

Action Research in Cooperative Education Projects: Developing Lifelong Capabilities for Improving Practice

Lesley Ferkins
School of Sport, Unitec, New Zealand

Jenny Fleming
Division of Sport and Recreation, Auckland University of Technology, New Zealand

Abstract

There are natural synergies between action research as a method of inquiry and the practice of cooperative education. In the search to integrate theory and practice, action research is underpinned by a philosophy of experiential learning. Similarly, cooperative education is underpinned by the belief that in order to learn, there also needs to be action. The work of cooperative education students is also founded on data-based reflection is highly context based and usually collaborative; important characteristics of action research (Cardno, 2003). These similarities between action research and cooperative education provide a starting point in conceptualizing the adoption of action research for sport cooperative education projects. How can action research be integrated within cooperative education projects? This paper will discuss the theoretical basis of action research and illustrate through the use of case studies why and how action research has been utilized in cooperative education projects in sport and recreation. Sport students undertake a range of activities in the cooperative education setting. Some complete basic day to day tasks in recreation centers and with sports teams and others act as volunteers in major events. While these types of roles can fulfill desired outcomes for cooperative education program (for student, industry organization and institution), the adoption of action research can add a further dimension because it aims to create change within the setting under investigation. Through the use of cooperative education projects, students are in a unique position to frame a problem, integrate theory, determine action, and implement and evaluate that action. This paper explores how action research is used in cooperative education projects to help develop capabilities for improving practice.

Introduction

The key aim of cooperative education at the tertiary level is to apply and integrate theoretical concepts to the work environment (Rainsbury, Hodges, Burchell & Lay, 2002). Indeed, the cooperative education experience allows students to learn through a variety of experiences that result in changes in their actions and behaviors. There is considerable research and literature that highlights the benefits of cooperative education to student learning in a range of disciplines (Dressler & Keeling, 2004). The involvement in a ‘real life’ project (as distinct from undertaking more random tasks) is recognized as a particularly valuable learning strategy within cooperative education programs that enhances student learning and prepares students for the demands they may encounter in the workplace (Fleming & Eames, 2005). Undertaking a project facilitates personal development by providing an opportunity for the students to take responsibility that develops confidence and the use of initiative. The project also provides the opportunity for students to apply a range of technical skills and knowledge that have been learnt during their studies, yet also develop a wide range of new capabilities (Fleming & Eames, 2005).

Ferkins (2002), in a study undertaken within the sport industry noted, “...the most significant benefit (for the industry organization) was the ‘injection’ of fresh ideas and enthusiasm into the organization from the students” (p. 34). It is clear from this research that industry organizations seek students who can not only perform the necessary tasks, but who can also offer the capability to help improve current practice. In a later study, Fleming and Ferkins (2005) assessed the modes of cooperative education delivery in sport in four different countries. While they note that research-based modes of delivery is a common model used to achieve stated learning outcomes, they assert that: “Further research needs to focus on the impact of course structure, placement context and supervision for both student learning and the outcomes for the industry to ensure continued viability and relevance to all stakeholders for the future” (p. 46). This paper seeks to advance these ideas by offering action research as a tool for students to employ as part of their cooperative education project

work with industry organizations. The arguments presented in this paper are based on the notion that an action research based project offers organizations the ability to engage students who seek new and improved methods of practice.

Action Research

The basic premise of action research is that change and research are not mutually exclusive, that is, a simultaneous focus on improving practice and developing theory is indeed possible (Coghlan & Brannick, 2001). Frisby, Crawford and Dorer (1997), argue that participatory action research as a methodology encourages researchers "...to consider how they could become partners in transforming sport structures, rather than merely gazing upon them" (p. 24). Indeed, Gustavsen (2001) considers that "Most proponents of action research argue that theory alone has little power to create change and that there is a need for a more complex interplay between theory and practice" (p. 17).

Most often aligned with the interpretive research paradigm and qualitative methodology, the term action research means different things to different people and has been described as both a research method and methodology in its own right (Tinning, 1992). As a consequence, there are a host of terms used to describe the various interpretations of the core set of principles that values research in action. Cardno (2003) notes there is a vast array of literature on the subject and confusion occurs because of the number of diverse descriptions. She explains that action research has been described as a tool for personal reflection (for example, action learning); an approach for improving practice (for example, developmental action research); as a means of liberating the oppressed (for example, participatory action research or critical action research); and a scholastic methodology (for example, action science). A generic definition that appears to capture this diversity is presented by Reason (1993, p. 1268):

All models of action research suggests that inquiry engages in a cyclical process; problems are identified and questions asked, some form of action is designed and carried out, empirical and/or experiential data are gathered, and then in a reflective mode the experience is compared with the starting idea and questions.

Sport students are utilized in the cooperative education setting for a range of reasons. Some complete basic day-to-day tasks and others fill in staffing gaps for example, during major events. While these types of roles can fulfill desired outcomes for cooperative education programs (for student, industry organization and institution), the adoption of action research can add a further dimension because it aims to create change within the setting under investigation. Through the use of the research process, students are in a unique position to frame a problem, integrate theory, determine action, and implement and evaluate that action.

This paper draws on two case studies that provide some evidence that the use of action research in cooperative education projects helps to create change and improve practice. The case studies were selected from the cooperative education program for the Bachelor of Sport and Recreation at AUT University, New Zealand.

Context

The Bachelor of Sport and Recreation (BSR) is a three-year program designed to prepare students for careers in the areas of exercise science, sports and recreation management, coaching, fitness, physical education or outdoor education. During their final year the BSR students complete 600 hours of cooperative education where work and learning are integrated through the development of partnerships between the university, the student and a sport or recreation organization. The cooperative education component constitutes half of the students' total workload for the academic year. Cooperative education papers (Cooperative 1 & Cooperative 2) are structured so that the student spends the equivalent of two days a week during the two, fifteen week, semesters of the academic year within one organization. This allows flexibility for students to experience a range of different learning activities that occur across a year due to the seasonal nature of the sport and recreation industry.

A key learning strategy within the BSR is for the students to undertake a project for the host organization. The project design must demonstrate the application of the research process in an industry context and have a potential benefit for the organization. The learning experience is facilitated and supported by the industry supervisor and the academic supervisor from AUT.

Case Studies

The two case studies selected from projects undertaken as part of the BSR, exemplify how, by using an action research approach, the students had the opportunity to develop capabilities for improving practice and creating change in the sport and recreation industry.

The student in collaboration with both industry and academic supervisors identified an issue or problem within the context of the organization where they were undertaking their cooperative (phase 1). The student then developed a proposal for an intervention or action. This involved reviewing and reflecting on current practice, examining theory learnt in class, reviewing literature as well as talking to and asking questions of others (phase 2). The intervention or action was then undertaken (phase 3). The final step in the process was the evaluation of the intervention and the reflection on the experience (phase 4).

It is not the purpose of this paper to extensively present the findings of each project, but to demonstrate the potential benefits of using an action research approach within the cooperative education experience for the industry organizations and for student learning.

Case Study One

The cooperative student undertook her experience in a primary school in Auckland. Her role was to assist classroom teachers and the wider school with physical education and sport activities.

Phase 1: A review of current practice within the school identified that there were low levels of involvement in sport by both children and staff. The Principal acknowledged that many staff were not confident in teaching sport skills and therefore provided limited experiences for the children. The student acknowledged that this project potentially had a wider impact on the broader issue of youth physical activity. If the children have a more meaningful experience of physical education and sport as a fundamental part of their education, this may encourage more physical activity in the longer term.

Phase 2: The student discussed with the school staff and Principal their approach and commitment to sport, and the issues they faced in teaching physical activity. The student reviewed the literature and theory that she had learnt in class on different approaches to teaching sport skills and identified the philosophy that she would utilize within the project. The focus for the action or intervention was to introduce an alternative method and philosophy for teaching sports skills. The 'Teaching Games for Understanding' approach was selected as it provided games focused sessions as opposed to the traditional drill based sessions that most of the teachers were using within the school. The student shared with three teachers (who would be involved with the project) the key findings from her literature review and the reasons she felt that the approach she had selected would be suitable to implement within the school. The student considered that it was important to 'sell' the approach to the teachers to assist with the process of change.

Phase 3: The student then identified the games and activities that would form the basis for the lesson plans that would be collated to form a teaching resource. This involved a continuous process of designing and implementing sessions using the new approach, gaining feedback from teachers and children and reflection and modification of the lesson plans. This created mini action research cycles within the intervention phase. The intervention occurred over a ten-week period. An additional outcome from this process was the development of a handbook that could be used in the future by all the teachers within the school.

Phase 4: The student evaluated the impact the new approach had on the children and teachers who had been involved. The evaluation concluded that there was a positive endorsement from the three teachers involved with the 'Games for Understanding' approach. The teachers reported increased confidence in the teaching of sport skills. The feedback from the students highlighted that they enjoyed the games and

the teamwork that was developed. They reported that they especially enjoyed being able to achieve some success with the activities.

The cooperative education student identified that action research had provided an appropriate method for the project as it utilized a form of disciplined enquiry in which personal attempts were made to understand, improve and then reform practice. The student acknowledged that “because action research is participative, it can help create an environment for change (in this case with the teachers whose classes are involved in the project). Change is usually easier to achieve when those affected by change are involved” (Bullen, 2005, p. 21).

The student felt that the action research approach encouraged her to more intensively reflect on what she was doing and that she particularly benefited from regular feedback from the children and teachers within this process. She commented that this enabled her to develop her own understanding regarding teaching sport skills and felt there was greater learning from the collaborative approach that action research allows (Bullen, 2005).

Case Study Two

The cooperative education student undertook her placement at a sports institute where she worked alongside the sports nutritionist. The athletes she was involved with were from a range of Pacific Island countries competing in a variety of different athletic disciplines. These athletes were all training and living at the Institute and were provided all their meals by the restaurant.

Phase 1: The sports nutritionist had highlighted concern that athletes were not meeting their nutritional requirements or following the suggested nutrition guidelines for their sport.

Phase 2: To determine current nutritional practice, the student carried out initial food diaries and questionnaires with eight athletes. The responses confirmed the initial views of the sports nutritionist. The reasons the athletes gave for not following the food guidelines included they did not like or were not accustomed to some of the foods they were being offered and they got bored with the same menu all the time. They were asked to give suggestions of which foods they would prefer to include in their diets. The student reviewed the literature and theory learnt in class. In addition the student also contacted appropriate agencies related to Pacific Island nutrition and nutrition for athletes. The student highlighted in her reflections the value of using a range of contacts and resources to assist her determine the changes required.

Phase 3: The focus of the action or intervention was to assist the athletes at the institute to implement and maintain an eating plan that would meet the requirements of their sport while living at the Institute. The student made recommendations to the caterers of the restaurant for changes to be made to the food offered for the athletes. There was some compromise needed due to cost and availability of certain Pacific Island foods suggested by the athletes. The chef was also unfamiliar with how to cook certain foods so the student arranged for the athletes to show the chef how to prepare some of the traditional Pacific Island meals. The athletes spent four weeks adjusting to their new diet before a final questionnaire was administered.

Phase 4: The evaluation questionnaire gained feedback on how the athletes felt about the changes made, if their issues had been resolved and if their diets had improved. The responses overall were positive in all areas and most of the athletes had improved in terms of meeting their sport specific nutritional requirements. The student concluded that the project had been successful in creating positive change within the placement organization.

The student highlighted that the action research approach had been suitable for addressing this issue, as it is a method in which the primary motive is to create a positive social change (Berg, 2004). The student also acknowledged that action research focuses on methods or techniques that consider the participants’ history, culture, interactive activities and emotional lives (Bramley, 2005).

Discussion and Conclusion

The integration of action research within sport cooperative education projects as discussed within this paper is offered as a mechanism for developing capabilities for improving practice. As noted earlier, research by Ferkins (2002) identified a desire by sport industry organizations involved in cooperative education, to engage students who might offer new and improved methods of practice. Additionally, Fleming and Ferkins (2005) noted a gap in knowledge regarding cooperative education course structuring for stakeholder benefit. Action research as a method of inquiry that seeks to create positive change within the research process provides a tool for cooperative education programs, to further integrate research and theory within the workplace setting.

Outcomes from the two case studies discussed earlier demonstrate development at both an organizational and individual level. At the organizational level, there is some evidence from the case studies reported that change has been created within each organizational setting that has resulted in improved practice. The adoption of an alternative to the traditional style of teaching sport skills (Games for Understanding) within the school environment appears to have created lasting change for teaching practice. The increased cultural sensitivity regarding menu selection appears to have been successfully implemented within the sports institute. Perhaps the most significant aspect of organizational development might be the adoption of a research method that provides direct outcomes for the organization. The use of theory and research is often missing in practice. Action research utilized via the medium of cooperative education provides a form of research that appears palatable for practitioners. Direct benefits accrue, learning is captured and the danger of repeating faulty practice might be avoided.

At the individual or student level, the requirement to identify an issue, frame a solution, implement that proposed solution and evaluate the outcome, challenged the students to draw on a range of resources available to them. Significant learning regarding teaching sport skills and adopting sound nutritional practice was reported by the students involved. Additionally, this learning not only involved the integration of current workplace knowledge and practice, but alternative options from relevant literature and available theory. The students also reported that the collaborative experience in facilitating a shared solution between organization, client and student, was a skill developed, of considerable magnitude. The reflective nature of cooperative education seeks to maximize student learning, however, the addition of action research within this process provides the student with a problem-solving tool that specifically seeks to integrate practice and theory. The students have been challenged to not just accept current practice but to seek methods of improvement, to implement such methods and to evaluate the outcome. Such a tool, it is argued, positions the students as change agents within industry organizations and offers the opportunity to create lasting change and the capability for improving practice.

The adoption of such a method within the structuring of cooperative education projects is not, however, without its challenges and indeed limitations. Action research is known to be an intensive method for all involved. Dick (1990) urges rigor in action research, by ensuring that the quality of the data collected and the accuracy of the research interpretations, is tested by engaging in multiple cycles that challenge original conclusions. Action research has been described as being more difficult than other forms of qualitative research, because of the complexity involved with participant collaboration and its iterative approach (Dick, 1990). In order for the project to be judged valid, it was important that each organization had a sense that positive change had occurred (McTaggart, 1998). These are 'tall orders' for student work and may prove too difficult for some students. The case studies illustrated above, however, demonstrate how such complexity can be managed at an undergraduate level.

This small-scale case study research has demonstrated how the integration of action research into student cooperative education projects might be possible. The study also offers some evidence that this approach has resulted in improved practice within the industry organizations involved. Students are offered a tool that allows them to act as change agents within the workplace setting, that, if successful can provide lasting benefits for their learning as well as lasting change for the organization.

Further investigation regarding the efficacy of action research cooperative education projects is needed and could include a closer investigation of the change that has taken place for both student learning and the industry organization partners. The challenges and limitations of using action research for student projects also warrants further investigation, particular in terms of how academic supervision might be structured to support such ambitious endeavors.

References

- Berg, B. (2004). *Qualitative research methods for the social sciences*. New York: Pearson Education.
- Bramley, A. (2005). *Sport and recreation cooperative report*. Auckland: Auckland University of Technology.
- Bullen, S. (2005). *Sport and recreation cooperative report*. Auckland: Auckland University of Technology.
- Cardno, C. (2003). *Action research: A developmental approach*. Wellington, New Zealand: New Zealand Council for Educational Research.
- Coghlan, D., & Brannick, T. (2001). *Doing action research in your own organisation*. Thousand Oaks, CA: Sage.
- Dick, B. (1990). *Rigour without numbers: The potential of dialectical processes as qualitative research tools*. Brisbane: Interchange.
- Dressler, S., & Keeling, A.E. (2004). Student benefits of cooperative education. In R.K. Coll & C. Eames (Eds.), *International handbook for cooperative education* (pp. 217 -236): Boston: World Association for Cooperative Education.
- Ferkins, L. (2002). Sporting best practice: An industry view of work placements. *Asia-Pacific Journal of Cooperative Education*, 3(2), 29-34.
- Fleming, J., & Eames, C. (2005). Student learning in relation to the structure of the cooperative experience. *Asia-Pacific Journal of Cooperative Education*, 6(2), 26-31.
- Fleming, J., & Ferkins, L. (2005). Cooperative education in sport: Building our knowledgebase. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 4 (1), 41-47.
- Frisby, W., Crawford, S, Dorer, T. (1997). Reflections on participatory action research: The case of low-income women accessing local physical activity services. *Journal of Sport Management*, 11, 8-28.
- Gustavsen, B. (2001). Theory and practice: The mediating discourse. In P. Reason, & H. Bradbury (Eds.), *Handbook of action research: Participative inquiry and practice* (pp.17-26). Thousand Oaks, CA: Sage Publications.
- McTaggart, R. (1998). Is validity really an issue for participatory action research? *Studies in Cultures, Organizations & Societies*, 4(2), 158-278.
- Rainsbury, E., Hodges, D., Burchell N., & Lay, M. (2002). Ranking workplace competencies: Student and graduate perceptions. *Asia-Pacific Journal of Cooperative Education*, 3(2), 8-18.
- Reason, P. (1993). Sitting between appreciation and disappointment: A critique of the special edition of *Human Relations* on action research. *Human Relations*, 46(10), 1253-1270.
- Tinning, R. (1992). Action research as epistemology and practice: Towards transformative educational practice in physical education. In A.C. Sparkes (Ed.), *Research in physical education and sport: Exploring alternative visions* (pp. 188-209). London: Falmer.