

A Study on the Implementation Status of the Physical Education Syllabus 2014 in Singapore Schools

Koh Koon Teck, Wang Chee Keng John, Li Chunxiao, Tan Kwang San Steven, Tan Shern Meng, Ang Wee Boon, Wong Liang Han and Yeo Huat Neo Connie

KEY IMPLICATIONS

Theory

The study supports the case being made based on literature, that appropriate pre- and in-service for physical education (PE) teachers can influence the effectiveness of teaching and learning. In addition to that, the findings demonstrate that a well-designed curriculum can influence a student's level of understanding in physical health and fitness, while promoting transference of skills and knowledge.

Student/Teachers Assessment, Capacity, Curriculum

The study provides data on PE teachers' perception of assessments in PE, the areas for improvement, as well as the need to clarify PE assessment procedures. It identified the strengths of the syllabus, as well as the challenges faced by PE teachers in the implementation of the PE syllabus. The study has contributed to existing literature by providing evidence of students' engagement in physical activities during PE lessons and in their daily lives, which provides further empirical-based insights to the effectiveness of PE as a platform to promote physical activity participation among students.

NIE Programmes and Practice

Guided by the findings, the study was able to identify potential key areas for the development of NIE programmes and practices, to further support the implementation of the PE syllabus. This includes the development of pre-service/in-service training or MiniMasters programme by NIE/PESS that can address key concerns in the implementation of the PE syllabus – such as evaluations in PE and having an understanding of the PE syllabus and its relevant assessments. The study has also shed light on the need to equip PE teachers with the relevant skills needed to effectively communicate with students with special needs. NIE can also help to address the need for further professional development, including the improvement of teaching competencies in areas where PE teachers have reported relatively low levels of teaching competencies (e.g., Outdoor Education (OE) for primary and secondary PE teachers; Dance and Gymnastics for primary PE teachers).

Policy

Empirical data gathered by the study provides evidence on the strengths and areas for improvement of the syllabus. Moreover, the varying experiences of syllabus implementation by the PE teachers have provided insights into

the challenges they have encountered. These findings have revealed areas of the syllabus which may require further attention and re-thinking, and shall act as a guide for policymakers when planning for a syllabus revision in the future.

Wider Practice

The study provided insights from PE teachers and students on how the MOE PE Syllabus 2014 has been implemented to achieve desired student learning outcomes.

BACKGROUND

PE is an important component of a school's curriculum, from primary to pre-university levels. The Ministry of Education (MOE) has reviewed the PE Syllabus 2006, and implemented the PE Syllabus 2014 in all schools in Singapore in phases: Primary 1 to 2 and Secondary 1 to 2 in 2014, Primary 3 to 4 and Secondary 1 to Pre-University 2/3 in 2015, and Primary 5 to 6 in 2016. The PE Syllabus 2014 will lay a strong foundation for a lifelong pursuit of a physically active and healthy lifestyle. It will create more opportunities for students to participate in recreational sports competitions. It will also make use of PE settings to help our students develop their character and values.

FOCUS OF STUDY

The purpose of the study was to investigate the current status of implementation of the PE Syllabus 2014. It aimed to understand how PE teachers interpret and implement the PE Syllabus 2014, as well as the challenges they face in the areas of curriculum content, pedagogy and assessment. It also aimed to ascertain the appropriateness and relevance of the curriculum content in enabling students to achieve the purpose and goals of PE. In addition, it aimed to examine the extent to which students achieve these goals and purpose, and apply/transfer knowledge and skills learnt beyond PE (e.g., Co-curricular Activity [CCA], sport programmes, home). Findings of the study will be useful to inform the current implementation state of the PE Syllabus 2014, guide professional development of PE teachers, and inform policy formulation in the area of active and healthy living. The proposed study also contributes to the literature in advancing our knowledge in syllabus implementation and evaluation processes in PE in the Asian context.

KEY FINDINGS

- In general, both the PE teachers and the students reported positive perceptions on areas such as Beliefs in PE Learning Domains, Understanding of the Goals and Students' Responses to the Teaching of PE in School.
- Primary school PE teacher generally portrayed a more positive perception of the PE syllabus compared to secondary school PE teachers.
- In terms of the PE teachers' perceived competency levels on teaching the different learning areas, both primary and secondary PE teachers were reported to only have moderate competency levels in teaching Outdoor Education.
- Primary PE teachers perceived that they were not very competent in teaching Dance and Gymnastics. There were no group differences in terms of perceived competency levels. We found a weak to non-existent relationship between competency levels and years in service as a trained PE teacher.
- The PE teachers tended to use direct teaching styles. No group differences was observed on the use of instruction style across school levels.
- Both primary and secondary PE teachers have been guided by a Scheme of Work (SOW) in implementing the syllabus.
- In terms of resources being used by PE teachers in planning and teaching their lessons, they appear to have tapped into a variety of resources beyond those provided by the Physical, Sports and Outdoor Education Branch (PSOEB) and Physical Education and Sports Teacher Academy (PESTA).
- Despite the absence of a prescribed pedagogy by the school or department, PE teachers have used various pedagogical approaches in their teaching.
- Various modes of assessment beyond those provided by PSOEB and PESTA were also employed by PE teachers from both levels during formative assessments throughout the term. The primary aim was to provide feedback to students during the class, and for determining a final summative score/grade. The summative scores/grades merely serve as a reference for the students.

- Overall, the results of the objective physical activity data suggested that primary school students were more active than secondary school students, and there were no gender differences.
- Students reported a moderate level of intrinsic motivation in physical education, physical activity self-efficacy, and physical activity enjoyment. On average, the students accumulated a relatively large amount of moderate-to-vigorous physical activity time over the week.
- The results of the Academic Learning Time-Physical Education (ALT-PE) suggested that both primary and secondary school students were above average in terms of motor-activity level during lessons (62% of the lesson time), while secondary school students were generally more motor engaged (66% of the lesson time) compared to primary school students (59% of the lesson time).
- Focus group discussions with the students manifested their understanding of physical health and fitness, and a range of ideas which showed that they have a grasp of the benefits of physical activities, exercises or had a generally active lifestyle, accompanied by proper nutritional choices and habits. Students also have an appreciation for the usefulness of skills and knowledge acquired during PE lessons and being able to apply them to their daily life.
- Despite the absence of a prescribed pedagogy by the school or department, PE teachers were able to use various pedagogical approaches in their teaching.
- Various modes of assessment beyond those provided by PSOEB and PESTA were also employed by PE teachers of both levels during formative assessments throughout the term.
- The results of the objective physical activity data suggested that primary school students were more active than secondary school students, and that there were no gender differences. Female students had a higher sedentary time compared to male students. On average, students accumulated a relatively large amount of moderate-to-vigorous physical activity time throughout the week.
- The results of the independent t-test showed that primary school students had higher levels of intrinsic motivation in physical education, physical activity self-efficacy, and physical activity enjoyment compared to secondary school students. Secondary school students were reported to have a longer sedentary time compared to primary school students. The two groups showed no differences in terms of light physical activity and moderate-to-vigorous physical activity levels.

SIGNIFICANCE OF FINDINGS

- Both the PE teachers and students had positive perceptions in areas such as Beliefs in PE Learning Domains, Understanding of the Goals, and Students' Responses to the Teaching of PE in School. However, positive perceptions were not reported in regard to Assessment Behaviours.
- In terms of the participants' competency levels on teaching the different learning areas, both primary and secondary PE teachers reported only moderate competency levels in teaching Outdoor Education. Additionally, primary school PE teachers perceived that they were not very competent in teaching Dance and Gymnastics.
- In implementing the PE Syllabus 2014, schools have been guided by a Scheme of Work (SOW) in attempting to achieve specific learning outcomes, content and practice activities.
- The results of the Academic Learning Time-Physical Education (ALT-PE) suggested that both secondary and primary school students were above average in terms of motor-activity level during lessons (62% of the lesson time). During lessons, secondary school students were generally more motor engaged (66% of the lesson time) compared to the primary school students (59% of the lesson time).

PARTICIPANTS

Study 1

Study 1, a total of 398 PE teachers participated in the online survey. The majority of the participants were male (75.1%). On average, the participants have served as trained PE teachers for 12.02 years (SD = 8.98).

Study 2

Study 2 involved a sample of the PE teachers involved in Study 1. A total of 40 PE teachers participated in Study 2. The PE teachers came from a total of 20 primary and 20 secondary schools.

Study 3

Study 3 recruited a total of 1121 students (n = 617 boys, 55.0%) with a mean age of 12.41 years (SD = 2.01; Range = 9 to 18). 286 students (54.5% male) were involved in the focused group discussions. A total of 11 PE lessons from both primary (n=6) and secondary (n=5) schools were video recorded in order to analyse student activity and behaviour during PE lessons.

RESEARCH DESIGN

The study employed both qualitative and quantitative methods to gather data. For Study 1, an online survey instrument was developed and administered to school PE teachers using Qualtrics. For Study 2, qualitative results were derived through thematic analysis of interview transcripts to address the research questions. The interviews were audio-recorded, transcribed and analysed using thematic coding guided by the key research questions. For Study 3, a mixed methods approach was employed by using a cross-sectional survey and focus group discussions to gather data.

About the authors

KOH Koon Teck, WANG Chee Keng John, LI Chunxiao, TAN Kwang San Steven and TAN Shern Meng and ANG Wee Boon are from the National Institute of Education, Singapore.

WONG Liang Han and YEO Huat Neo Connie are from the Ministry of Education, Singapore.

Contact Koh Koon Teck at koonteck.koh@nie.edu.sg for more information about the project.

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