

Title: “TeamUP”: An approach to developing teamwork skills in undergraduate Midwifery Students

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Abstract

Objective: To develop an effective model to enable educators to teach, develop and assess the development of midwifery students’ teamwork skills

Design: An action research project involving participant interviews and academic feedback.

Setting: A regional university

Participants: Midwifery students (n=21) and new graduate midwives (n=20)

Interventions: A whole of course program using a rubric, with five teamwork domains and behavioural descriptors, to provide a framework for teaching and assessment. Students self and peer assess. Lectures, tutorials and eight different groupwork assignments of increasing difficulty, spread over the three years of the undergraduate degree are incorporated into the TeamUP model.

Findings The assignments provide students with the opportunity to practice and develop their teamwork skills in a safe, supported environment.

Key conclusions The social, emotional and practical behaviours required for effective teamwork can be taught and developed in undergraduate health students.

Implications for practice: Students require a clear overview of the TeamUP model at the beginning of the degree. They need to be informed of the skills and behaviours that the TeamUP model is designed to help develop and why they are important. The success of the model depends upon the educator’s commitment to supporting students to learn teamwork skills.

Keywords

Teaching, Teamwork, Midwifery, Peer Assessment, Rubric, Student

Highlights

- TeamUP is an effective, structured approach to teaching, developing and assessing health students' teamwork skills
- TeamUP involves students' self and peer assessment
- TeamUP is a whole of course educational strategy
- Students need to be informed about teamwork skills and why they are important in the first year of their course
- TeamUP may be a valuable teaching tool to employ in health undergraduate courses.

Background

Teamwork skills are a significant factor in the dynamics of health care, influencing the quality and safety of care, the workplace culture and health professional retention (Leonard et al., 2004; Wolf et al., 2017). Clinical errors, bullying and high turnover of staff are features of the workplace when teamwork is poor (Riskin et al., 2015). Groupwork assessments aim to develop students' teamwork and communication skills (Cumming et al., 2014; Kusano et al., 2016). How students learn these skills is beginning to get attention (Barton, 2016; Yi, 2016). Common complaints about groupwork projects include: work not equally shared; little commitment to the team project from some individuals (Parmelee, DeStephen & Borges, 2009) and shared low marks for the assessment item due to poor-quality contributions by some group members (Yang, Woomeer & Matthews, 2012). To avoid the common complaints with groupwork assessments and to appraise the development of the individual's teamwork skills, a regional Australian university introduced self and peer-marking for groupwork assessments into an undergraduate midwifery program in 2012. An evaluation of this attempt to assess the development of students' teamwork skills indicated a well-grounded and systematic approach was required (Parratt et al., 2014). In response, TeamUP, a longitudinal educational strategy spanning the whole undergraduate program, was developed in 2013.

Students and new graduates were invited to provide feedback on the TeamUP model and their perceptions of their experiences with teamwork at different stages of its development and implementation. With informed consent, interviews were conducted with participants. The first round of interviews focused on their interactions with their groupwork teams at University (Hastie et al., 2015). The second interviews focused on the application of their teamwork skills in the workplace. Analysis of the second interviews is in progress. Both interviews involved participants' perceptions and suggestions on all aspects of TeamUP. Academics involved with TeamUP also provided critique. This paper reports on the final version of the TeamUP model.

Ethics

Approval for the study was granted by the University's Ethics committee.

The Model

A modification of the generic American Association of Colleges and Universities' (ACCU) rubric (Rhodes, 2010) provided the framework for the TeamUP model. Based on a review of the literature (Hastie et al., 2014), the TeamUP rubric has five domains of teamwork skills,

with behavioural descriptors for each domain. A Delphi process with health academics was used for content validation of the rubric (Parratt et al., 2016). The TeamUP rubric functions as both a teaching and assessment tool. Curriculum time in the first year of the midwifery degree was allocated for lessons and tutorials on each of the five domains: 1) Fostering a Team Climate; 2) Project Planning; 3) Facilitating Teams; 4) Managing Conflict and 5) Quality Individual Contribution to the Group Project. Lessons and associated tutorials on communication skills, including courageous conversations, boundaries and reflection using a structured reflective process (Wisanskoonwong et al., 2011), are an integral part of the TeamUP model.

Recordings of the TeamUP lectures, downloadable notes, handbooks, relevant articles and the rubric are made available on the University site in a sidebar tab labelled TeamUP.

Examples of teaching and learning strategies

1. Tutorials

After each TeamUP lecture, there is a tutorial on the topic. The following example is from a tutorial on the topic of courageous conversations.

For this tutorial, students are randomly divided into small groups. Each group is given a different scenario e.g.

A baby has just been born. The midwife tells you to “hurry up and give the woman her injection”. You try to explain that you have not yet been taught how to do this at university. The midwife says irritably “oh for goodness sake ... I’ll watch you ... it’s in the tray, just do it”.

Students discussed and role played their scenario in their small groups and considered the best way to address the issue presented in the scenario. The role plays were presented to the large group and feedback was invited. This process is designed to enable students to learn to speak up, verbalise critique and provide feedback in a group.

2. Assignments to extend and measure learning

The TeamUP model contains eight teamwork assignments of increasing difficulty, spread over the three years of the degree. In the first year of the degree, students are divided into teams of 5-7 members, based on geographical location so they can meet face-to-face to undertake the assignment/s. Students allocate roles e.g. team leader; minute taker; etc. and use a community of practice area set up on the university web hosting site; with wiki, file sharing and email, to discuss their assignment and submit their meeting minutes and files. Explanatory handbooks outlining the TeamUP model and process to follow are provided for both students and educators.

In first semester, first year, students submit a reflection on their own teamwork behaviours along with the assignment. Academic staff allocate a mark for the teamwork behaviours, based on the quality of the student’s reflection, insight and learning. For the second semester and the rest of the degree, students provide formative and summative feedback for each other in each teamwork domain, using an online survey. Students are encouraged to discuss the domains regularly during their team meetings, invite comments from the others and reflect on

their own teamwork skill development. At the assignment’s midpoint, students appraise their own and their team-members’ teamwork skill development using the online survey. On completion of each survey, comments are automatically emailed to the relevant student. Students then have an opportunity to improve their teamwork behaviours if required, before their teamwork skills attract a mark. Although the mid-assignment feedback is a required hurdle, there are no marks allocated.

Once the assignment has been submitted for marking, each student undertakes another online survey and again, provides information about their own and other team-members’ teamwork skill development. This time the educator compiles the comments, evaluates and marks each students’ results. The handbook for educators contains a rubric for evaluating and marking student online survey comments. The assignment mark is generally weighted at 50% (all students get the same mark) and 50% for individual teamwork skills (students get different marks).

Table 1 Assignments here

Year of Degree	Semester	Assessment item
First	First	Poster
	Second	Essay
Second Year	First	Annotated Bibliography
	Second	Health topic brochure
Third Year	First	Interactive Learning Tool
		Antenatal Education Session
	Second	Debate
		Practice Development Project

How well does the model work?

Preliminary analysis of the second round of interviews with students and new graduates suggests that students learn the social and emotional skills as well as identified teamwork competencies underpinning effective teamwork. This learning is illustrated by one of the graduates of the program who said:

“it [TeamUP] taught me to want to be in a team - it’s the first thing in my head when I go to a new ward or a new environment, it’s right there – who do I talk to, who’s in charge, who’s going to be the people that are going to support me if something was to happen or who do I support if someone needs help”.

Threats and Challenges

Challenges for academics who want to use this model include the necessity to provide the lectures and tutorials on the TeamUP topics. In health degrees, content is ever expanding and there is never enough lecture time to cover all the material. Creative programming and innovative ways of providing content are required for this model to work. Another challenge is that the educator needs to be committed to helping their students develop the social, emotional and practical behaviours that underpin effective teamwork. The biggest threat to the model is a lack of commitment. If the educator is not committed to the model, it will disappear and the original program of groupwork assignments, with its associated shortcomings, will resurface.

Conclusion

The exciting and encouraging reality is that the social, emotional and practical behaviours required for effective teamwork can be taught and developed in undergraduate health students. The developers of TeamUP learned that it is crucial to provide students with a clear overview of the TeamUP model at the beginning of the degree. Students need to be informed of the skills and behaviours that the TeamUP model is designed to help develop and why they are important. As maternal and infant safety, quality care and staff retention are global concerns and rely on effective teamwork, educators may find the TeamUP model a valuable teaching tool to employ in their courses.

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