

USING IPADS TO IMPROVE PRE-SERVICE TEACHER'S ENGAGEMENT, CONFIDENCE AND KNOWLEDGE WHEN TEACHING MOVEMENT SKILLS IN PHYSICAL EDUCATION

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Abstract: This paper provides an overview of a study that uses iPads to improve pre-service teacher's engagement, confidence and knowledge when teaching movement skills in Physical Education. The use of iPads complements the teaching of Physical Education in the Bachelor of Education (Primary) course and develops the acquisition of movement skills, concepts and strategies that enables the pre-service teacher to confidently and competently teach children in the twenty first century. The use of iPads enhances this learning significantly as it offers experiential learning along with a curriculum which is relevant, engaging, contemporary and physically active. Supporting the pre-service teacher with relevant learning opportunities that lead to exploration and inquiry, allows the pre-service teacher to be active participants in the use of technology and ensures that they feel supported and engaged in deep and powerful learning.

Keywords: pre-service teachers, iPads, physical education, movement skills, technology, contemporary learning

INTRODUCTION

There is a general perception that teaching Physical Education is actually easy as it is extraordinarily visible. However research has shown teaching movement skills is a very difficult form of professional practice (Labaree, 2008).

Physical Education is unique as it can transport and illuminate effective pedagogy in many ways. The knowledge, understanding and skills required to teach Physical Education are complex in an ever changing contemporary world. Providing the important nexus between theory and practice for our current pre-service teachers is integral to building the confidence and knowledge of our future teachers. This requires a reframing and rethinking of Physical Education to confidently and competently teach a curriculum which is relevant, engaging, contemporary, enjoyable and developmentally appropriate for future students (ACARA, 2012).

The aim of this study is to develop a pre service teacher's engagement, confidence and knowledge when teaching movement skills in Physical Education and will endeavour to develop positive attitudes towards teaching Physical Education in a Primary school context. This study will use iPads to:

1. Engage the pre-service teacher in teaching movement skills;
2. Improve the pre-service teacher's confidence to teach movement skills in Physical Education; and
3. Increase the pre-service teacher's knowledge and understanding of teaching movement skills in Physical Education.

This paper will discuss relevant literature and will provide an outline of the theoretical framework of the study.

LITERATURE REVIEW

Many advances in Information and Communication Technology (ICT) have made their way into schools and classrooms as a focus of student centred learning. These advancements have dramatically changed the notion of effective pedagogy and significantly enhancing the teaching content making it accessible, dynamic and fascinating (Collins, 2011). For teachers of Physical Education to inspire, motivate, and prepare learners to live in a technologically advanced ever-changing world there needs to be a reframing and rethinking worldwide on Physical Education teacher preparation and Physical Education programs (Edginton, Chin, Geadelmann & Ahrab-Fard, 2011). Physical Education should move beyond 'easy street' and make clear and coherent links between theory and practice for pre-service teachers to help them deliver and develop programs for contemporary conditions of the 21st century (Bulger and Housner, 2009 & Meldrum, 2011). Universities worldwide have been inundated by waves of emergent technologies and the release of the iPad since 2010, as the new 'state-of-the-art' mobile device (William's, Wong, Webb and Borbasi 2011) could revolutionise the current teaching and learning of Physical Education.

The nexus or central point where theory and practice bind together in pre-service teacher education to contribute significantly to the development of quality Physical Education teachers is crucial and requires a reframing of current practices. This reframing of Physical Education has remained a challenge for pre-service teacher education programs particularly the notion of how to create teaching and learning experiences that are meaningful, engaging and contribute to the preparation of the students' life (Tinning and Hunter, 2006). Research into pre-service teacher preparation indicates the importance integrating ICT into units of work, as pre-service teacher's highlighted they needed to be comfortable with the new technology before they will consider integrating it. (Amade-Escot, 2006).

Physical Education and physical activity for young people has been linked to positive self-esteem, skill development, skeletal and cardiovascular health, and general healthy development. It is now widely established that childhood is the best time to establish positive attitudes and behaviour relating to physical activity and a healthy lifestyle. Young people spend a significant amount of time at school and therefore school environments need to be supportive of students being physically active. Physical Education teachers and programs are an important part of a comprehensive approach to providing this support. Teacher Education programs and pre-services teachers must connect with advances in technology to encourage and engage students in using ICT as key tools to communicate, collaborate, analyse performance and access information to enhance movement performance (ACARA, 2012). It is proposed that the pre-service teacher's engagement with iPads will develop their knowledge and understanding, enabling them to select, implement and maintain an appropriate Physical Education program enhancing the health and wellbeing of students in a school context.

RESEARCH DESIGN

A pilot study will be conducted in Semester 2, 2012. The participant group of pre-service teachers will be participating in a tutorial group when completing a Physical Education Unit as part of a Bachelor of Education (Primary) course. The study will use a mixed method approach to the data collection including a pre and post questionnaire, also, the researcher will observe, video and make notes of a practical tutorial. Data analysis will be conducted over three stages and the pre-service teacher will:

1. Complete a pre (week 1) and post (Week 4) questionnaire in Semester 2, 2012;
2. Participate in a practical tutorial using the Ipad for EDPH 306, Personal Development, Health & Physical Education (Week 2 & 3) of Semester 2, 2012, and;
3. Allow the researcher to observe video record and make written notes about the tutorial.

Installed on each iPad will be the 'Coaches Eye Application' which will support and help the pre-service teacher when they are learning how to teach movement skills in Physical Education. The particular iPad Application allows the pre-service teacher to slow analyse footage in real-time, slow motion or frame by frame.



FIGURE 1: The Coaches Eye App on the Ipad (left) is used by Pre Service Teachers at ACU, Melbourne Campus.

CONCLUSION

Pre-service teachers graduating from universities need to be able to use a range of tools and technologies to support students in learning Physical Education. This study intends to provide opportunities for pre-service teachers to engage with technology using iPads and gain confidence and knowledge when teaching movement skills in Physical Education. It is hoped that the use of the iPads provides opportunities for individual and collaborative responses, immediate feedback on performance, and the development of high order thinking which will endeavour to develop positive attitudes towards teaching Physical Education in a Primary school context.

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