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Is role-play an effective teaching approach to assist tertiary students to improve teamwork skills?

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Often student teams become dysfunctional as a result of inexperience and lack of prior knowledge. This exploratory study implements and evaluates a framework that attempts to scaffold teamwork skills through role-play activities. The review highlighted five essential teamwork skills that are supported with teaching materials. The results indicated that measuring change in team performance is difficult. However, the study showed that role-play was an effective teaching approach and well received by the students.

Keywords: teamwork, role-play, skills development, graduate attributes, communication skills, active listening, decision making, interdependence, interpersonal skills, conflict resolution

Introduction

There is a growing emphasis in higher education institutions on students developing professional skills that can be directly applied in industry. Important areas such as the development of teamwork skills, problem solving skills, decision-making skills, communication skills and information literacy skills have been given greater priority in response to industry requirements and greater reliance on teamwork within organisations (Australian National Training Authority, 2000; Baker, Horvath, Campion, Offermann & Salas, 2005; Bennett, Dunne, & Carre, 1999; Candy, Crebert, & O'Leary, 1994; Dearing, 1997).

Edith Cowan University (ECU) has ten graduate attributes that are considered important to a student's overall development and teamwork is identified as an essential generic skill. For this reason in many courses at ECU, students are required to work in teams as part of the curriculum. However, they are only given limited guidance as to how to make this effective. Sometimes students feel frustrated with these teamwork activities and complain about inequitable workloads and conflict. Students do not learn much from participating on dysfunctional teams and often develop negative views about the value of teamwork (Denning, 1992; Luca & Heal 2006; Swan, Magleby, Sorensen & Todd, 1994).

Teamwork

Handling group dynamics, multicultural teamwork, developing team presentational skills and implementing peer assessment are essential principles for effective teamwork according to Oxford Brookes University (2005). According to Luca and Tarricone (2001), the essential skills are commitment to team success and shared goals, interdependence, interpersonal skills, open communication and positive feedback. Similarly according to Harris and Harris (1996) team members should be willing to give and receive constructive criticism and provide authentic feedback, as appropriate team composition is essential in the creation of a successful team. Team members need to be fully aware of their specific team role and understand what is expected of them in terms of their contribution to the team and the project; commitment to team processes (Kets De Vries, 1999); and leadership and accountability, where team members need to be accountable for their contributions.

The review highlighted very similar areas, but it was seen as an important prerequisite of this study to find a valid and reliable instrument that could measure teamwork skills and attitudes. This turned out to be harder than originally anticipated given the relevance and importance that teamwork skills play in the current tertiary environment. Most instruments were commercial and expensive to use. The only suitable instrument found from a known reliable source was the Adult Literacy and Life skills (ALL) teamwork framework instrument (Baker et al., 2005). The ALL Survey is an international comparative study designed to provide participating countries, with information about the skills of their adult populations.

ALL undertook their own in-depth research in four core competencies - communication, interpersonal relations, group decision making/planning and adaptability/flexibility. It was decided to base our teaching materials on these, with the inclusion of conflict resolution, as this was perceived as important from the researchers own review.

Role-play

“Teamwork skills and team member participation can often be enhanced through role-playing” (Lingard & Berry, 2002) as it allows for hypothetical situations to be approached in an authentic setting. This is corroborated by research that concludes that situated learning allows learners to construct their own meaning and improves outcomes (Alessi & Trollip, 2001; Anderson, 1983; Park & Hannafin, 1993; Schank 1997). Applying skills toward achieving a specific goal provides a context in which those skills are useful (Bransford, Sherwood, Hasselbring, Kinzer, & Williams, 1990; Collins, Brown, & Newman, 1989).

According to Johnson, Sutton and Harris (2001) students perceive role-playing as one of the most important techniques for learning communication skills, after discussion. Role-playing scores the highest for the most enjoyable learning environment and since learning is improved if a student is motivated and engaged this is important to their learning outcomes.

Within this context, a role-play intervention was used to help promote the development of students’ teamwork skills. Role-play may be situated in authentic settings where students are allowed the opportunity to acquire the intended learning outcomes by making mistakes in safe environments.

Research undertaken by Ip, Linser and Naidu (2001) concluded that the move from traditional lectures, seminars, tutorials, paper-based exams, essay writing and reliance on printed books and articles, to role-playing significantly transformed the learning and teaching processes. Students played an active rather than passive role and emphasis was transferred from individual activities to communication and collaboration, which allowed flexibility in the delivery of material in terms of the number of participants, the timing and spatial location of the teaching and learning process and also how participants were taught new skills and competencies.

Methodology

A case study of two student teams, totalling six students was used to test the effectiveness of role-play as an approach to acquiring and or improving teamwork skills and perception of teamwork skills. Five modules were developed, each targeting a specific teamwork skill as outlined in the Literature Review and based on the ALL Teamwork Framework questionnaire (Baker et al., 2005). These students were selected from a unit where they were involved with real clients, producing an authentic product, such as a website or DVD in project teams where each play a real-world role, such as Graphic Designer, Project Manager and so on.

Data was collected in the form of both interview and survey data, which encompassed both quantitative and qualitative data. Surveys were undertaken to attempt to measure any discernible change in skill level, attitude towards teamwork and perception of teamwork skills.

The intervention consisted of five modules. Each module had a learning activity and involved the role-play of both good and bad teamwork skills. In order to highlight the possible pitfalls the researchers role-played the bad scenario first. This was done to put the students at ease and the researchers believe assisted the students in feeling less self-conscious about their own attempts at the good scenario. After the role-play of the bad scenario the students were provided with a teaching package that highlighted the skill being demonstrated, the key principles and techniques and, together with the role-play, provided material for discussion and reflection. The students then undertook a relevant activity based on the information provided and discussed, which was intended to provide scaffolding for their newly acquired knowledge and then a student group attempted to role-play the good scenario, allowing them to apply that knowledge. This then provided further material for reflection and discussion. Students were then required to use this to develop their SAOs (Situation, Action, Outcome) for their e-portfolio.

Preliminary findings

The results did show that the students considered teamwork to be important. This was reinforced by comments made as part of the qualitative data gathered. In response to the question – how do you feel about working in teams at ECU, one student responded, “It is a good experience and I think it is the most important skill to have when going out to the workplace”. However, there were changes in the perception of teamwork skills from pre- to post- survey (students were asked to rate their skills in each of the areas). Five out of six of the students felt that their skill levels had improved, but this was not corroborated by the ALL surveys.

Overall the students enjoyed the program, which was evident in their active engagement and aligns with Johnson, Sutton & Harris (2001). When asked about how they felt about role-play and if they found it uncomfortable one student commented:

Well obviously, but that's really beside the point as I found it really good to learn because you always think you know about that stuff but until you actually try it out... and it's good to role-play because even if you make a mess, you know, it's OK, but if you are actually with a client and you got deadlines then you start figuring out that you should be doing this and it might be a bit too late.

Another student commented on one particular module (interdependence):

I actually thought that one was really, really good and really enjoyed that one. That taught me a lot about myself and how I conduct myself and in groups, so I thought that was really, really good.

Role-playing also provided an authentic setting where students could apply their new knowledge, “Most of us have been in that group situation before, and so we could sort of relate to that.” They found that the information was more readily retained than by other more traditional teaching approaches. For the same reason, as they were able to contextualise the problem they felt that the program assisted with their production of SAOs as it reflected the situation and provided understanding.

Conclusion

This exploratory study attempts to contribute to the development of graduate attributes in the higher education sector by using role-play intervention to help students recognise the importance of teamwork skills, whilst immersed in an authentic learning environment.

It was interesting to discover after all attempts made to use a valid and reliable instrument to measure teamwork skills and attitudes that no discernible change was detected in these areas. This might suggest that the ALL instrument was not suitable for this study, or that it is indeed difficult to measure skill levels with this type of instrument, which was obviously further exacerbated by the small sample size. It would be interesting to perform further research using a much larger sample size to see what impact this would have in using this instrument.

Students highly rated the role-play activities and resources and believed them to be relevant to what they were doing and a motivational learning framework. Feedback obtained from surveys and focus group sessions showed strong and positive engagement in using the role-play strategy and there was an improvement in their perception of their skill levels. This could be a reflection of an improved confidence level provided by the activities undertaken, or it could be that the instruments or methods used do not accurately measure skill levels, or that perceptions are different from actuals, so even though these measures may provide some construct they do not provide conclusive results.

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