Teacher renewal through curriculum innovation: 
Changing teachers' pedagogies and programs

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This paper outlines the development of a new pedagogy for the health and physical education learning area based on teachers' stories from the national trial of the sport education curriculum model. Against a backdrop of subject marginality, a crisis in physical education and recently encountered difficulties facing physical educators in delivering learning outcomes for the post-modern youth culture some dysfunctional aspects of school physical education are addressed. Our research findings have led us to a position that when curriculum innovation moves beyond surface change teachers will renew both their pedagogies and their programs. Teacher renewal within this framework has led to widespread and ongoing curriculum development, program restructuring, improved outcomes for adolescents and is positively affecting the expectations teachers have for learning outcomes in physical education. Our work provides evidence that student-centred sport education curriculum model seems responsive to the changing social world of adolescents. However it will be teachers who will tell us whether their initial renewal through sport education improves their professional lives and the lot of their students.

This paper begins by identifying some of the socio-political contexts within which PE teachers have trialed and shared their stories about a new curriculum model, sport education in physical education program (SEPEP). Following the discussion of socio-political contexts into which the seeds of sport education were planted, we report the aims and findings from the SEPEP national trial. Finally, we identify some issues facing the possible diffusion of sport education throughout Australian schools.

Characteristics of the sport education in physical education model

Sport education is an innovative curriculum model, increasingly used as a component of upper primary and secondary school PE programs and exhibiting many parallels with community junior sport. Within normally scheduled physical education lessons, mixed ability teams are formed at the start of a 20 session (approximately) competitive "season".

In addition to the aim of helping students learn to become good players, sport education encourages students to fulfil other roles such as umpiring, acting as a team coach, manager or captain, serving on a sports management board or duty team and working as a publicity officer/journalist.

The sport education model is a process with a potential for educating children and adolescents into good sporting behaviour and embodies a number of characteristics:

- involves seasons rather than units
- requires a formal schedule of competition
- establishes matched, mixed ability teams to promote even competition and unpredictable outcomes
- gives students responsibility and ownership within physical education
- casts the teacher in the role of learning facilitator
- modifies traditional game rules and team sizes
- depends on record keeping and the publication of results
- culminates in a festive event. (SPARC, 1994).

A season of sport education, in contrast to many PE programs which incorporate 4-5 week units, is most often pursued for a whole school term (ten weeks) with two sessions each week. While initial sessions may be more teacher-directed
as office bearers organise their roles, once the fixtures commence the instruction in skills, strategies and knowledge is increasingly mediated by students. Teachers meanwhile are encouraged to pursue the development of personal and social skills, conduct formative assessment or work in a coaching role with teams and individuals on skills and strategy. This outline of the model provides a starting point for examining its significance in a range of cultural and educational contexts.

**Sport education in context**

Culturally, sport exists as an institutionalised form of higher ludic (play) activity. Siedentop (1982) presented the following argument for sport as a culturally significant practice:

> If sport is equal in value to other ludic forms (art, music, drama and dance), both for the individual and the culture; and if more appropriate participation in sport by more people represents a positive step in cultural evolution; then sport education is justified as the conceptual model for what we do. . . Its importance to humankind can be seen more clearly through this set of assumptions and subsequently, its place in education can be made more secure (p. 2).

Acknowledging the potential of perverted sport forms (e.g., competing unfairly in elite sport) to negatively affect the evolution of a culture, Siedentop (1992) argued for sport to become key subject matter in children's education based on its cultural significance. He was at pains to point out that "the most appropriate relationship to it (sport) is doing it rather than studying it" (p. 2). Sport education is unashamedly about playing just, equitable and competitive sport in physical education.

**The macropolitical context: The marginality of physical education and curriculum change**

Commentators on the condition of school PE, despite the considerable differences in the vantage points they take and the lenses through which they study the area, do seem as one in their assessment: PE is viewed as marginal to the central purposes of schooling. In Australia, where the 1990s have seen increased scrutiny applied to PE, as a national curriculum for schools was developed (Australian Education Council, 1989), its marginality was highlighted by national and state government reviews (Senate Standing Committee on Environment, Education and the Arts, 1992; Directorate of School Education, 1993; Office of the Minister of Education, 1994).

The call for curriculum innovation and the transformation of school practices was the subject of Locke's (1992) admonition that replacing the dominant program model was the only thing which could rescue secondary PE from marginality and demise. Locke's work led us to refocus our attention on some of the contemporary literature on change in schools (Fullan, 1991; Sparkes, 1990). A dominating feature of this literature was the amorphous catch-all concept, teachers' workplace conditions. Locke's view was that the structure of programs seems to be a more important factor in limiting the achievement of student outcomes than any shortcomings in teachers' repertoires of teaching skills and ideological commitments. Advice to improve teaching effectiveness (Siedentop, Mand and Taggart, 1986) and teaching quality (Tinning, 1987) seem now to have given way to insights into the dysfunctional role of program structures. Issues such as 'good teachers in bad programs' now seem to be pertinent in PE.

In proposing that the dominant PE program model (multiactivity) be replaced Locke (1992) abandoned any hope of success through surface level refinements, suggesting that " . . . replacing the dominant program model is the only course of action that can save a place for PE in secondary schools." (p. 362) If the profession was to deal with "disturbing levels of alienation, program marginality in school curricula (and) deep and destructive role conflicts within those who teach" (p. 362) then the change would have to be so deep (Sparkes, 1990) that it could only be referred to as curricular replacement rather than repair.

Research specific to adolescents' perceptions of their PE experiences, inside and outside school (Tinning and Fitzclarence, 1992) recounted some of the phenomena "representing and constituting the crisis in school PE" (p. 28). Among them were:

- withering systems' (State Departments of Education) support for PE as a curriculum specialty;
- federal initiatives in developing curriculum packages for junior sport which have, in many schools, become the
defacto PE program;
- media and advertising hyping of commercialised, medicalised, scientised and otherwise glamorised physical activity, rendering physical activity within school PE relatively unattractive; and
- the cultural disjunction between school PE and students' entertainment-filled lives (e.g., computer games; videos, movies, professional sport) outside of school.

Referring to the "postmodern youth culture", Tinning and Fitzclarence advocated a:

. . . rethinking of the nature of school PE, which is informed by an understanding of the nature of the postmodern world and the place of education, schooling and physical activity in it (p. 302).

This went beyond Locke's (1992) call for replacement program models by arguing that a key test for any contender in the replacement program stakes should be its degree of responsiveness to the characteristics of a postmodern youth culture. We asked as a result: Could sport education become responsive to such a culture as well as offering a sound physical education?

The sport education trials

Based on reports of teachers' work with sport education in Western Australia, the Australian Sports Commission's Aussie Sport Unit funded a national trial of the model (involving 53 teachers) (SPARC, 1995a) [1]. We were aware that sport education was generating educational problems and had a hunch that, for many teachers, new opportunities to be "off centre-stage" were providing them with the time and energy to more frequently ask, "how could I do this better?" This was clearly evident in the rapidity with which teachers were prepared to relinquish their commitments to the multiactivity program model. New propositions about programs and their relationship to potential outcomes were emerging.

Steering Committees and Management Groups responsible for each state trial were informed about the ways in which we had conceptualised sport education within the broader context of education. In general this required a shift in thinking from teacher-directed toward student-centred learning as the pedagogical basis for achieving the outcomes beyond those typically available when teachers work predominantly at the teacher-directed end of the control continuum. This "shift" was assisted by the presence, for consultation purposes in each state, of the newly published statements and profiles for the Health and Physical Education Learning Area in which social development objectives such as group processes, cooperation and responsibility figured prominently in the higher level outcomes.

Throughout this period, our prime interest was in keeping uppermost the goal of supporting teachers' curriculum work. The broad aim of the projects was to ascertain teachers' perceptions of the potential of the model to be a viable vehicle for delivering good PE within the widely varying contexts of Australian schools. The project evaluation was directed at fourteen key areas, each highlighted by a focus question. The findings which specifically highlight issues relevant to themes of change are discussed under four key areas: program change, educational impact, inclusivity and sport education as a management tool. Quotes from students and teachers have been taken from the Sport Education in Physical Education Report (SPARC, 1995b) and included to illuminate the summarised findings. Before presenting these findings, however, we outline the research methods employed.

Conceptually framing the sport education projects

While there are many conceptual frameworks within which our projects' findings might be analysed, the following seem to have been most influential in the way we have thought about sport education:

- knowledge concerning change in schools (Fullan, 1991; Locke, 1992)
- the characteristics of the postmodern youth culture (Tinning & Fitzclarencce, 1992)
- Crum's ideological aetiology of physical education's failure (1993)
- the characteristics of action research (Carr & Kemmis, 1986)
- the widely cited goals of physical education (e.g., motor skills, fitness, knowledge and understanding, values and attitudes and social behaviour)
- the characteristics of the sport education model itself (Siedentop, Mand & Taggart, 1986; Alexander, Taggart &
However, despite their respective heuristic merits as devices for analysing the relative merits of sport education, these frameworks seem better reserved for framing our discussion of the results rather than for their presentation. So with this amalgam of postmodern youth culture, governmental inquiries and reports and the continuing difficulties facing physical educators in their workplaces as a backdrop, we turn to examine the emergence of the sport education curriculum model in Australian PE programs and then attempt an assessment of its potential to assist teachers in repositioning PE as more integral to the central purposes of schooling.

**Research method**

Data sources included teacher interviews, pre- and post-season class surveys, document analysis, anecdotal records, recordings of teleconferences with teachers and Steering Committees and teacher and student journals. All teachers (n=53) returned questionnaires and over 80% participated in the teleconferences. Teacher journals were completed by less than 40% of teachers, although only about 15% contained entries which we classed as reflective. Student journals were returned reliably only by six teachers where they had made their completion part of the students' assessment. The student surveys (a "hands-up" method of checking students' prior involvement in and liking for particular sports) were not reliably administered.

By far the most informative data sources were the questionnaires and teleconference transcripts. These data were supplemented by additional information collected on the initiative of State Steering Committees or by university researchers and their graduate students.

The questionnaires were analysed in the tradition of a four point Likert scale. The data appeared in the main report (SPARC, 1995a) as a series of 72 (one per questionnaire item) column graphs depicting the average response by teachers for each State. The national average response for each question appears as a horizontal line to facilitate state-specific interpretation. The open-ended data from the questionnaires were independently subjected to conceptual open-coding and subsequently categorised into emergent themes.

From the questionnaire analysis, fourteen categories for coding were identified. The data suggested clear issues within each of these categories. We were then able to search for comments relevant to each category. This process ensured the themes within the data could be captured. Teleconferences transcriptions were analysed in the same manner as teachers' open ended questionnaire responses, allowing more fine-grained interpretive analyses to generate emergent themes. All data sources converging within each theme were synthesised to ensure results could be triangulated.

Researchers independently analysed data sources, drawing their own conclusions before sharing them with one-another in a final synthesis.

**Findings**

Most of the sport education findings are based on teachers' perceptions of the workings of the model. Our analysis of students' perceptions of their sport education involvement suggests they prefer the model to traditional PE pedagogies (i.e., teacher directed/command style). Students have reported that they not only learn more under sport education, but enjoy its student-centredness as well: Before, physical education was a bit boring. We always did different sports and things but they weren't as fun as sport education because there was no competition or nothing to play for and most of the time people stuffed around or cheated (Student journal, Australian Capital Territory; SPARC, 1995b, p. 56).

There have been many instances of students complaining about the lack of continuity to their seasons when school administrators commandeered PE facilities for whole school functions. In accepting responsibility for significant input into the organisation and participation in seasons of sport education competition, students have begun to display intolerance for interruptions and disruptions to their seasons.

**Program change**

It is impossible to take on a model requiring greater time allocation without effects being felt on the number of sports offered within PE. The adoption of sport education seems to have precipitated widespread program restructuring.
Figure one shows that the extended sport education season generally created few disturbances to PE timetables.

![Image](image.png)

**Figure 1: Mean responses by state to questionnaire item 1: 'Sport education caused significant disturbances to the timetable'.**

The following teacher's assessment of sport education's immediate effects on his program captures a growing sense of ownership for sport education among both teachers and students:

> I found that some of the year tens involved in the running of sport education got quite political . . . and started questioning the idea that everything (has to go) on top of physical education and physical education misses out and we haven't got more time in the program. It was like a breath of fresh air for them to actually get involved in how physical education was taught in the school (SPARC, 1995 a, Teacher teleconference, Victoria, p. 46).

Teachers have extended sport education's use within their programs by moving it to other year levels, adding new sports and tackling higher levels of implementation by incorporating more of the model's characteristics within their seasons. Teachers, with whom we have shared professional development platforms have reported changes in their teaching which are characteristic of the deep ideological level of change described by Sparkes (1990). Many teachers now suggest they are unable to return to the teacher-directed pedagogies they employed prior to encountering sport education.

Along with program changes at a structural level, sport education seems to entice teachers toward and engage them in increased levels of school-based curriculum and professional development, as this teacher reports:

> Within the school we made a conscious effort to make what we're doing public. . . . We had almost the whole faculty involved, everyone was talking about it in the staffroom. The news about sport education . . . (was) starting to filter out of our faculty, through the school and out into the community (Teacher teleconference, South Australia, SPARC, 1995 b, p. 22)

In preparing to write new curriculum support materials for sport education (Alexander, Taggart, Medland & Thorpe, 1995), we "cast a net" over all the teachers we knew were using sport education and invited them to submit materials they had developed to support their use of the model. A considerable amount of material was sent to SPARC, strong testimony to teachers' preparedness, not only to try sport education, but also to undertake curriculum work designed to support better outcomes, both for themselves and for their students.

While these positive signs of professional renewal reflect favourably on sport education as model deserving strong consideration as a component in PE programs, an important measure of any new pedagogy continues to be student outcomes. The following section examines the sport education findings relating to educational impact.
Changes in pedagogy

Teachers agreed that their role in delivering sport education was very different to their traditional role.

While agreeing that their pedagogy changed some teachers' expressed discomfort with their less directives: "Personally I found it very difficult not to interfere and control the situation more than what was expected in the Sport Education philosophy." (Teacher journal, South Australia). Another teacher stated that it was "hard to back off at times. Some decisions needed consultation with the student-led sports board." (Teacher Questionnaire, ACT). However many teachers made the transition to more student-centred learning very well: "At the start of every lesson, I didn't do a thing. I waited for the kids to set everything up... The relief teacher said 'well don't you go out?' and I just said 'no, I'll just wait here for 5 minutes and I expect that all the games will have started by then.' She was absolutely amazed at what went on and said 'I have never seen lessons get underway so well so quickly.' (Teacher teleconference, South Australia).

The educational impact of sport education

Skill development is one area in which sceptical teachers are often quick to criticise the sport education concept. However, through a combination of longer units of work, increased motivation amongst students, the relevance offered by competition and the removal of the need for teachers to always be control agents, improvements in skill development have been reported, especially for lower skilled students (Carlson, 1995; Figure 3).
As the following representative comment suggests, the effects of a reduction in teacher-directed instruction and the concomitant increase in coaching by novices (students) led this teacher to struggle with a counter-intuitive finding:

I don't know whether I'm teaching skills to the same depth in sport education but I'm not sure that really matters since the games are getting to a much better level than I was ever able to achieve with my usual approach (Teacher interview, SPARC, 1994).

Another important finding across all sport education trials has been the generally positive reporting by teachers and students of social development outcomes. What has been witnessed is the development of qualities such as leadership, team-work, peer support and the active pursuit of socially responsible and equitable participation. Trial teachers believed these outcomes were more in evidence than they had been in their previous teaching (see Figure 4).

While we have few data from our teacher networks (beyond anecdotal reports) that students are better able to make decisions and solve problems under student-centred sport education, we do know of many teachers who, for the first time, are beginning to report on these aspects of students' achievements in PE. Included in new sport education curriculum materials (Alexander et al., 1995) are examples of some teachers' assessment and reporting documentation, designed to inform parents about their children's attainment of the "key competencies" (Australian Education Council, 1992) deemed important if students are to successfully and productively enter the world of work.

With the National (Curriculum) Statements and Profiles starting to come into schools and working out ways of meeting those, part of that is going to be about giving kids more responsibility and challenging them with tasks that require them to develop skills that we'd normally just leave to adults (Teacher teleconference, South Australia; SPARC, 1995 a, p. 115)

It appears that the self-regulated and cooperative small-group learning approaches which typify sport education may be contributing to students' learning abilities. The degree to which these abilities are transferable to other learning areas is yet to be examined.

Better student understanding of the rules and strategies important for successful participation in particular sports has also been widely reported. One of the earliest signs that sport education may offer better cognitive outcomes were reports from several schools that teachers had been forced to rewrite many of their knowledge tests due to students' better understanding of the sport. Questions had to be re-focused on team play and game strategy as students' sound knowledge of rules (the usual items in written tests) became evident through judgements made during daily
**Inclusivity**

When we did the sport education program we played touch football which was fun and taught us to share, but it would have been better if the boys would have shared the ball a bit more and given us a fair turn instead of assuming we were bad players just because we were girls. (Student journal, New South Wales, SPARC, 1995 a, p. 169)

PE has historically been accused of being a non-inclusive subject where certain groups, particularly girls in coeducational lessons, are often marginalised. We looked for signs of inequities for girls, less skilled students and for others who were socially marginalised within classes. Prior to this Project, our view has been that sport education seemed to be a far more inclusive curriculum model than those traditionally seen in physical education programs. However as we analysed the girls' student journals signs emerged that perceptions of equitable arrangements seemed to be overly optimistic. The journals, and interviews conducted with girls, indicated quite strongly that the they did not (or could not) share equally, especially as players in coeducational sport education learning environments. Although many teachers reported more positive attitudes from girls (e.g., performing roles in addition to players), boys still dominated games in many instances. Our conclusion is that it will be important, in future research, to listen closely to the voices of girls.

It generally appears the sport education model is offering increased opportunities for involvement for the lower skilled (Carlson, 1995) and habitual non-participants. For many teachers absenteeism and non-participation became the exception rather than the rule, often a useful yardstick for judging students' liking for PE. Strong evidence was forthcoming identifying students' team mates as significant influences in promoting participation, even among the most recalcitrant students.

**Sport education as a management tool?**

Figure 5 shows that teachers generally agreed that students were self managed under sport education. However there is a distinct possibility that teachers' freed from directive managerial and instructional roles may constitute, in a marginal subject one more reason for teachers to adopt what Crum (1993) called "non-teaching perspectives". However our data indicate that sport education has allowed teachers to concentrate on more important teaching tasks such as observing and assessing student performance, providing feedback and giving small group and individual instruction.

![Figure 5: Mean responses by state to questionnaire item 56: 'Most students were self-managed during sport education lessons'.](http://www.iier.org.au/iier7/alexander.html[9/01/2015 11:53:27 AM])
what and how they have been teaching. Under sport education, the focus of such reflection no longer must be centred entirely on the teacher's performance, especially management of behaviour, but on the learning environment which has been jointly constructed by the teacher and students and for whom all must bear some responsibility.

Implications for professional development

The multi-agency professional development initiatives which have supported Australian PE teachers' adoption of sport education seem also to have created significant changes in their work practices. Australia-wide trialing of National Curriculum frameworks and the associated student outcomes (Kirk, 1997), has provided teachers with new forums in which to highlight sport education's social development potential. These changes seem to be affecting some teachers' fundamental ideological commitments, a more significant development than the surface level change often associated with the adoption of different content or new resource materials (Sparkes, 1990). These developments bear a striking resemblance to the program model reform agenda promoted by Locke (1992), which drew heavily on a more general literature on factors influencing change in schools (Fullan, 1991).

There is evidence that teachers who understand the significance of, and can work strategically among, the interactive factors influencing their own workplace conditions are beginning to reposition their programs as more integral (less marginal) to their entire school's educational ethos and purpose. These developments hint strongly at processes of professional renewal for many of the teachers with whom we have worked on the sport education projects.

Teachers in a variety of forums continue to disclose new levels of awareness about the reflective potential of the pedagogy of sport education. For the first time in our collective experiences PE teachers voluntarily share their stories about assessment, skill development and equity. They also tell us that in their staffrooms the booking of buses and the school sporting team successes and failures often play second fiddle to "what is happening in my PE class."

Sport education's future: Will it wither on the vine?

In challenging the conventional wisdom that success leads inevitably to greater successes, Locke (1992) reported that when teachers see a new approach to curriculum while they produce the results wanted they will not necessarily continue on their new course until it becomes entrenched and institutionalised. He also challenged the assumption that when:

> . . . teachers actually observe students learning more, assigning more value to what they learn and wanting to participate in class activities, there can be no stronger guarantee of adoption (p. 368).

Locke questioned such wisdom by challenging those seeking lasting change to pay attention to broader systemic contextual variables:

> If only it were that simple. Observed benefits may be the outcome that validates the change, but those alone will not sustain the effort needed to go through the often long process of mastering a new instructional strategy or institutionalising a new program. Many clearly advantageous changes fade in the second or third year (the third summer vacation is notoriously lethal). . . A little early success rarely substitutes for continuing investment (p. 368).

We believe systemic influences have played a large part in the success of the sport education trials. These include:

- widespread activity in relation to trialing the National Curriculum Profile,
- continuing interest in the teaching of key competencies for those leaving school for the workforce (Australian Education Council, 1992),
- support from key agencies including Education Departments,
- the Australian Sports Commission's policies targeting sporting involvement and the development of school-community links and
- a general feeling of dissatisfaction amongst many teachers, searching for new directions in PE and professional fulfilment through curriculum change.
These forces have helped spawn collaborative ventures and professional development networks which have reduced the professional isolation within which too many PE teachers' work.

**Conclusion**

Sport education is being implemented by a large number of teachers across Australian schools. This diffusion seems to have occurred through the wider dissemination of early workshop materials and the implementation of sport education based on first or second hand reports from other teachers about their work with the model. It has been the grass roots adoption and dissemination of the model which has provided a strong indication that sport education is versatile and responsive to teachers' "practicality ethic" (Sparkes, 1990). But clearly it is one thing for teachers to adopt the structural characteristics of the sport education pedagogy and yet quite another for the learning environment to deliver outcomes which are equitable, educational and meaningful for students. To inquire further into these issues, SPARC, as part of its ongoing programmatic research agenda, will in August 1997, conduct a national survey of primary and secondary schools, asking teachers about their use and perceptions of the sport education curriculum model.

An amalgam of a postmodern youth culture, governmental inquiries and reports and economic and industrial imperatives constitute powerful forces to which even the most isolationist, yet committed and charismatic teachers are subject. It is precisely that socio-cultural amalgam to which we all should attend, especially those of us in physical education. Not to do so is to work in a restricted information field, naive to the power of strategic rhetoric (Sparkes, 1990) as an important weapon in the war to establish the integral educational status for school PE.

Sport education seems to differ from traditional attempts to include meaningful sporting experiences in PE in that the model has provided a student-centred social system which allows for educational coherence, often lost in the mindless doing of physical activity in schools. While sport education seems to be rekindling many physical education teachers' professional zeal, finding ways to support this happy state of affairs is a challenge facing Australian physical educators who take seriously their profession's bottom line: the recruitment of children and adolescents to the movement culture.

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**Endnote**

[1] Prior to the national sport education trial, a report of the Sport Education Phase II Project (SPARC, 1994) outlined the promising outcomes of the Western Australian trials. This interested the Australian Sports Commission's National Aussie Sports Unit which subsequently funded the national trial which was the subject of a large (290 pages) report (SPARC, 1995a) which included hundreds of statements from trial teachers, arranged under 14 "focus areas" and accompanied by 72 figures reporting the results of a questionnaire completed by teachers. A smaller version of the report omitted many of the figures but foregrounded teachers' comments and was entitled "Sharing teachers' stories of sport education" (SPARC, 1995 b).

**References**


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