



Making a wave of difference in water awareness and competence through Primary Physical Education Teacher Education

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INTRODUCTION

Motor development; from atypical to typical will want to be child-paced (Gabbard, 2021). Generically speaking, there are seven years to facilitate fundamental movement mastery in contextually meaningful and progressively challenging ways. This can be facilitated through movement concepts (Graham et al., 2020). Arguably, the same principle can be posited for our student teachers. At PETE level, it is essential that generalist student teachers are provided means to transfer their classroom teaching efficacy and skills out to physical education (PE) in order to keep teaching efficacy high (Murray et al., 2018). The progression spiral approach aligns with that of Bruner (1966), another tangible link to generalist student teacher studies (and as such potentially teaching efficacy around spiral progression notions). The environmental space approach presents both a visibly tangible way to think and plan PE and supporting physical activity and play, as well as an accessible way to conceptualise how to progress skills and competencies as they are revisited across the colour coded environmental space set (Table 1).

OBJECTIVES

This study aims to explore possibilities for generalist primary student teacher a facilitated by **a) PE primary specialists, and b) an environmentally led spiral progression series.**

It seeks to address the following questions:

- **Programme wise**, how might primary student teachers benefit from a PE Primary specialist-generalist peer supported teaching and learning addition to the PE Pedagogical Content Knowledge experience set?
- **Motorically and competence wise**, what are the reported potential and perceived student benefits regarding PCK, teaching efficacy and motivation to teach primary PE when spiraling national curriculum skills, competencies and underpinning knowledge through a series of environments before moving to a water-based environment?

METHOD(S)

- Following the modelled specialist series, generalists (undergraduate and graduate student teacher cohorts) were able to try these and then progress fundamentals into a water environment.
- The change-challenge-choice strategy (Stiehl, Morris, and Sinclair, 2008) was adapted across the environmental series to enable students to select the way in which they felt comfortable experiencing the learning and teaching.
- Post graduate student teachers preselected their respective role from a set offered; beside and or in water TA, dry side TA, or water-based participant, in a mixed or women only setting.
- Learning activities which could be accessed and completed using Fundamental Movement Skill and Core Aquatic Skill interchangeably were modelled and utilised. As such they remained developmentally responsive to individual contextual needs and constraints.
- Student teacher lesson progressions were shared onto the RLPE inter-primary teacher programme/school-based partner accessible PETE online padlet series, alongside other accessible materials and made available to generalists.
- The series is now available for roll out across the programmes in order to address objectives.
- The bespoke water awareness and competence TA certificate is now being piloted.

RESULT(S)

Classroom physical activity tasks and challenges	Indoors, beyond the classroom-the school gym	Outdoors, controlled space-the playground	Outdoors-green space (more open park space)	Outdoors-blue space; (by a body of water)	In/outdoors-controlled water-based swim permitted space (swimming pool)
In-small space	In-large space	Out-Grey-small to larger	Out- Green-large	Out-Blue-supervised small to larger	In/Out-Water-supervised spaces (pool side and in pool)

Table 1 above shows the environmental space approach to applying the spiral progression.

Below is the illustrative results from the spiral progression water series, as developed by the PE primary specialists that progresses the English PE national curricular skills, competencies, and interlaying knowledge applied to aquatics.

- I can create an accessible game for a small group to play and organise that (with the discretionary help from the water-based and or dry side TA (student teacher). I can explain the game (2-3 rules max.) to my partner and accept ideas to tweak it after we try it out.
- In shallow* water (crossing the pool), I can collaborate (with a partner/group) to help adapt an existing game or activity practising arms and or leg core aquatic skills
- I can participate in throwing and catching challenges in the water.
- I can experiment with ways to travel and use the pool floor and also other noncontact ways to travel (e.g. kicking using a noodle or float, swimming, sculling)
- I can travel by walking, running and or jumping using the pool floor to propel me.
- In shallow water (crossing the pool), I can collaborate to help adapt an existing game or activity practising arms and or leg fundamental skills
- I can travel from one shallow side to the other using a fundamental, a core aquatic or a combination of travel skills through or on the surface of the water.
- I can reflect on what I need to travel and float on my back and show my partner.
- I can play a simple follow my leader and or tag game using bobbing, floating on my back and travelling skills with a partner and or in a small group when instructed to do so.
- I can combine bobbing on the spot and travelling, all the while watching for teacher signals and listening for instructions.
- I can use a board or noodle to support my practise as required/desired
- I can travel through the water and practise bobbing so that my upper body is lowered into the water.
- I can travel through the water allowing my feet to stay along and close to the pool floor.
- I can show a partner how I take my feet off the floor and explain how I do that.
- I can explore my personal space taking one or both feet off the pool floor and use my hands and arm to regain balance as I move against the resistance of the water.
- With my feet on the pool floor I can bend my knees and allow my face to enter the water by closing my mouth and or by blowing out air as I dip into the water.
- I can explore my personal space keeping my feet on the pool floor and use my hands and arm to regain balance as I move against the resistance of the water.
- I can move into a space with the TA and show them how I move into a face up floating position.
- I can practise how to signal and shout for assistance when instructed and I know how and when I can get assistance at any point across the lesson.
- I can walk around the pool and enter the pool in a controlled manner and follow teacher instructions to do so.
- I can tell my water safety -water competence teacher how to stay safe by explaining how to signal and call for help and how to roll onto my back and float face up. I can practise this upon instruction.

*knee-waist depth to afford choice of using fundamental or core aquatic skills to participate and complete the learning challenge

CONCLUSIONS

- **Programme wise**, - primary student teachers have benefited from developing their PE primary specialist-generalist peer supported teaching and learning, through applying the spiral progression series through all environmental spaces types. They now have the pedagogical content knowledge to be able to develop their own spiral progression series having successfully facilitated, and critiqued their own and others series.
- **Motorically and competence wise** – this style of learning and understanding PE has enabled student teachers to be more confident within their teaching placements, when they are asked to develop PE lessons. Student teachers were able to apply their knowledge of the national curriculum skills, competences and underpinning knowledge through series of environments before considering aquatics and water based environments.
- **Overall** - the aquatics series are novel and additional creative element to exploring environmental space, within the English context. These have been collegially shared with and tried out by Year 2 undergraduate as well as and graduate primary student teachers. The environmentally led and peer supported PETE progression will be formally implemented in full this coming academic year, with aspirations to complete and offer the accredited certification within that process.
- It is expected that the next PE specialist cohort will practise and develop their own PE pedagogical proficiencies this year before moving into generalist professional development as part of their final year PETE subject leadership pathways. All primary student teachers will have the PETE online padlet and progression spiral task card series from the outset of their journeys, and each cohort create their own versions to suit their own needs and interest for school placement use as they go.
- We look forward to sharing subsequent findings and welcome all ideas and considerations along the way.

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