrastructure is likely to impact the development and effectiveness of

virtual teams in such a way that team members and the instructor may or may not be able to manage productively (Taras et al, 2013; Topchyan, 2015). For instance, software compatibility is a key element to consider when teams select the communication channels (Topchyan, 2015). Therefore, the appropriateness of selecting and utilizing communication media plays a critical role in overcoming the challenges that teams have (Liu et al., 2008 or Topchyan, 2015).

Without the supporting and effective communication technology, a seamless communication among team members will not come to fruition. Teams might carefully select and utilize proper communication media from an assortment of available technologies for various tasks and different stages of team development (Hu, 2015). Virtual team members might have to make extra efforts in communication and collaboration for a productive team process since their interactions and the sense of community could have a considerable impact on team dynamics (Liu et al., 2008). In addition, obtaining proper training in how to use the communication technology will enable the effective conversation to occur (Makani et al., 2016). Furthermore, there are inherent factors impacting the success of virtual teams. Based on the findings from their research, Munkvold and Zigurs (2007) outlined five negative factors including the lack of normal for communication, mismatches in expectations, time differences, cultural differences, and various levels of experiences. As a result, poor process structuring, ineffective communication, and mistrust among team members lead to ill-development of a shared understanding of what needs to be done to accomplish their team goal. All teams in Munkvold and Zigurs's study (2007) voiced that many problems could have been eliminated if the initial orientation meeting was conducted.

6. Strategies to Form and Facilitate the Effective Virtual Learning Team

A team-based approach towards learning fortifies the course design that shifts the balance from more supported and directed approach to teacher-centered learning to more independent learning, student-centered learning (Tseng et al., 2009). Business and management schools have incorporated the team concept as a valuable instructional element in the delivery of the curriculum in the online courses. Theoretically and empirically, each team member has the responsibility to establish and maintain virtual teamwork. Nevertheless, the instructor should take on more responsibilities to intervene and help build effective virtual teams to minimize confusing and misunderstanding as well as foster impartial distribution of work and responsibility (Makani et al., 2016; Milman, 2015; Tseng et al., 2009).

Based on numerous scholars' research and experiences in the online learning teams (Beranek & French, 2011; Bulu & Yildirm, 2008; Grzeda et al., 2008; Lee, Lee, Liu, Bonk, & Magjuka, 2009; Makani et al., 2016; Milman, 2015; Munkvold & Zigurs, 2007; Topchyan, 2015; Tseng et al., 2009), the following suggestions are proposed for instructional design and course facilitation when virtual teams are needed in online courses:

- Host a kick-off meeting via synchronous communication. In an attempt to foster online collaboration, instructors can promote the significant collaboration by organizing a kick-off meeting in the commencing of team projects (Munkvold & Zigurs, 2007). During the 15- to 30- minute meeting, task and technical orientation should be introduced (Bulu & Yildirm, 2008). The instructor should also articulate the course requirements and expectations for team-based projects, supply relevant materials, and address students' concerns and questions (Milman, 2015; Tseng et al., 2009).

- Integrate a team-building ice-breaker exercise. It might be intimidating for certain students to meet online with their team members for the first time and immediately work together on a team project. Accordingly, it is necessary to build team members' trust, relationship, and team dynamic in a team-building exercise (Grzeda et al., 2008). It is desirable that this exercise should be organized in conjunction with the kick-off meeting to help students develop team process skills in support of effective completion of team-based course requirements (Beranek & French, 2011; Bulu & Yildirm, 2008; Grzeda et al., 2008).

- Assign team leaders with proper responsibilities. To improve the effectiveness of online learning teams, the instructor should assign team leaders and promote trust among team members. The main responsibility of team leaders is to move the team towards their common goals by encouraging collaboration. The team process, usually, is consisted of relationship building, idea generation, task prioritization, and decision-making (Makani et al., 2016; Topchyan, 2015). As collaboration and communication processes suffer from lack of fact-to-fact interaction, the team leader's role becomes paramount. A team leader must manage this team process by utilizing a whole spectrum of communication technology strategies and incorporating the underlying elements of human and social interactions (Topchyan, 2015). The aim of the leader's facilitation is to clarify all aspects of communication concerns including the unspoken interpersonal issues (Topchyan, 2015). The leader should give clear directions on what needs to be done. The leader also needs to delegate tasks and

responsibilities to the team members. As such, the team members will be motivated to work independently and interact with team members collaboratively. With available communication technologies, an outstanding team leader sends reminder communications to remind teammates of deadlines, schedules online meetings, and keep the teammates on track during the discussion (Milman, 2015). The team leader should be the point of contact between the instructor and team members as well as have the final say on major team decisions if necessary (Milman, 2015).

- Specify roles, tasks, and responsibilities to be performed in a team**.** According to Bulu and Yildirim (2008), conflicts and disagreements can be minimized, and trust is intensified if the division of labor and equal participation occur in the teamwork. Defining roles, tasks, and responsibilities in the team may help equal distribution of communication and participation among team members. Coordinated work is accomplished by the division of labor among teammates whereas collaboration encompasses teammates' mutual engagements in the cooperative endeavors to solve the problem collectively (Taras et al., 2013).

- Formulate grading rubrics*:* The instructor needs to communicate grading criteria and expectations expressly. All key tasks to be performed should be evaluated, including team communication, team involvement, time management, individual contribution, and collaboration. If peer assessment is required, this should be in the grading rubric as well (Beranek & French, 2011; Grzeda et al., 2008; Milman, 2015).

- Provide management tools and guidelines. The effective management of virtual teams demands certain management skills and the appreciation of the fundamental principles of team dynamics. Students are not born to possess team management skills. Students acquire the skills in school or at the workplace. To facilitate effective online learning teams, the instructor ought to provide tools and guidelines for project management, time management, and conflict management (Bulu & Yildirim, 2008; Makani et al., 2016).

- Maintain instructor's social presence throughout the team-based activities. Effective online learning is the circumstance under which instructors engage students in an ongoing discussion over a case or project, which is resembling faculty-led case discussions in the traditional classroom. It is impracticable that instructors can participate in the entire discussion for all teams. However, instructors could facilitate and participate in the discussion on a needed basis. The instructor's social presence could motivate and encourage

teams to build a sense of community (Bulu & Yildirim, 2008; Makani et al., 2016;). Bulu and Yildirm (2008) emphasized that the instructor should promote purposeful engagement among autonomous and independent learners. It is worthy that the instructor cultivates a safe and friendly online learning community where team members trust one another and respect other teammates' ideas, contributions, and work (Makani et al., 2016; Milman, 2015; Tseng et al., 2009). As a consequence, collaboration can be generated based on sincere interdependence drawn upon a shared sense of purpose and a division of labor.

Moreover, students might need support and advice from time to time, and the instructor should also act as a help provider to facilitate the learning process (Tseng et al., 2009). The instructor should promptly respond to students' queries and provide guidance or assistance (Makani et al., 2016). The instructors could build in checkpoints to gauge the team's progress, ensuring that teams are working together to complete the assignment (Lee et al., 2009; Milman, 2015). The students in Lee, Lee, Liu, Bonk, and Magjuka's (2009) study reported positive team-based learning experiences because of the monitoring and facilitation capacity of the instructor. Finally, the instructor should also help resolve relationship conflict when team members need advice on their collaboration and concerns if they are not able to resolve within the team (Tseng et al., 2009).

- Boost active learning among team members. The instructor plays a notable role in facilitating the sharing of knowledge (Ghadirian et al., 2014). Serving as the catalyst, the instructor should shift from enacting as a knowledge transmitter to a learning guide or facilitator (Lee et al., 2009). Instructor's support is an influential factor positively associated with students' knowledge sharing behavior (Lee, et al., 2009; Makani et al., 2016). It is the instructor's responsibility to ensure that students are engaged in the team process, activate their meta-cognition, explore and construct the knowledge, anchor the case to prior knowledge, and transform the knowledge to the real-world cases (Lee, et al., 2009). In the online team-based learning, timely feedback from instructors provides students with sensible insight as to how to address or solve a particular problem or situation embedded in a case (Lee et al., 2009; Makani et al., 2016; Tseng et al., 2009). Students will be motivated to engage social interactions with team members and to participate in the team and learning process (Tseng et al., 2009).

- Develop an action plan within a team**.** The team needs to identify the actions or activities required to achieve the team objectives. A timeline should be established for accomplishing each action to ensure that team activities remain on schedule (Milman, 2015). A specific team member or the team leader should be assigned to the responsibilities to warrant that each activity will be realized to beat the deadline (Grzeda et al., 2008).

- Keep the communication channels open**.** The instructor should urge students to share their contact information with their teammates (Milman, 2015). Each team would have to establish a list of team members' contact information including home, work, and cell numbers, email address, Skype name (if any), time zone and availability, as well as an emergency contact person and phone number. When one cannot make the deadline as a result of unexpected events or work/family commitment, he/she should inform the team members immediately (Milman, 2015). If any issue cannot be resolved within the team, it is obligatory to report the issue to the instructor and ask for help from the instructor (Milman, 2015).

7. Conclusion

The information technology revolution has enabled the institutions and educators to employ the hallmarks of fruitful face-to-face interactions in the online classrooms. Working in virtual teams can be very exciting, challenging, and rewarding. The skill cultivated and applied when working in virtual teams are beneficial. Team-based learning can prepare students to deal with the real-world problems that they will face. Once they are leaving the academic environment, they will be able to use previously acquired skills and experiences to be successful in their professions. Indeed, many students treasure the value of virtual teams; however, they might have the deficiency in social and technological skills that are required for team effectiveness. The integration of team-based activities into existing pedagogy entails a degree of expertise and technical skills that instructors might not possess as well. To harvest the benefits of virtual teams, institutions must take on the lead to develop faculty's capacities in the technical and facilitation dimensions. Without the support and encouragement from the institution, team-based activities could become burdensome to the instructors and the students.

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