



## The Influence of Experiential Pedagogy on Undergraduate Sport Coaching Students' 'Real World' Practice

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**Abstract:** There is a body of research on the challenges that coaches face when trying to implement athlete-centred coaching, but very little attention has been paid to the influence that the growing number of sport coaching degrees has on coaches' beliefs and practice in regard to athlete-centred coaching. While studies have been conducted on sport coaches' use of game-based approaches (GBA) to coaching, undergraduate sport coaching students' interpretation of this coaching innovation has been largely overlooked. This article takes a step toward redressing this oversight by reporting on a study that inquired into the influence of the experiential pedagogy used in a course on athlete-centred coaching on students' beliefs about coaching and their practice. The scholarship of teaching study adopted a constructivist grounded theory methodology to focus on five undergraduates in a sport coaching program with data generated through a series of three interviews with each participant. This study concludes that the experience-based course design was effective in influencing undergraduate students' beliefs about coaching and their practice outside university.

**Keywords:** Sport coaching, higher education, Positive Pedagogy for sport coaching, coach learning, New Zealand, scholarship of learning and teaching



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## 1. Introduction

There is now a significant literature on athlete-centred approaches to coaching that has focused on team sports over the past few decades with recent attention paid to athlete-centred approaches to coaching in individual sports as well [1, 2]. The literature suggests the efficacy of these approaches but also its lack of significant influence on coaches' and teachers' practice [3]. This is largely due to the inherent pedagogical challenges of learning a new method and how it contradicts traditional coaching and teaching that focuses on skill-drill and direct instruction [4]. Short interventions in coach education programs on athlete-centred coaching pedagogy have also been identified as being ineffective in changing belief and practice [5] due to the influence of experience but growth in coach education programs at universities offers opportunity to make a difference. However, the relatively recent development of sport coaching programs means that been limited research attention paid to teaching and learning, or the pedagogy used in them [6, 7].

There is a body of work on physical education that, despite the differences between sport coaching and physical education teaching, suggests how the interaction between prior experience and university level studies in coaching is likely to shape coaching beliefs and practice. This research suggests that teachers enter the profession with beliefs and dispositions developed through experiences and interactions with people who have a significant influence on their practice [8-10] and identifies the influence of the pedagogy experienced as students on their interpretation of experiences in teacher education programs and the sense they make of them [11]. In regard to games teaching, studies on pre-service physical education teacher's interpretation and use of GBA such as Teaching Games for Understanding (TGfU) identify the powerful influence of prior experience on student beliefs about games teaching but discount the influence this formal learning has on them. While some studies have been conducted on sport coaches' use of GBA such as Game Sense and TGfU [4, 12], the influence of formal education at university level on undergraduate sport coaching students' belief in, and use of, of athlete-centred coaching has been largely overlooked. This article takes a step toward redressing this oversight by reporting on a study that inquired into the influence of the experiential pedagogy used in a course on athlete-

centred coaching on students' beliefs about coaching and their practice outside university.

## 2. Methods

This scholarship of learning and teaching study adopted a constructivist grounded theory [13] methodology and was focused on five undergraduate students.

### 2.1 Aim

The study on teaching sought to answer the question of: 'How effective was the pedagogy used in the course in positively influencing sport coaching students' coaching practice and why?' Ethical approval was granted for the study that was conducted over the six months following completion of the course. Data were generated at two distinct stages, which were:

1. Retrospective/reflective interviews on their experiences of the course within three weeks of its completion.
2. Two, one-on-one interviews that inquired into how participation in the course influenced their practice (if at all) over the 6 months following completion of the course.

### 2.2 The site and participants

Five, year-three (final year) undergraduates who undertook the course volunteered to participate in the study after invitations were sent to all students by email. All five had completed a previous course on athlete-centred coaching for team sports the year before.

### 2.3 Data generation

Data were generated through three interviews with each participant over a six-month period. In the forty to sixty-minute interviews the second author used open-ended questions focused on what they felt they learned and on their experiences of implementing any of what they felt they had learned in practice. The third interview was conducted by telephone.

### 2.4 Data analysis

We developed themes through initial, and then focused, coding to develop categories through memoing and constant comparison. We read and re-read the transcripts beginning with initial coding and then focused coding which required asking analytic questions of the data we gathered. This deepened our

understanding of the participants' responses and experience and guided subsequent data-gathering [13]. Through memo writing we developed focused codes into strong substantive codes that we then elevated to theoretical codes and themes. We used theoretical codes to conceptualize "how the substantive codes may relate to each other as hypotheses to be integrated into a theory" [14]. The theoretical codes specified possible relationships between categories we had developed in our focused coding, with the process of memo writing helping us identify emergent categories and thereafter an emerging theory.

### 2.5 The Course and its Pedagogy

The design of the course on athlete-centred coaching for individual sport and its pedagogy were guided by the work of [15, 16]. This involved placing experience at the centre of learning with lectures, practical sessions and assessment structured around this experience to encourage the development of knowledge and understanding of the course content at a nonconscious, embodied level by the students and the use of language to bring this implicit learning to consciousness through dialogue. We aimed at helping the students make sense of things through their experiences of lectures, practical sessions, critical reflection, oral presentations, dialogue with peers and lecturers, and the required relevant readings for literature required to complete their assessment tasks.

The course was delivered over one semester (12 weeks of teaching) that was divided into two terms with the students participating in a one-hour lecture and a two-hour workshop each week. Over the workshops during the first six weeks, the students experienced being athletes/learners who were coached using a Positive Pedagogy for sport coaching [17] PPed - approach as applied to individual sport and to specific skill and technique. For this course the workshops were on rugby passing, football (soccer) passing and dribbling, 4 x 100m relay baton changeovers, swimming, karate punching and javelin. Assessment for this half of the course was an essay in which the students reflected upon their experiences on how it felt to be coached this way, how it compared to previous experiences and how effective they felt it was from a learner's perspective. Over the second six weeks (second term), the students formed small coaching teams to design and implement a twenty-minute coaching session using the PPed approach for individual sports [17] in an individual sport of their choice but with two groups choosing to coach a single

specific technique or skill from a team sport. Their second assessment was on their analysis and critical reflection on the coaching session presented to their peers by their coaching team. This approach was aimed at providing them with the related experience of PPed as an athlete to encourage understanding and empathy with how learners experience the approach and of coaching in this way with an emphasis on being be critically reflective.

### 2.6 Positive Pedagogy for Sport Coaching

We recognize the variations in approaches but, in general, traditional coaching breaks the sport into separate components with a focus on teaching skill and technique. It focuses on what to coach (content) but not on how to coach (pedagogy) with a body of research conducted on the problems its dominance creates for coaches interested in taking up athlete-centred approaches [18]. Indeed, one of the more significant developments in contemporary coaching has been a focus on how to facilitate learning – on pedagogy. The course we focus on in this paper drew on 'Positive Pedagogy for sport coaching' [17, 19], which emphasizes learning through dialogue, reflection on experience, problem solving and interaction. It is not a model but provides a framework for coaching structured around the four features of (1) designing the physical experiences or activities to promote learning, (2) emphasizing questioning over instruction, (3) adopting an inquiry-based approach to learning and (4) encouraging positive experiences of learning by drawing on the work on Antonvosky (1987, 1996) and Seligman's (2012) PERMA model [20-22].

## 3. Results

The three factors that the participants felt most contributed to their learning in the course were, in order of importance, (1) the experiential pedagogy used, (2) the challenges they faced and overcame and, (3) their enjoyment of the course. Here we focus on the ways in which they felt the experiential pedagogy used helped them learn and make sense of their experiences, and how it influenced their practice and views on coaching. All five participants emphasized the central importance of their experience as learners and coaches in developing and an understanding of PPed. This was more focused on the experience of the workshops, but they also recognized the role played by critical reflection. In doing so, they lent support to Dewey's contention that we learn through both the

experience of doing, and the experience of reflecting, upon this doing [15, 19]. Here we present the role that the participants felt experiences played in their learning in three stages, which are: (1) The first-hand experience of being an athlete coached in this way in the workshops and the formal reflection on it during and at the end of these sessions through the assessment task, which was a reflective essay. (2) The 'hands on' experience of working with a small team to design and implement a coaching session using the PPed approach and the use of formal reflection and critical analysis through a formal presentation as the assessment task on the experience of applying the PPed approach to their coaching and having to adapt it.

### 3.1 Experiences as athletes

Experiences of the workshops as learners over the first six weeks allowed the participants to develop a subjective understanding of what it is like to be coached using a PPed approach. They felt that the dialogue involved between them and us, and between them, encouraged reflect on their own immediate experiences and on their learning. It also helped them appreciate the humanistic nature of the PPed approach and to understand the emphasis it placed on 'feel', empathy and seeing athletes as thinking, feeling beings. We suggest that this contributed to what Fosnot (1996) refers to as deep learning that involves understanding the concepts or 'big ideas' beyond the rational functioning of the mind that constructivist perspective on learning suggests underpin it [23].

Working as a basketball coach at a secondary school, Tom felt that his experience of learning in the two pool sessions had the most powerful influence on his understanding of PPed and its appeal to him. In the swimming workshops at the local pool, we placed constraints on the students that they had had to learn how to adapt to through dialogue, reflection and problem solving. For example, when doing freestyle, we told them to use a pull buoy to prevent kicking and to swim with their fists closed. This was aimed at developing feel for the water with the fingers and hands (when opened) and forearms. We used questions to help them solve the problem of moving forward as most effectively as possible with these constraints such as asking, "how does that feel?" and "with your fist closed, what can you do to catch as much water as possible?". We then allowed them to gradually use more of their fingers until they were able to use all fingers, asking them questions to encourage

awareness of contact with the water and a feel for it and encouraging them to work in pairs. Tom's reflection on this workshop and his emphasis on learning through feel suggest the strong role his experiences of the workshop played in his learning:

I really liked the workshops because they helped me feel the theory in action and particularly the swimming lesson by (the first author). You progress to each kind of stage and breaking it down to feel what it was like when you struck the water and so on. I learned another way and area of coaching that can be useful especially in individual sports. (Tom, interview 2)

Sam was a surf instructor who taught beginners how to surf at a local beach. He said that the idea of focusing on feel when coaching resonated with him due to its importance in surfing and changed his ideas on coaching over the course. He particularly liked the ways in which he felt PPed empowered him and his peers as independent learners and how it promoted deep and critical thinking for him:

I thought it (the course) was good. It's quite empowering for the students like it's more than just athlete-centred. How do I say it...hmmm...like athlete-centred coaching you know, it puts everything on to the athletes and it gets us to think about everything, but the PPed like further backs it kind of thing (Sam, interview 1).

He was very keen to experiment with the new pedagogy when teaching surfing but had little opportunity to do so because he felt his boss would not want to depart from the approach to instruction that they followed for so many years. He also had some concern with how successful this approach might be when starting out for him:

So, with surfing, you can feel the way you are on the wave and how you are going smooth or stuff so, it will be used to put into the practical sense into surfing. Hmm, but yeah, in terms of actually the things that I have learned I guess I've just kind of learned another way of coaching that can be very useful. I mean especially in individual sports, but it could be difficult after the way I have kind of developed my surf coaching. (Sam, interview 2)

### 3.2 Experiences as coaches

The second six weeks involved the students switching roles from athlete to coach. Here, we encouraged them to reflect on their experiences as an

athlete/learner to design and implement a short coaching session on an individual sport or on a specific skill or technique from a team sport. They understood the learning design of the course as we had explained it in detail to them during lectures and all five participants identified the learning involved in transitioning from learner (athlete) to coach:

The lecture provides a detailed understanding of the theory behind Positive Pedagogy that is experienced in the workshop where the lecturer adapts this approach on various sports and situations. Finally, the assessment requires students to work in a group and adopt this approach to the sport and the athletes you are teaching. In our case, this was our peers which were pretty easy and gave us a chance to make a start. This allows the first-hand experience of the approach being coached and coaching someone, which is what we do in our own coaching. (Indiana, interview 2)

Four of the participants spoke of the degree of work that is involved in planning sessions and seasons when adopting a PPed approach to coaching and were initially surprised at how much time and effort they had to exert to run an effective session that they were happy with despite it only being of fifteen to twenty minutes duration:

I guess it's all about how coaching requires a lot of actually running the session but is only the very smallest part of it, you got to plan to know what you are going to do, you got to be prepared for the coaching and then afterwards obviously studying it, you got to be really reflective on it and analyze your own performance and then write. So, I guess the whole kind of process preparing, implementing and then reflecting kind of gives you that full picture of how you actually went and I think we had peer assessment so that's good as well obviously all those different perspectives on what you can do. (Max, interview 2)

PPed draws on constructivist learning theory, Positive Psychology and Antonovsky's (1978) Sense of Coherence Model to make learning positive [1, 20]. The participants initially found some of this theory challenging but said that they came to a practical understanding of it through participation in the workshops as athletes and as coaches and in which group reflections, in particular, helped them understand. In many workshops we introduced constraints such as swimming with their fists closed to create problems they had to solve:

Instead of spoon feeding the athletes with information, Positive Pedagogy challenges athletes' thinking by modifying the session to present problems and suppressing a behaviour that gets the athlete thinking about how to solve the problem. I enjoyed the course as we take a theoretical idea into a real-life situation and each student gets to experience Positive Pedagogy by using it on each other through the coaching sessions we did in small teams. (Indiana, interview 1)

The assessment for the coaching sessions involved a formal group power point presentation that analyzed the session noting its successful aspects and challenges with suggestions for improvements with fifty percent assessed by peers and fifty percent assessed by teaching staff. The time and effort demanded by this assessment task surprised most students but the five who volunteered to take part in the study enjoyed it:

I actually enjoyed doing the assignments in this course. It was really kind of interesting. We used a team sport, basketball, but the free throw element as the coaching element. It was kind of an individual aspect in the sport and it was fun because it gave another aspect to the sport and looking at how you can make a better free throw. Being able to present it to others and have them engage in discussions in the workshops were the highlights of our presentations. (James, Interview 2)

### 3.3 Self-directed learning

The most pleasing aspect of the study for us was how well the participants had been able to adapt to the challenges of day-to-day coaching and to learn how to learn. As a surf instructor, Sam had been unable to put his learning into action in practice but the other five had all decided to apply some of what they had learned in the course to their practice as coaches and it was here that very significant learning seems to have taken place. Max said he liked the PPed approach but coached at a secondary school where he was initially anxious about applying it due to the "real-life behavioural and cognitive issues" (interview 2) he said he had to deal with but decided to try it out. The low decile school he was in was plagued by behavioural issues and low academic achievement but instead of being a problem for him he said that using PPed had allowed him to be flexible and help his students develop a comprehensive understanding. It also helped him learn to adapt PPed to the demands of the situations in which he coached as he suggests in

his comments on the running workshop during the course:

It was quite difficult at first but from the experience (in the course) I had learnt about different people learning differently. Like after doing it (PPed) for a while you can see "Oh that might need some direct coaching", that was why I was able to sit back and check on positive stuff and questioning more. That kind of coaching was more like gaining experiences (for me) especially in looking at what athletes were like during the coaching and responding to the Positive Pedagogy. (Max, interview 3)

Indiana coached badminton with the biggest challenge for him being asking his athletes questions that promoted thinking and interaction and which is a common problem for coaches using athlete-centred coaching [18, 24, 25]. He decided to try PPed with secondary school students he was coaching and whose previous coach had been very coach-centred. He said that his students were so accustomed to being told what to do by their previous coaches that they would sometimes look at him in astonishment when he asked them questions for which he expected an answer. He said that they found it difficult to adjust to his coaching style and being asked questions instead of being told what to do [18] but he felt that him being more caring and trying to empathize with them helped as he saw them begin to change:

They were used to being told what to do and having coaches making all the decisions. This transition is tough both on coaches and athletes. However, over time these athletes started to open up and decided to think and figure out on their own. (Indiana, interview 1)

Indiana said that he adjusted his coaching to suit the needs of the group and to make the learning more meaningful for them by linking the detailed foci of activities to the end aims of the session and the season to make them meaningful, which is a feature of PPed [1]. He also felt that this helped his students develop as independent learners more able to solve problems themselves:

For these athletes, I decided to put them into smaller groups and assisted them by providing suggestions when they were stuck and questioned them in their decision supportively. This process took at least a couple of months before they were able to do these on their own and was rather effective when it happened. After a while, their reliance on me began to decrease significantly and they were able to discuss

with their team. My role as the coach changed but still remained the same in terms of constantly challenging them to improve. (Indiana, interview 3)

This 'on the job' development of a new pedagogy through reflection on experience and being able to identify and find solutions for the problems that arose in their coaching suggests the efficacy of the experience-based learning used in the course in encouraging critical reflection, tuning into the athletes' experiences of learning and being adaptable. It also suggests the affective, emotional and corporeal learning that the experiential pedagogy generated, and which can encourage long-term engagement with activity [26]. Four of the other participants also commented positively on the emphasis the course placed on feel in reflection and learning and the need for the coach to have empathy. This reflects the holistic and humanistic underpinnings with this connected to humanistic psychology [27].

#### 4. Conclusion

This study generated data from the participants' perception of their learning with no attempt made to measure it. This is due to the difficulty of this challenge and the limitations it places on the learning that can be considered when attempting to quantify it. However, the ways in which the five participants embarked on applying and adapting elements of PPed to their coaching over the six months of the study provides compelling evidence of their understanding and motivation to try out PPed. It also strongly suggests their ability to adapt PPed to their practice and to critically reflect and learn 'on the job' and the meaning the course held for them. The findings suggest to us, how effective the experiential approach we employed for achieving our course aims was. We recognize the limits of being able to generalize from this small study, but this was not its aim. Its focus is on the detail of human experience rather than on having a large sample and the generalizations that can be made from such studies.

As a scholarship of learning and teaching study our findings provide useful detail on individual student interpretation, experience and learning in a particular socio-cultural and institutional setting. For us, the most pleasing finding is how they developed their coaching after the completion of the course and which makes a contribution toward our understanding of experiential learning in higher education settings, and particularly with practice-oriented programs.

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### **Conflict of interest**

None of the authors have any conflicts of interest to declare.

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