Enhancing Student Learning Experiences in Sport Psychology Modules using Practical Activities

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Abstract

Regular formal and informal feedback from Higher National Diploma students within the Institute of Sport and Exercise Sciences over a number of years highlighted a request for 'more practicals', despite the fact that many of the HND modules embed practical tasks and activities within each taught session. An action research project was undertaken to explore students' views on their preferred learning styles and to reflect on a modification to teaching practice in light of their preferences. The research found that there was no one specific learning style which suited all students and a number of initiatives are to be trialled during subsequent iterations to assess the efficacy of different approaches.

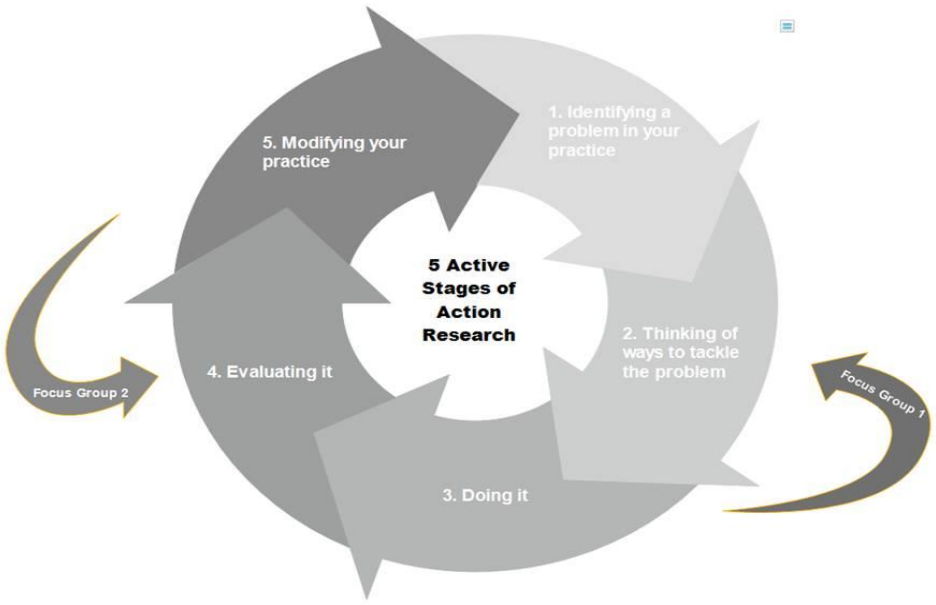
Identifying the Problem

The University of Worcester states in its most recent strategic plan (2013 – 2018) a set of enduring values that guide and direct the activities of the institution. The first listed, and perhaps the most important value is the striving to be 'an outstanding university at which to be a student'. This is further supplemented by values such as 'to inspire our students to reach their full potential through excellent, innovative teaching, scholarship and research' (University of Worcester, 2013: 4). One of the many ways in which the institution strives to provide this outstanding educational experience is through regular engagement, both formal and informal, with students at a number of points in each semester. Regular experiences of collating formal and informal feedback has led to the identification of a common theme amongst Higher National Diploma (HND) students in the Institute of Sport and Exercise Sciences (ISES), where they consistently request 'more practicals'. The ISES modules however are designed to incorporate a high degree of interaction, practical activities and tasks. This is especially important for those studying at HND level as research suggests differences in learning preferences exist when compared to undergraduate students, the former preferring a more tactile style of learning (Peters et al., 2008). Using an introductory Sport Psychology HND module as an example, practical activities and tasks are fully embedded in the taught sessions to enable contextual links to be made between the learning outcomes and their subsequent use. Examples of these include:

1. Interviewing athletes to produce a performance profile (Butler & Hardy, 1992);
2. Completing psychometric instruments such as the Competitive State Anxiety Inventory-2 (CSAI-2) to measure competitive anxiety in sport (Martens et al., 1990) and demonstrate data collection and construct measurement;
3. Performing relaxation interventions on the students to demonstrate how specific techniques (in this instance, decreasing somatic anxiety) might work in practice;
4. Demonstrating how observational learning facilitates skill acquisition by creating experimental conditions that the students participate in, in teaching a new skill.

Nevertheless owing to the students' previously stated on-going requests for more practical activities, it became evident that assumptions about what students consider an effective means of experiential or active learning in the context of sport-related disciplines of study needed to be investigated. This is where the opportunity to undertake an action research project arose, this being a practical method commonly employed in pedagogical enquiry to aid reflection on teaching and assessment practice for the purposes of working towards continuous improvement (see Figure 1).

Figure 1: The Five Active Stages of Action Research (Norton, 2001) & Focus Group Timing

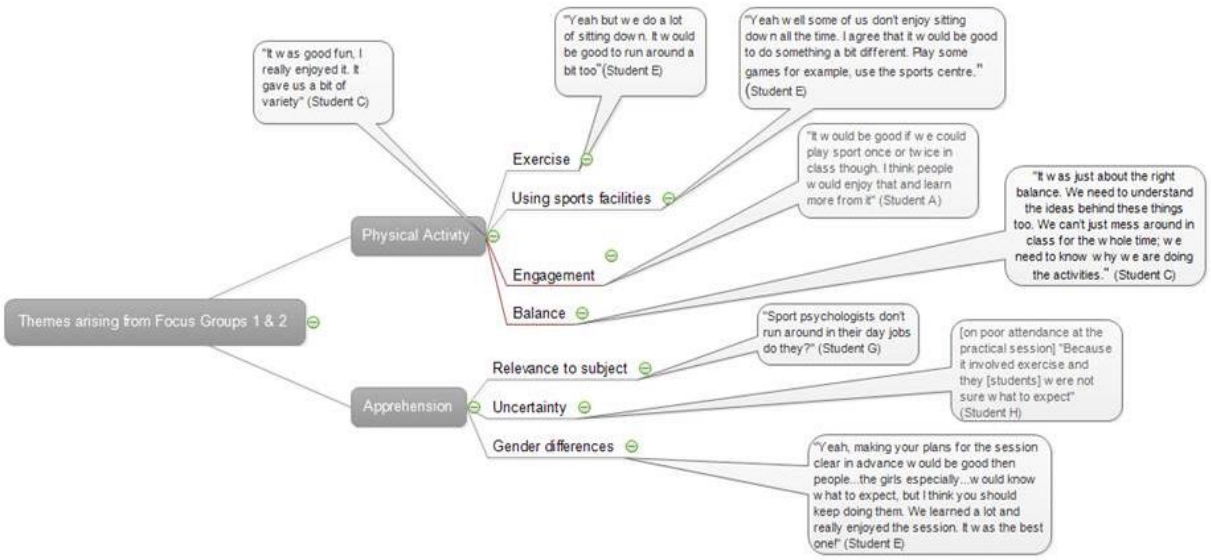


Thinking about Ways to Tackle 'The Problem': Method

The overall purpose of the project was to seek clarification on the evaluative feedback provided by the students and to bring about a modification to teaching practice. As such, a focus group was deemed the most appropriate method of knowledge generation (Chiu, 2003) as it placed the students (the participants in this instance, and key stakeholders in the process) at the centre of the research process. Therefore, to a certain degree the 'learners' were given the opportunity to collaborate and negotiate in determining their learning processes. A focus group is defined here as a qualitative research method that employs a particular form of group interview technique (Barbour, 1995; Pope et al., 2000) popularly employed in action research (Chiu, 2003).

Once ethical approval was gained from the Institute and participant consent had been obtained, two focus groups each involving 10 Higher National Diploma (HND) students were conducted at different times in the academic year. The first focus group (male, n = 6 and female, n = 4) was conducted in December 2012 after the completion of semester one of the 2012/2013 academic year, and the second study (male, n = 7 and female, n = 3) was conducted in April 2013 on conclusion of semester two of the same year (see Figure 2). The students from both focus groups were recruited from the University of Worcester's Sports Science HND, where they studied a module titled '*Foundations of Sport Psychology'*. All HND students were invited to participate in the focus group interviews. As the study relied on volunteers, the participants can be considered an opportunity sample. The first author acted as the facilitator of the focus group on each occasion to encourage critical dialogue between parties. In order to help achieve this, discussion guides were produced in advance of the focus groups and were used to structure the participants' input and dialogue (Stewart & Shamdasani, 2014). In the first focus group, the discussion guide was designed to encourage the students to think about the different teaching methods used in the previous semester and to provide further feedback on the positive and negative aspects of each. Anticipating the potential for limited recall or an inability to articulate the methods employed, a PowerPoint presentation was prepared with pictures of some of the activities completed over the course of the module to aid recollection. This was a useful means of anchoring the discussions of the participants in a particular area, which led to an examination of the participants' interpretation of 'practical' activities. Each focus group was videoed, notes were taken by the facilitator and the contributions of each party were subsequently transcribed verbatim. Data was analysed using inductive content analysis, where raw themes were identified, coded and organised into super- and sub-ordinate themes (Elo et al., 2014).

Figure 2: Summary of Themes arising from Focus Groups 1 & 2



'Doing it': Focus Group 1 Results and Activity Trial

The analysis of the data from the first and second focus groups is reported in Figure 2 and illustrates the group's discussions and interactions on this topic. The summary presented in Figure 2 shows that two superordinate themes: *physical activity* and *apprehension* emerged. Four further subordinate themes of *exercise, using sports facilities, engagement and balance* emerged under the *physical activity* theme. The data gained from focus group 1 was used to design a trial lesson for semester 2 which included a session involving physical activity. On reflecting on the discussions that emerged in the initial focus group, it was surprising to learn that requests for 'more practicals' were not unanimous within the cohort, only serving to reinforce the individual differences in learning preferences (Peters et al., 2008).

On preparing the module outline for a similar module in semester 2, time was taken to design a session that involved a high degree of physical activity. The trial involved gathering in the sports centre where a Dodgeball competition was arranged. The class were divided into 4 teams by physical size (two teams with taller, stronger individuals versus two teams with smaller players). A competitive anxiety condition was manipulated by the organiser of the game where the physically larger team were told that the expectation (Jones et al., 1998) was that they would be certain to win against their smaller opponents. To add to the inducement of competitive anxiety, students who were unable to participate in the activity due to injury were used to carefully evaluate the contribution (Smith et al., 1998) of each of the players from the 'stronger' team, giving them a score out of 10 for their individual performance which was then published on a screen at the end of the game. The smaller opponents were told that the Dodgeball game was being staged for fun, and that they should play with the aim of enjoying themselves. The lack of expectation regarding their performance was designed to eliminate the onset of any symptoms of cognitive or somatic anxiety. As there were four teams, two games of Dodgeball were run simultaneously. The outcome varied in both games, with the stronger team winning in one, and the physically smaller team in the other. After both games were finished, the students were handed a copy of the Competitive State Anxiety Inventory (CSAI-2) (Martens et al., 1990) to complete, which is designed to measure:

1. Levels of cognitive anxiety (e.g. negative thoughts);
2. Levels of somatic anxiety (e.g. physical symptoms of anxiety such as butterflies in the stomach, sweaty palms etc…);
3. Levels of self-confidence experienced in advance of the competition. A group discussion then ensued where the respective performances were evaluated and the contribution of competitive anxiety was debated.

The students were given a 30 minute break to have a shower, get changed and return to the classroom where the remainder of the session was focused on the theoretical underpinnings of the anxiety and sports performance relationship.

Evaluating it: Focus Group 2

A second focus group was organised after the end of the semester 2 module to consider the trial session described above and was structured in a similar way to the first. The purpose of this focus group was to evaluate the students' attitudes to the practical work in the aforementioned lesson on competitive anxiety in sport. An outline of the lesson was provided by the facilitator for the purposes of reminding students of their experiences. The summary presented in Figure 3 shows that the second superordinate theme of *apprehension* emerged, with three subordinate themes of *relevance to the topic, uncertainty and gender differences*. It was evident from the students' contributions that the delivery of a session involving physical activity was divisive. It was fully aligned with the expectations of some students, yet not others. Overwhelmingly in the second cohort, the physical activities were preferred and supported by the male students, whereas the female students could see the value in the way the practical activities had been provided previously. This finding may mirror that of Loo (2004) where he found that in general male students had a preference for learning through practical exercises. The lack of consensus regarding the balance of practical activities within the lesson design again highlights the individualistic nature of preferred learning needs and potentially a manifestation of the reluctance of women to exercise in front of men, a lack of confidence on the part of the women in their sporting skills, or negative body image issues (see, for example, Women's Sport and Fitness Foundation, 2012).

Modifying Practice: Module Design

The results of this action research project have been used in two ways. Firstly, it has allowed a more in-depth investigation of the meaning and intention behind a common comment offered by students during module evaluation, thereby acquiring evidence to support a change in practice. The second modification concerns the sharing of these findings with colleagues both within and cross-institute. In light of this information, joint physical activity-related sessions involving students from two to three different modules have been staged, thereby providing more flexibility in the types of activities offered and interventions demonstrated.

Critical Reflection & Conclusion

Whilst the present action research project has provided some useful data upon which to base a modification in teaching practice, there are a number of elements that need to be critically acknowledged as part of this process. Firstly, the recruitment of students to both focus groups relied on volunteers. By virtue of this, it is suggested that those participating would be the individuals that were more likely to have engaged with the learning process, and therefore perhaps more likely to have positive expectations and feedback. Furthermore, the first author (who was the module leader) acted as the facilitator in both focus groups thereby affecting the power-dynamic between the researcher and the participants. The effectiveness of the trial session was gleaned through qualitative data: the focus group discussions. A more effective evaluation of the impact of the balance of activities within a new learning experience may be rooted in assessment as well as feedback on students' attitudes towards the experience. A comparison of the results from one cohort to another could serve to provide this, and when considered alongside the qualitative outputs would provide a mixed-methods perspective on the data.

On reflection, and in advance of employing these strategies in the future, providing students with a small amount of preparatory work before the physical activity sessions is recommended; it is anticipated this will help students' identify pre-existing levels of knowledge to increase the effectiveness of experiential learning (Kolb & Kolb, 2005). Additionally, due consideration should be given to the inclusivity of students with both disclosed and undisclosed disabilities that may require adaptation of the planned sessions. For this purpose, it is intended that further thought will be given to the development of a wide variety of roles for the students within the re-designed sessions, which should, it is anticipated, lead to a greater attendance at the sessions and opportunities to include all students regardless of any potential obstacles faced.

In reflecting upon the ethics of the research project, it should be noted that ethical approval was obtained for conducting the intervention which involved the manipulation of competitive state anxiety amongst the student cohort. It should also be noted that we carefully considered the level of the emotion that was likely to result from this condition and concluded that it was highly unlikely to deviate from the levels experienced as part of everyday life. All students were debriefed on the completion of the lesson and fully understood why this condition had been created. Notwithstanding the fact that this activity was part of a Sport Psychology lesson where there were no serious consequences of either a win or a loss in the games, this clearly leaves us open to criticism that the condition created was unrealistic and unrepresentative. Finally, the most concerning finding arising from the present study was the reduction in attendance by the female students at the session involving physical activity. It is suggested that the next area to be investigated as a result of this study will be the challenges that running these session creates in terms of attendance within this population. In summary, the students participating in the focus group evaluated the trial physical activity session as having a positive effect on their learning experiences within the module.

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Biography
Lerverne Barber spent many years as a Physical Education teacher, Adviser and Inspector. She worked for the Youth Sports Trust as a National Trainer for ten years and in that time worked with Baroness Sue Campbell on the Physical Education and School Sport Strategy at the DfE. Lerverne has been at the University of Worcester since 2002, she is now Associate Head of the Institute with a responsibility for Learning and Teaching, Principal Lecturer for Student Selection and Achievement and she continues to lecture on the Physical Education course. In 2011 she was awarded University of Worcester Learning and Teaching Fellowship.

Claire-Marie Roberts is a Chartered Sport and Exercise Psychologist, BASES Accredited Sport & Exercise Scientist, Lecturer in Sport & Exercise Psychology and Course Leader for the BSc (Hons) Sport Studies degree. Claire-Marie works as an applied Sport and Exercise Psychologist with a variety of athletes, teams and sporting organisations in addition to her academic duties at the University of Worcester. She holds a BEng in Civil Engineering from Loughborough, a first class honours degree in BSc (Hons) Sport Psychology and an MPhil Sport Psychology from the University of Glamorgan, a PG Cert HE with distinction from the University of Worcester and is currently finishing her PhD at the University of South Wales, focusing on career termination in male professional athletes.