A Peg in the Ground – The Health and Physical Education Curriculum in Secondary Schools

Dawn Rasmussen, National University of Samoa

Physical Education should excite students, engage them enthusiastically in activities they find meaningful, and eventually help them develop lifelong commitments to physically active lifestyles.

(Siedentop & Tannehill 2000: 130 cited in Penny n.d.)

Since its inception in 1967, physical education in Samoan schools remained unrecognized although structural changes were made to include a health component. In 2004, the Curriculum Statement for Samoa Secondary Schools: Health and Physical Education Years 9 – 13 (Ministry of Education, Sports & Culture 2004) was officially completed. The writing of teacher's guides for years 9 and 10 (Rasmussen & Sio 2004a) and, years 11 and 12 followed (Rasmussen & Sio 2004b). In 2005, the official implementation of the curriculum began with 2008 being its inauguration as an examinable subject for the Year 12 School Certificate and 2010 for Year 13 Pacific Senior School Certificate (PSSC). The implementation of the Samoa Secondary Schools Health and Physical Education Curriculum is "A peg in the ground" (Stothart 2000: 5) as this marks the long awaited curriculum for Physical Education, and as a subject that has been marginalized for a long time. The Samoan expression alluding to the Biblical verse "*O le ma'a tulimanu sa lafoai'ina e tufuga*", the stone that was rejected by the carpenters, has now become the cornerstone (Mark 12:10) seems particularly apt at this time to describe the current developments in this field. Over the years Physical Education had taken second place to the more traditional subjects taught in schools, however, the launch and implementation of Health and Physical Education (HPE) curriculum accelerated the incorporation of HPE into mainstream teaching.

Issue with Implementing the Secondary PE Curriculum

Samoa has continued to face problems implementing the Samoa Secondary Schools Health and Physical Education Curriculum (which I will also refer to as Physical Education) as well as what teachers encounter in the implementation of the curriculum. This also includes the barriers that may have contributed to the delay and acceptance of Health and Physical Education as an academic subject. The primary focus is to address issues relating to Physical Education including health.

Furthermore, teaching Physical Education had taken a long time in gaining recognition as a school subject due to teachers and the Ministry of Education, Sports and Culture's perceptions. In support of this, there is also an attempt to discover whether there had been any changes to attitudes and perceptions of teachers towards Physical Education. The article will help to gain a better understanding of the problem regarding the acceptance and teaching of Physical Education in the schools as well as helping to improve the training of teachers.

The Samoan Social Structure

The Samoan social structure is made up of the village (*nu'u*) and the family (*aiga*). The family, which includes the extended family has a chief (*matai*) who is the head or leader of the family and is accorded

great status and power and is entrusted with the management of family land and property (Meleisea 1992; Petana-loka 1995). This social system ensures the village welfare and well-being of the family and individual (Fairbairn-Dunlop 1991; Meleisea 1987 cited in Faoagali 2004). The council of *matai* (chiefly title holder) makes up the *fono*, the village forum that governs matters such as health, education and developmental programmes (Petana-loka 1995; Meleisea 1992; Faoagali 2004). In many villages, the *fono* are predominately male who exert power and a strong control over their communities as well as influence on school leadership (Fa'aulufalega 2008; Pereira 2006) and what goes on in the schools.

Samoan Education System

Systems of education are on the whole conservative (Beeby 1966). According to Curle 1964 (cited in Beeby 1966: 29) "in most societies, for most of recorded time, education has been a reactionary force rather than a progressive one. Education that is often closely associated with religion has tended to hallow antiquity than to promote innovation". As such, education in Samoa seemed a replica of religion in following tradition rather than moving with the changing times. Undoubtedly, HPE in the late late sixties heralded a new era which continues to now. However, changing attitudes and perceptions remain a challenge.

Education systems are political organizations in which power is an organizing feature (Sarason cited in Johns 2002; Beeby 1966), to change societal habits and values. Consequently, the powers at play in the establishment of HPE have yet to influence and change society's views on HPE. Although Samoa is a sporting nation this was not translated into classroom practice because it was not an examinable subject. Educational policies and practices have evolved historically from colonial heritage (Salter 2000) to ex-colonial countries like Samoa. Subsequently, policies and practices have accepted the kind of academic schooling handed down to them by their European rulers, as a system that offered hope and freedom for their children from "poverty and tedium of the life on the land" (Beeby 1966: 30). This attitude is still in existence today in Samoa. Researches by (Tavana 1994) and (Fuatai 1993) found that education was valued as a means of escaping rural life and finding white collar and well paid employment (Pereira 2006).

The education system in Samoa began with the advent of the London Missionary Society (LMS) missionaries in the 1830s. It was a combination of influences of Samoan culture, Christian missionary work, colonialism under New Zealand, and the beliefs of the Samoan leaders who have directed schooling since political independence in 1962 (Department of Education Western Samoa 1986). Formal secondary education began in the early 1960's following the establishment of Samoa College in 1953. Under the New Zealand administration (1914-1962), Samoan schools followed the New Zealand curricula and syllabi. This was particularly so at secondary level, where New Zealand external examinations such as the New Zealand School Certificate and University Entrance examinations became dominant. Secondary education was influenced and controlled by New Zealand expatriate teachers. Schooling in Samoa mirrored schooling in New Zealand. The New Zealand system of education (Petanaloka 1995) continued in Western Samoa even after independence. Gradually in 1989 the school curriculum was localized and the national examination, the Western Samoa School Certificate and a

regional examination, the Pacific Senior Secondary Certificate at senior secondary level (Petana-loka 1995, Ministry of Education, Sports & Culture (2008) *Samoa school certificate examination: Health and physical education 2008 exam report.* Ministry of Education, Sports & Culture.) were established.

For about thirty years, the Samoan educational system was largely influenced and replicated New Zealand educational views, philosophies and practices. This was reflected in the subjects selected (Schuster, 2019) taught at secondary schools namely, English, Geography, Mathematics, Science and Book-Keeping. Physical Education was conducted in the form of a sports activity usually timetabled in the last period on Friday.

The influences of the New Zealand Physical Education syllabus in the 1940's and 1950's (Stothart 2000) were eminent in the introduction of the "rompers" for girls during sports period and the type of sporting activities that were practiced. These practices were particular to Samoa College, a prestigious secondary school that was funded by the New Zealand Government. The majority of the teachers came from New Zealand. The particular focus at Samoa College was to prepare Samoans for leadership in the Independent State of Samoa. The New Zealand 'influence' on education was pointed out as early as 1920s, by the then Administrator to Western Samoa, General Richardson, who stated that "the Samoan Educational System was controlled by New Zealand experts who were keen, enthusiastic and able but who were liable to view the education of Samoans 'through New Zealand spectacles" (Department of Education Western Samoa 1965: 2).

The emphasis on an examination system, prevented teachers from being creative and innovative and from teaching subjects that were more practical in nature. Dalton 1988 (cited in Petana-loka 1995) discussed Piaget's statement in the following way, "the school examination becomes an end in itself because it dominates the teacher's concerns, instead of fostering his natural role as one who stimulates consciences and minds and he directs all the work of the students toward the artificial result which is success on final tests, instead of calling attention to the student's real activities and personality" (p. 69). As a consequence of this practice, practical subjects such as physical education, music, and visual arts became irrelevant. Because they were not examinable, they were regarded as unimportant, a "filler in" to keep students occupied while the teacher attended to other matters. Perhaps, it is because these subjects were not examinable, that they held no status in the Samoan education system.

By the mid-1960s, after Samoa became independent, the Samoan education system became "Samoanised". Expatriate education officers and teachers, were gradually replaced by qualified overseas and locally trained Samoan teachers (Department of Education Western Samoa 1965).

Introduction of Physical Education

In 1967, the Education Department saw the need to train teachers in physical education and the subject was then introduced at the Teachers' Training College (TTC) for primary trained school teachers. Later it became the Primary Teachers' College (PTC) until it merged with the Secondary Teacher's College (STC) in 1991 to become the Western Samoa Teachers' College. The course of study included Physical Education as one of the majors that students could choose from. Moreover, the one day a week sports

period in the secondary schools was replaced by Physical Education. Physical Education was viewed as 'sports' and translated into Samoan as *ta'aloga*. The ambiguity related to this Samoan term, also meant it was games, or play, as well as sports which proved to be ambivalent in the way the subject was viewed by parents, students and particularly teachers. This uncertainty may also be due to the nature of some of the Physical Education lessons where physical activities were related to games and sports skills. As a result, Physical Education was not seen as an important part of holistic growth which involved the well-being of an individual in all areas of their physical, mental, emotional and social life (Rasmussen & Sio 2004a), but a subject that was 'easy going' with exercise not necessary or important (Kim & Taggart 2004).

For many years, and more important in relation to this study which was conducted in 2009, teachers were trained in Physical Education despite the fact that there was no curriculum. Moreover, it was not until thirty-eight years later, in 2003, that a curriculum statement for the Samoa secondary schools was written. The curriculum for the primary schools had recently being written under the Education Sector Project II, which focused on improvement of both primary and secondary education and capacity building within the MESC (Ministry of Education Sports & Culture, Final Inception Report 2006; Ministry of Education, Sports & Culture (2008) *Samoa school certificate examination: Health and physical education 2008 exam* report). However, a sports programme called *Fiafia Sports* which was fashioned out of the Aussie and Kiwis sports programme is the only physical activity programme that was activated in selected primary schools in Samoa since 1990.

Implementation of the Samoa Secondary School Health and Physical Education Curriculum

In 2004, the Curriculum Statement for Samoa Secondary Schools Health and Physical Education (Ministry of Education, Sports & Culture 2004) Years 9-13 was completed (Ministry of Education, Sports & Culture, 2004) and ready for implementation. The implementation of the Health and Physical Education Curriculum was our first peg in the ground. In preparation for implementing the curriculum, a one week's workshop was organized to train teachers who were going to teach the Health and Physical Education Curriculum. This workshop was planned for the first week in March 2005. Trainers for this workshop were Ms Brenda Sio and the author who were involved in the development of the Health and Physical Education Curriculum statement and writers of the Teacher Guides. Ms Sio was responsible for the teaching of Health and the author, for the Sports and Physical Education section.

In preparing for this workshop the constructivists theories of learning was taken into consideration; where learners generate understanding or knowledge through interaction of what they already know and believe and the ideas, events and activities which they have learnt through contact or communication (Cannella & Reiff 1994). Knowledge is learned through involvement with content rather than through imitation or replication (Kroll & LaBoskey 1996). Learning activities using a constructivist approach include active involvement, inquiry, problem solving and cooperation with others. The teacher is a guide, facilitator and co-explorer, who encourage learners to question, challenge and form his or her own ideas, opinions and conclusions, rather than being just a dispenser of knowledge (Ismat 1998). As a trainer or facilitator, it was important that adequate preparation was undertaken for the workshop that

would include a lot of practical and group activities related to the curriculum and Teachers Guide, so that teachers would be able to interpret and develop their own pedagogical styles.

Forty-four (44) teachers from eighteen government and mission schools were invited to attend the weeklong workshop. However, only fourteen (14) teachers (about 31 percent of invitees) attended the workshop. The non-attendance of teachers, demonstrated attitudes that existed amongst principals and teachers of practical and vocational subjects that was undervalued or perceived as important. As one teacher commented when asked about the absence of the other invited teachers; "our principal told us whoever wanted to attend could do so". This exemplifies the casual and dismissive attitude that is held by many individuals in the Education Sector, including those in influential positions such as principals, towards vocational subjects. The workshop procedure guided the teachers through the Curriculum Statement booklet. The Teacher's Guide provided guidelines on how to plan and implement the curriculum in their schools.

Key Principles that Underpin Samoan Education

In the last five years much discussion and thought has gone into developing and strengthening Samoan education. Four overarching principles have been outlined in curriculum documents which underpin all aspects of Samoan education including the development of the curriculum.

These are Equity, Quality, Relevance and Efficiency.

Equity has been defined as that element that requires that "the system will treat all individuals fairly and justly in provision of educational opportunity" (Ministry of Education, Sports & Culture 2006: 3). Additionally policies and practices which advantage some social groups and disadvantage others are to be avoided whilst those which address existing inequalities in access, treatment and outcomes are to be promoted. The second principle of quality is defined as being exemplified by "high standards of academic achievement, cultural understanding and social behavior and results from a complex interplay of professional and technical factors and social and cultural practices" (Ministry of Education, Sports & Culture 2006: 3). Furthermore, policies promoting these practices will focus on the learning institutions, most especially on day to day classroom practices addressing the monitoring, assessment and reporting of student outcomes and teaching effectiveness. Relevance is defined as implying "a system which is meaningful, recognized, applicable and useful to one's life" (Ministry of Education, Sports & Culture 2006: 3). It has a broad influence enhancing individual and community wellbeing, as well as national development, which includes cultural, humanistic and spiritual aspects. The fourth principle of efficiency in education is "demonstrated by leadership and management practices which ensure optimum use of resources - human, financial and material - at all levels, efficient service delivery, effective communication and coordinated and transparent decision-making" (Ministry of Education, Sports & Culture 2006: 3).

The Samoa Secondary Schools Health and Physical Curriculum Statement

The main purpose of the Samoa Secondary Schools Health and Physical Education Curriculum Statement is to provide a guideline for the teachers who would be teaching the Health and Physical Education

curriculum. The statement outlines the curriculum principles which are based on the principles of the Samoa Secondary Schools Curriculum as stated in the Samoa Secondary Schools Curriculum Overview Document (Ministry of Education, Sports & Culture 1998). The statement outlines the principles underpinning the Samoa Secondary Schools Health and Physical Education Curriculum, and the structure of the curriculum which includes the General Aims, the Four Organizing Strands, the Specific Aims and the Achievement Objectives for Years 9 to 13.

The four strands are:

- 1. Active Personal Health and Relationships
- 2. Active Human Movement
- 3. Active Interpersonal Family Health
- 4. Active Community Health

Of the four strands, three are focused on health and one on human movement. Each strand has specific aims that develop the general aims. The general aims are to help students develop knowledge and understanding, skills and attitudes towards improving personal health and wellbeing and developing healthy lifestyles through movement and regular physical activity, as well as promoting robust family and community relationships.

Covered also in the document are the generic teaching and learning approaches across the subject areas including the assessment and evaluation processes for Health and Physical Education. This document also provides the teacher with directions on learning outcomes; what is to be covered at the various levels within the four organizing strands. The overall intention of the Health and Physical Education Curriculum (Ministry of Education, Sports & Culture 2004) however, is to develop student's knowledge and motor skills, through physical activity, to promote healthy, active lifestyles and foster moral behavior and other generic skills (Ministry of Education, Sports & Culture 2004)

Following the completion of the curriculum statement, teacher's guides for years 9 to 12 were written and implemented in 2005 (Rasmussen & Sio 2004). The implementation of the Samoa Secondary Schools Health and Physical Education Curriculum (Ministry of Education, Sports & Culture 2004) has been labeled 'A peg in the ground' (Stothart 2000: 5), since this marks the construction of something new, after thirty-eight years, the long awaited curriculum for Physical Education.

My Position

I have been involved in the training of teachers and the teaching of Physical Education to secondary students ever since it was introduced as a subject in the Samoa education system in 1967. As a Physical Education lecturer from 1997-2016 at the Faculty of Education of the National University of Samoa and the co-writer of the Teacher's Guide for Health and Physical Education for Years 9 and 10 and Years 11 and 12; as well as a member of the International Federation of Physical Education (FIEP) Oceania, and a committee member involved in the writing of the Samoa Secondary Schools Health and Physical Education Curriculum Statement, I was interested in teachers progress with the implementation of the Physical Education curriculum and finding out reasons behind the non-development of the subject and the slow progress of accepting it, not only as an academic subject but also as one that has been

recognized as a means of promoting and encouraging active lifestyles (Culpan 1998). This would assist in promoting Physical Education situation and improve practices associated with the training of teachers.

Samoa National Secondary School Curriculum

The 1998 Samoa National Secondary School Curriculum Overview Document (Ministry of Education, Sports & Culture 1998), outlined principles, and learning areas that Samoan secondary schools students must experience and achieve. The curriculum, as referred to by the Ministry of Education, Sports & Culture (1998) contains "planned and structured learning experiences that schooling provides" (p. 5) and curriculum principles are ones that "guide and direct how schools develop, organize and implement learning experiences" (p. 5) There were ten curriculum principles which provided direction and consistency for the development of programmes and related policies, one of which states that "schools will provide an active environment which simultaneously enhances the intellectual, aesthetic, spiritual and physical development of each individual" (p. 6). During this period of time there were ten major learning areas that were classified as secondary school curriculum. Like the New Zealand Curriculum, (Culpan 1998) Health and Well-being was stated as one of the learning areas with Physical Education as one of the subjects that contributed to the learning area. However, in line with Government reforms of the early 1990s, the Ministry of Education Sports & Culture implemented the Education Policies and Strategies 1995-2005, in which changes were made for the improvement of education in Samoa. The Samoan government recognized the importance of education and placed it on its highest priority with a vision for every Samoan to enjoy an improved quality of life premised on a competitive economy with sustained economic growth, improved education, enhanced health standards and strengthened cultural and traditional values (Ministry of Education, Sports & Culture, Samoa 2006: 5).

In order to improve the quality of education, three areas were identified, these being to improve: teacher quality, curriculum and teaching materials and education facilities (Ministry of Education, Sports & Culture, Samoa, 2006: 5). In this policy, seven learning areas were identified with Health and Physical Education being one of the learning areas in both primary and secondary levels. Time allocation for this subject was 3 hours for Years 1-3, 2.5 hours for Years 4 to 8, and 1 hour for Years 9 to 11. Health and Physical Education was listed as a compulsory subject in secondary school Year 9 to Year 11, while in Years 12 and 13 it was optional. Students at this level, (Years 12 and 13) had to take English plus a group of four subjects that were linked to either academic, vocational or employment interests. Time allocation for this level was a minimum of 5 hours per week for both English and optional subjects. In 2006, a further development occurred when, the Strategic Policies and Plan July 2006 – June 2015 (Ministry of Education, Sports & Culture 2006) was implemented, where sports in education became part of the Health And Physical Education learning area. The policy statement advocated encouragement of participation of all students in physical education, physical activity and sports. It also stated that Health and Physical Education was to be compulsory for 1 hour a week for Years 9-13 and that Health and Physical Education was to be made examinable in Years 12 and 13 (Ministry of Education, Sports and Culture 2006).

Specific problems that were identified in the 2006-2015 strategic policies and plan document was the absence of a sports policy to guide sports development, the lack of maintenance of sports fields that were built and upgraded by the Ministry, the shortage of personnel and the little emphasis placed on Health and Physical Education. This lack of emphasis was also reiterated by the then, Chief Executive Officer, Tautapilimai Levaopolo Tupae Esera (2005) who stated:

Because of the heavy emphasis on examinations and academic excellence, non-examinable subjects like Health and P.E. have too often been sacrificed for additional lessons in Maths, English or other subjects. Hence, PE lessons that are conducted are often ill organized and haphazardly taken. PE in most schools despite having specialized PE teachers mostly consists of students playing around with the ball on the field or using it as a free period to relax and catch up with other studies. In addition because of the shortage of teachers most of the PE teachers are made to teach other subjects

(Esera 2005: 4).

Implementation of a Curriculum

Theorists who have been dealing with curriculum design issues have dealt mainly with curriculum planning and development with little consideration of curriculum implementation issues (Virgilio, 1984). Curriculum design has three main functions: to produce curriculum, to implement it, and to appraise the effectiveness of the curriculum system (Beauchamp, 1968 cited in Virgilio, 1984). With little information on curriculum implementation, this has created some problems with schools who have attempted to incorporate new curriculum.

Curriculum implementation as defined by Virgilio (1984) 'is incorporating and appraising of that which was materialized by the construction and development processes" (p. 58). Incorporation involves trialing of the curriculum and appraising provides feedback on the construction and development process. These processes are important as they help in the preparation and acceptance of the new program.

Crucial to the implementation of any curriculum are material support and human support (Virgilio 1984). Material support is most important to begin with, as teachers need new materials, supplies and equipment. Human support is also very important, and the principal is vital in the implementation program, as he/she is in a unique position to influence and authorize curriculum change (Ha et al 2004; Virgilio 1984). Other human support, are the teachers, who play an important role in the success of curriculum implementation (Fraser-Thomas & Beaudoin 2002; Snyder et al. 1992; Virgilio 1984). Faucette 1987 (cited in Fraser-Thomas & Beaudoin 2002) classified teachers as acceptors, conceptualizers or resistors of new curricula and only teachers who accepted the innovations worked consciously in the implementation of new curricula (Fraser-Thomas & Beaudoin 2002). From the research literature on educational change, it was evident that teachers were pivotal in the implementation stages as they were instrumental in the implementation process, but they also had a key role in transforming policy into practice (Cherryholmes 1988; Johns 2002).

Before the implementation of any curriculum, in-service training or professional development for staff is essential for any program to be successful. Because teachers implement the curriculum, they play an important role in effecting curricula implementation (Fraser-Thomas & Beaudoin 2002). In a study by Gibbons (1995), teachers who undertook in-service training using peer-teaching and observation sessions, found it very beneficial in their preparation for teaching new content. Virgilio (1984) noted that "Most implementation efforts fail because curriculum leaders neglect to provide adequate staff development opportunities" (p. 61).

In implementing a curriculum, such as Physical Education, it is important that the classroom teacher uses schemes of work that the school has chosen or devised (Qualification and Curriculum Authority England 2005) or curriculum statements such as the Samoa Secondary Schools Health and Physical Education Curriculum (Ministry of Education, Sports & Culture 2004). It is important when planning and implementing the curriculum that consideration is given to the needs of the learner, their physical, social, intellectual and emotional development, the classroom and school environment, as well as the special nature of their community. Important also is the understanding of the cultural aspects that are relevant to the student's promotion and development of physical skills, self-awareness and confidence (Ministry of Education Sports and Culture 2005). In addition, it is important that Physical Education programmes are gender and culturally inclusive, to meet the needs of boys and girls and students with special needs and abilities (Ministry of Education Sports and Culture 1999). These concepts are also reiterated by the Physical Education and school sports programmes in England, where classroom teachers plan their work taking into consideration the pupil and how they would be able to "develop aspects of their fitness, health and well-being as well as their knowledge and understanding of why it is important to be active" (Qualification and Curriculum Authority England 2005: 1).

Implementing Curriculum Change

The design and execution of education reforms. Provide an opportunity for radical breakthroughs in understanding, for giant leaps in learning

(McGinn cited in Macdonald 2003a: 140)

Changes to curriculum or reforms are nothing new. Curriculum changes are normal but what is supporting these changes involve disputes over what has been chosen, the processes by which these changes were made, who made them, what were the intentions and with what results (Macdonald 2003a). Arguments are geared towards what education is for, and for whom knowledge is most valued; the learner, teacher, parent or curriculum authorities (Macdonald 2003a). In the early 1960s and 1970s in North America and the United Kingdom, curriculum packages were, as Macdonald (2003a) called them, 'teacher proof', meaning that teachers had very little influence on the content, objectives and assessment tools. Curriculum materials or texts were largely produced by specialist curriculum writers who were not involved in the school system. Teachers and the school education system were to play the supporting role to those in authority, such as educational administrators and their curriculum writers: the main purpose is the achievement of the goals set on curriculum reforms (Macdonald 2003a). This curriculum reform process which Macdonald (2003a) had termed 'top-down' is one that has been much used in Physical Education, by countries such as France, England and Wales where the Physical Education, by a dominant group of education officials, teachers, academics and key stakeholders (Macdonald 2003a). Penney and Evans 1999 (cited in Macdonald, 2003b), had

documented the revival of competitive games and sport in the Physical Education curriculum under this 'top down' form of curriculum change. Another example of the top-down educational reform is the New Zealand's National Certificate of Educational Achievement used as recognition of success for national tests and standards (Macdonald 2003b)

Research that was conducted on curriculum development during the 1970's and 1980's showed problems on goal achievement using the 'top-down', 'teacher proof' model, so changes were made where 'a bottom up' concept came into view, where ownership was given to the teachers (Macdonald 2003b). A new approach to curriculum was then made, and this was known as the School-Based Curriculum Development (SBCD) (Macdonald 2003b). Teachers who were the 'real experts', were given control of the curriculum development Kemmis and McTaggart 1988 (cited in Macdonald 2003b). Kirk and Macdonald (2001) supported the involvement of teachers in curriculum reform as they had "intimate knowledge of their students, their colleagues, their school structures and the resources available to them" (p. 552). However, critics of the school-based strategy viewed the role of teachers as agents of change, as problematic. Subsequently, another model of curriculum change was made which involved collaboration between administrators, curriculum developers, professional associations, researchers, teacher educators, teachers and parents. This model was known as the partnership model (Macdonald 2003b). Fullan 1999 (cited in Kirk and Macdonald 2001) terms it "across-boundary collaboration" (p. 552). An example of this was the German curriculum partnership project, where teachers, administrators, researchers, administrators and in-service providers were employed for the reformation of the science curriculum Riquarts & Hansen 1998 (cited in Kirk & Macdonald 2001) In the United States for example, Ennis 1999 (cited in Macdonald 2003b) described the US peace-education curriculum as "Sports for peace" (p. 142). This curriculum model showed a joint collaboration involving various factors from the schools, professional and community groups, teachers and students. In Australia, teachers are involved in the production of syllabi and curriculum guides and in the trials of curriculum material (Macdonald 2003b: Kirk & Macdonald 2001). This concept of partnership, where the integration of 'top-down' and 'bottom-up' strategies are used for reforms and changes in education, has brought together a variety of stakeholders who have a vested interest in the nature of change in the schools (Kirk & Macdonald 2001; Macdonald 2003b).

Another change to curriculum was the modernist curriculum reform which had its concerns with direct, purposive, systematic and intentional changes. The modernist curriculum reform was centered particularly on schooling, learning, and the young people (Macdonald 2003a), but failed to take into consideration the present-day situation of high modernity Giddens 1991 (cited in Macdonald 2003a) or the post-modern world (Macdonald 2003a). Post-modernity curriculum is an open system which necessitated interactive and holistic frameworks for learning with students as creators and transformers of knowledge (Macdonald 2003a).

A study conducted by Ha et.al (2008) on Hong Kong teachers regarding their views on curricular changes in Physical Education found that teachers felt more secure and confident about implementing changes after being provided with support and collaboration from the school principal and senior administrators. Changes in curriculum are often initiated by government, policy makers and curriculum officers, with very little consensus for change from school administrators and teachers (Ha et al. 2008: Fullan 2001). Fullan and Stiegelbauer (1991) suggested that curricular change is often very challenging in

practice and the process of implementation, which usually follows, is "an interactive and negotiated process between curriculum developers and schoolteachers" (Ha et al. 2008: 78). The success of the implementation of educational policy depends on the acceptance of the wide range of thoughts and daily practices of teachers who are the key players in the implementation process (Johns 2002). Taulealo (2007) in her study of the implementation of the Visual Arts curriculum in the Samoan secondary schools, states that "teachers need more training and time to become familiar with all aspects of the curriculum and (they) need to accept change and be prepared to follow the curriculum content and themes" (p. 11).

As indicated by Ha et al. (2008) the school principal and other subject teachers, including education administrators and others in power, would provide momentum and efficiency in implementing curriculum change.

Perceptions and Attitudes

Teachers' beliefs and values is another factor that must be considered. Researchers regarding curriculum change have shown that "teachers' belief systems play decisive roles in the teaching and learning process" (Chen & Ennis 1996: 338). When teaching, the "teacher's cognitive and other behaviors are guided by and make sense in relation to a personally held system of beliefs" (Clark & Peterson 1986 (cited in Chen & Ennis 1996: 207). This belief system determines what the teacher decides and what content will be taught (Chen & Ennis 1996). These beliefs are important as they are often very hard to change and have an "influence on students' receptivity to messages received in teacher education" Pajares 1992 (cited in Placek et al. 1995: 246).

The perception and beliefs by some see Physical Education as one that separates the mind and body (Culpan 1996/97) and that "Physical Education is for those students with less intellectual ability", or that "it is not for high achievers, it is for those who are more practical" (Culpan 1998: 4). These perceptions and attitudes have caused barriers to the implementation of Physical Education. However as Tinning et al 1993 (cited in Culpan 1998) argues, "the mind and body are not separate …we act both knowingly and intelligently and learn in and through movement" (p. 4).

Quality Health and Physical Education programmes are largely dependent on how they are perceived and valued by those responsible for teaching it (Morgan et al. 2002). Although Health and Physical Education has been recognized as one of the most valuable mediums for encouraging and promoting active lifestyles, it has been historically marginalized as low status (Culpan 1998; Morgan et al. 2002; Johns 2002; Ha et al. 2008) and viewed as a subject that is 'easy going' with exercise not necessary or important (Kim & Taggart 2004; Pereira 2006). Because of this view of the subject as inferior, many Physical Education teachers have a tendency to give "students little or no instruction while allowing them free play or other non-physical activities during times that have been allocated to Physical Education" (Kim & Taggart 2004: 1). Another reason for this low status can be attributed to the "lack of official assessment" Hardman & Marshall 2000 (cited in Hay 2009: 214) which according to Hay (2009) some academics in Physical Education have suggested the view of assessment is "a means by which value is attributed to subjects" (p. 214). Assessment also defines the value aspects of curriculum subjects which provide a tool for assigning value in the form of grades for those who possess a value on knowledge and skills (Hay 2009; Morris 1996). This is also defined by Chan et al. (2006) "any activity or method that is designed to "show what a person knows or can do" (p. 135). Rink and Mitchell 2002 (cited in Hay 2009) argued that in Health and Physical Education "one unintended outcome of the standards, assessment and accountability movement is that any program (or subject) not included in high stakes state level assessment, for all practical purposes, does not count" (p. 214).

Assessment is used as a means of providing grades after teaching has taken place to satisfy requirements and as a record or report about learning progress (Chan et al. 2006; Siedentop 1991). In Hong Kong, a research conducted by Chan et al. (2006) found that certain schools subjects were perceived and legitimized as being of academic value and counted towards the final years' results, whereas Physical Education was not and this even included students who performed well in Physical Education examinations.

In Samoa, an emphasis on examinations and academic excellence had an impact on subjects like Health and Physical Education which were often sacrificed for additional lessons in Math, English and other subjects (Esera 2005). Pereira (2006) reported during discussions with Samoan parents, that subjects such as Physical Education, Music and Art were seen as a "waste of time" and a "distraction from getting good exam results" (p. 69). Students also felt that these subjects were unimportant because they were not formal subject areas and were not tested but if they were to be examined and graded in reports, then they would be important (Pereira 2006). In 2008, Health and Physical Education was introduced as one of the examination subjects for the National Samoa School Certificate for year 12, and in 2010, as an examinable subject in the regional Pacific Senior Secondary School Certificate (PSSC). The inclusion of Health and Physical Education at Year 13 marks another milestone in the change of attitudes and perceptions of teachers, students and parents towards a subject that has been viewed as a marginal subject, with low status and of little value. The recent examiners reports for the Samoa School Certificate Examination 2008 and 2009 identified strengths and weakness and noted that the one of the aims of introducing this subject into the curriculum was to have it "become a core subject for all schools (because it) is necessary for the life of the child" (Sio 2009: 10). As well as the examiner's report for the final examination the Internal Assessment Moderation Report for Health and Physical Education for the Samoa School Certificate 2008, remarked that "the ultimate goal is for the students to display their skills in various sports that are not examinable (so that) the progress they make internally will assist them greatly for their external assessment by the end of the year" (Ministry of Education, Sports & Culture 2008: 2).

With Physical Education, becoming one of the optional examinable subjects towards national certificates, changes have been noticeable in the way Physical Education has been taught. At a recent Physical Education New Zealand Conference, held in Auckland, in July 2010, a forum of Physical Education lecturers in universities and Heads of Department in secondary schools, voiced concern over the secondary school PE becoming "more theoretical and less practical" (Jones, 2010, p. 3). The reasons for this change in the practical nature of the subject, according to Jones (2010), are due to the "increasing emphasis and status of physical education as an optional examinable subject towards the

National Certificate of Educational Achievement (NCEA)" (p. 3). As Stokes noted (cited in Jones, 2010) "Throughout my school life I have experienced a number of changes to physical education with the amount of practical having been overtaken by theory. Our assessment has been determined increasingly by our ability to write which is highly academic" (p. 3). Additionally, Harrison observed (cited in Jones 2010) "physical education is often affected by assessment.... We need to make sure the physical is always an important part of the way we are teaching and we need to think about how the assessment is going to affect how much physical we can do" (p. 3). This provides much food for thought in the way Physical Education is now being taught.

Pedagogy and Content Knowledge

Resnick and Klopfer (1989) wrote "To know something is not just receiving information but also being able to interpret and relate it to other knowledge" (p. 4). Teaching is a learned profession. A teacher needs basic skills, content knowledge, and general pedagogical skills (Shulman, 1987). The first source of knowledge base according to Shulman (1987) is "content knowledge - the knowledge, understanding, skill, and disposition that are to be learned by school children" (p. 8-9). This content knowledge relies on the teacher having a good source of literature and a basic understanding of the subject being taught and a wider knowledge base to be able to impart alternative explanations of similar ideas or philosophies (Shulman, 1987). Additionally, Shulman (1987) identified other types of knowledge such as pedagogical knowledge, which relates to the principles and strategies associated with managing and organizing and pedagogical content knowledge as the central part from which skilled teaching and coaching comes from (Siedentop, 2009). However, pedagogical knowledge cannot be isolated from content knowledge, they must go together. In Physical Education, content knowledge is not easily recognized as it is with other subjects such as Maths, English, Music or Art (Siedentop, 2009). The content knowledge the students are learning in the schools in Maths, English, Music or Art are related to what the teachers have learnt during their teacher preparation programmes at university (Siedentop, 2009). As for Physical Education, a number of studies indicate that some teacher educators have eliminated the pedagogical content knowledge for teaching Physical Education (Vickers, 1987, cited in Siedentop, 2009, Shulman, 1987, Siedentop, 2009). According to Siedentop (2009), "pedagogical content knowledge is the 'main stuff' from which effectiveness and expertise in teaching and coaching derives" (p. 244). Hoffman (1987, cited in Siedentop, 2009) foretold the demise of Physical Education due to teachers' lack of knowledge about the subjects that they were teaching. In a study by Ha et al., (2008) on Hong Kong teachers, they reported the lack of confidence in procedural knowledge or pedagogical content knowledge, particularly confidence in applying a wide range of teaching methods for students with varying abilities. The difficulty of motivating female students to engage in physical activities during Physical Education lessons and the limitation of knowledge associated with generic skills was another problem (Ha, et al., 2008). These problems need addressing as, "teachers are expected to understand students' diversity and individuality and must master all necessary techniques to alter curriculum and instruction on a continuous basis" (Ha, et al,, 2008, p. 88).

To effectively implement educational changes, Fullan and Hargreaves (1992a, cited in Ha, et al., 2008) indicated the need for teachers to effect change in their knowledge about present policy and

professional and research issues by accessing good knowledge for improving teaching. Teachers' openness to change depended on their attitudes towards new educational ideas (Brown & McIntyre, 1982; Richardson, 1991; 1996 cited in Ha, et al., 2008).

Teachers' beliefs play an important role in the teaching-learning process. This belief system reflects the teachers' educational values on how knowledge is used in teaching (Chen, & Ennis, 1996). Pedagogical reasoning and action are processes that teachers go through when deciding the content and pedagogy that will be used for teaching in the classroom (Shulman, 1987). To teach is first to understand the ideas that are to be taught, so as to achieve educational purposes so that students will "develop understanding, skills, and values needed to function in a free and just society" (Shulman, 1987, p. 14).

Knowledge and skills that are taught in classrooms should be meaningful to the individual students and delivered in a way that enhances self-esteem and enjoyment in participation. It is important that one should be able to make sense of what has been taught and learnt, in a way that will motivate the learner. As Resnick and Klopfer (1989) stated "to know something is not just to have received information, but also to have interpreted and related it to other knowledge" (p. 4). Additionally Placek (1983) argues that "how teachers behave and what they do is directed to a large extent by what they think" (p. 47). Faoagali (2004) in studying the gap between the old Home Economics versus the new Food and Textile Technology curriculum for secondary schools in Samoa, found that the factors influencing successful curriculum implementation were complex. Contrary to expectation, where schools should reflect their local communities, Faoagali found that they did not. Indeed, the principles and values promoted by the local school system in some cases do not reflect Samoan culture as expected and in fact demonstrates the school in Samoa is a place where "things foreign are taught" (p. 96). Teachers' thinking involves what Jackson (1968, cited in Placek) has termed pre-active teaching, which involves careful preparation and planning of lessons for teaching outside of interaction time with students. During this time, teachers should be able to collect materials, make judgments and decisions about teaching strategies and plan a well-constructed action plan that will result in effective teaching and student learning (Placek, 1983). Physical activities and sports help students satisfy their individual needs in encouraging and developing their abilities which will in turn help them become socially responsible (Chen & Ennis, 1996).

Resources and Training

According to Beauchamp (1968, cited in Virgilio, 1984), "curriculum design has three primary functions: to produce the curriculum, to implement it, and to appraise the effectiveness of the curriculum system" (p. 57). Important in the phase of implementation is the staff development which is pivotal in the success of implementation. Virgilio (1984) argues that most implementation efforts fail because of the failure to provide adequate staff development opportunities. Patterson and Czajkowski (1979, cited in Virgilio 1984) agree that the importance of the major area of staff development being the re-education through a series of workshops that are related to the new curriculum.

For any implementation of curriculum changes, professional development programs are very important in bringing about changes in teachers' attitudes and beliefs, their practices as well as

students' learning outcomes (Chen, 2006; Guskey, 2002; Ha, et al, 2004)). Professional development is a must for teachers and principals as they are continuously learning and must be professional learners (Riley & Louis, 2000; Ryan & Cooper, 2004)). Therefore, professional development, or in-service programmes have to follow to support new curriculum. In-service training helps teachers in the implementation of a program, makes them familiar with the curriculum and provides strategies for its implementation (Ha et. al., 2001). Meaningful professional development is one of the vehicles that will help equip teachers with adequate knowledge and opportunities to develop new concepts of learning, that will help extend their knowledge and help them learn new instructional strategies (Chen, 2006). Ha et al., (2001) found that programmes that involved cooperation with government curriculum officers and university teachers provide innovative ideas and effective learning experiences for Physical Education in-service teachers.

The availability and provision of resources and equipment and the allocation of time are other considerations in implementing a Physical Education curriculum. Dewar (2001) noted that one of the difficulties in implementing the Health and Physical Education curriculum in New Zealand was the allocation of different subject areas into the school's timetable as well as the opportunity to receive further relevant professional development. A study by Penney (2001, cited in Fraser-Thomas & Beaudoin, 2002) on Physical Education teachers in England, found that inadequate training, a lack of resources and facilities and a crowded curriculum led to challenges in implementation. These difficulties were also found by Ha, et al., (2008) in the Physical Education programmes in Hong Kong, where there was a need for adequate resources and an appropriate amount of time to be assigned to physical education if physical education was to be a key learning area.

References

Beauchamp, G. A. (1968). *Curriculum theory*. (2nd ed). Wilmette, IL: Kagg Press.

- Beeby, C.E. (1966). *The quality of education in developing countries*. Cambridge, Massachusetts: Harvard University Press.
- Brown, S., McIntyre, D. (1982). Influences upon teachers' attitudes to different types of innovation: A study of Scottish integrated science. *Curriculum Inquiry*, 12(1) 35-51.
- Cannella, G. S., Reiff, J. C. (1994) Individual constructivist teacher education: Teachers as empowered learners. In *Teacher Education Quarterly, 21 (3) 27-28 EJ498429*.
- Chan, W. K., Lau, K. O., Sum, K. W. R. (2006). The implementation of the physical education assessment at the beginning of curriculum reform in Hong Kong. *International Journal of Learning* 13 (8).
- Chen, A., Ennis, C. D. (1996). Teaching value-laden curricula in physical education. *Journal of Teaching in Physical Education*, 15, 338-354.
- Chen, W. (2006). Teachers' knowledge about and views of the national standards for physical education. *Journal of Teaching in Physical Education*, 25, 120-142 Human Kinetics, Inc.
- Cherryholmes, C. H. (1988). *Power and criticism: Poststructural investigations in education* (pp. 65-66). New York: Teachers College Press.
- Culpan, I. (1996/97). *Physical education: Liberate it or confine it to the gymnasium*. Delta, 48 (1) 203-220.

Culpan, I. (1998). Physical education in the new curriculum: Are we agents of the state? In *Journal of Physical Education New Zealand*, 31 (1) 3-8.

Curle, A., (1964). Education, politics and development. *Comparative Education Review*, 8 (33). Department of Education Western Samoa. (1965).

- Department of Education Western Samoa. (1986). *Education policy and development looking towards the 1990s. A document on the educational policy decisions taken by the Department of Education in Western Samoa in 1986 for the next five years.* Apia: Education Department.
- Dewar, S. (2001). Implementing health and physical education in the New Zealand curriculum: A report of the experiences of a national sample of schools. *The Research Bulletin*, 12 June 2001.
- Ennis, C.D. (1999). Communicating the value of active, healthy lifestyles to urban students. *Quest*, 51 (2) 164-169.
- Esera, T. L. T. (2005). Role of MESC in promoting pe in schools. In *the International Federation of Physical Education (FIEP) Oceania Newsletter,* 4 December 2005.

Fairbairn-Dunlop, P. (1991). *E Au Le Inailau a Tamaitai: Women, Education and Development, Western Samoa.* Thesis submitted for the Degree of Doctor of Philosophy at Macquarie University. NSW.

- Fa'aulufalega, T. P. (2008). *How does culture impact on educational leadership in Samoa*? A thesis submitted in fulfillment of the requirements for the degree of Master of Educational Leadership: University of Waikato Hamilton New Zealand.
- Faoagali, S. (2004). Home economics vs food and textile technology: Bridging the gap between the old and new secondary school curriculum in Samoan secondary schools. A thesis submitted in partial requirement for the Masters of Teaching and Learning from Christchurch College of Education.
- Faucette, N. (1987). Teachers' concerns and participation styles during in-service education. *Journal of Teaching in Physical Education*, 6, 425-440.
- Fraser-Thomas, J. L., Beaudoin, C. (2002). Implementing a physical education curriculum: Two teachers' experiences. In Canadian *Journal of Education*. 27, (2) 249-268.
- Fuatai, L. (1993). An assessment of secondary education in a small island state: Implications for agricultural education. *Directions* 29, 15 (2) 17-27.
- Fullan, M. (2001). The new meaning of educational change (3rd ed) New York: Teachers College Press.
- Fullan, M., Stiegelbauer, S. (1991). The new meaning of educational change. London: Cassell.
- Gibbons, S. (1995). Curriculum implementation in elementary school physical education: A successful school/university collaboration. *CAHPERD*, 61, (4) 4-8.
- Guskey, T. R. (2002). Professional development and teacher change. *Teachers and Teacher Theory and Practice*, 8(3/4) 381-391.
- Ha, A. S. C., Lee, J. C. K., Chan, D. W. K., & Sum, R. K. W. (2004). Teachers' perceptions of in-service teacher training in support curriculum change in physical education: The Hong Kong experience. *Sport, Education, and Society*, 9(3) 421-438.
- Ha, A. S., Wong, A. C., Sum, R. K., Chan, D. W. (2008). Understanding teachers' will and capacity to accomplish physical education curriculum reform: The implications for teacher development. *Sport Education and Society* 13 (1) 77-95.
- Hardman, K. Marshall, J. (2000). *World-wide survey of the state and status of school physical education.* Manchester: University of Manchester.

- Hay, P. (2009). Broadening perspectives on assessment in health and physical education. In
 DinanThompson, M. (Ed) *Health & Physical Education: Issues for Curriculum in Australia and New* Zealand. Australia & New Zealand: Oxford.
- Ismat, A.H. (1998) Constructivism in teacher education: Considerations for those who would link practice to theory. In Eric Idenifier, ED426986. Retrieved February 13, 2004. http://www.eric facility.net/databases/ERICF_Digests/ed426986.html.
- Johns, D. (2002). Changing curriculum policy into practice: the case of physical education in Hong Kong. *The Curriculum Journal*, 13(3), 361-385.
- Jones, G. (2010) Where is the practical in physical education? In *International Federation of Physical Education Oceania (FIEP) Newsletter 18; 5 December 2010 1-9.*
- Kim, J., Taggart, A. (2004). Teacher's perception of the culture of physical education: Investigating the silences at Hana Primary School. *Issues in Educational Research* 14.
- Kirk, D., Macdonald, D. (2001). Teacher voice and ownership of curriculum change. *Journal of Curriculum Studies*, 33, (5) 551-567.
- Kroll, L.P., LaBosky, V. K. (1996) practicing what we preach: Constructivism in a teacher education program. In *Action in Teacher Education* 18 (2) 6372. EJ536 947.
- Macdonald, D. (2003a). Curriculum change and the post-modern world: is the school curriculum-reform movement an anachronism? *Journal of Curriculum Studies*, 2003, 35 (2) 139-149.
- Macdonald, D. (2003b). *Curriculum change in health and physical education: The devil's perspective.* Paper presented as a Keynote address at the PENZ 2003 National Conference, Hamilton, New Zealand.
- McGinn, N. (1999). What is required for successful education reform? Learning from errors. *Education Practice and Theory*, 21 (1) 7-21.
- Meleisea, M. (1987). Lagaga: A short Histroy of Western Samoa. Fiji: University of the South Pacific.
- Meleisea, M. (1992). *Change and adaptations in Western Samoa*. Macmillan Brown Centre for Pacific Studies, University of Canterbury.
- Ministry of Education, Sports & Culture. (2008) *Samoa school certificate internal assessment moderation report: Health and physical education.* Ministry of Education Sport & Culture.
- Ministry of Education, Sports & Culture. (2008). *Samoa school certificate examination: Health and physical education 2008 exam report.* Ministry of Education, Sports & Culture.
- Ministry of Education, Sports & Culture. (2006). *Strategic policies and plan July 2006 June 2015.* Apia Samoa.
- Ministry of Education, Sports & Culture. (2006). Final Inception Report. Apia, Samoa.
- Ministry of Education, Sports & Culture. (2005). National curriculum policy. Apia, Samoa.
- Ministry of Education, Sports & Culture. (2006). National curriculum policy framework. Apia, Samoa.
- Ministry of Education, Sports & Culture. (2004). *Curriculum statement Samoa secondary schools health and physical education Years 9 13.* Apia: Government of Samoa.
- Ministry of Education, Sports & Culture. (1999). National curriculum policy. Apia, Samoa.
- Ministry of Education, Sports & Culture. (1998) *Samoa secondary school curriculum: Curriculum overview document*. Samoa Secondary Education Curriculum Resource Project; Education Development for Asia and the Pacific.

- Ministry of Education, Wellington New Zealand. (2005). *Health & physical education in the New Zealand* schools <u>http://www.tki.org.nz/r/health/curriculum/statement/page50_e.php retrieved 13</u> <u>October 2007</u>.
- Morgan, P. Bourke, S. Thompson, K. (2002). *Physical educators' perceptions about physical education: An analysis of the prospective and practising teacher*. Paper presented at the Annual Conference of the Australian Association for Research in Education in Brisbane, December 2002.
- Morris, P. (1996). *The Hong Kong school curriculum: Development, issues and policies*. Hong Kong: Hong Kong University Press.
- Pajares, M.F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review* of Educational Research. 62, 207-332.
- Patterson, J.L., Czajkowski, T.J. (1979). Implementation: Neglected phase in curriculum change. *Journal* of Educational Leadership, 3, 204-206.
- Penney, D. (2001). The revision and initial implementation of the National curriculum for physical education in England. *Bulletin of Physical Education*, 37 (2), 93-134.
- Penney, D., Evans, J. (1999). Politics, policy and practice in physical education. London: E & F. N. Spon.
- Pereira, J. (2006). *Aspects of primary education in Samoa: Exploring student, parent and teacher perspectives.* Ph.D. Thesis University of Otago.
- Petana-Ioka, K. (1995). Secondary education in Western Samoa developments in the English curriculum 1960s – 1990s. A thesis submitted for the degree of Masters of Arts in Education at the University of Otago Dunedin NZ.
- Placek, J. (1983). Conceptions of success in teaching: Busy, happy, and good? In T. Templin & J. Olson (Eds.), *Teaching in physical education* (pp. 46-56). Champaign, IL: Human Kinetics.
- Placek, J. H. Doolittle S. A. Ratliffe, T. A. Doods, P. Portman, P. A. Pinkham, K. M. (1995). Teaching recruits' physical education backgrounds and beliefs about purposes for their subject matter. *Journal of Teaching in Physical Education*, 14 246-261 Human Kinetics Publishers Inc.
- Qualification and Curriculum Authority England. (2005). *Physical education and school sports England*. Retrieved May 23, 2005 http//www.Qca.org.uk/press/564/html.
- Rasmussen, D., Sio, B. (2004a). *Health and physical education teacher guide years 9 and 10*. Samoa: Ministry of Education Sports & Culture. NZ Egan-Reid Ltd.
- Rasmussen, D. Sio, B. (2004b). *Health and physical education teacher guide years 11 and 12.* Samoa: Ministry of Education Sports & Culture. NZ Egan-Reid Ltd.
- Resnick, L.B., Klopher, L.E. (1989). Toward the thinking curriculum: An overview. In L.B. Resnick and L. E. Klopfer (Eds), *Toward the Thinking Curriculum: Current Cognitive Research* (pp1-18) 1989 Yearbook of the Association for Supervision and Curriculum Development.ASD publications.
- Richardson, V. (1996). The role of attitudes and beliefs in learning to teach. In J. Skula (Ed). *Handbook of Research in Teacher Education*. (2nd Ed). 102-119 New York; Macmillan.
- Riley, K. A., Louis, K. S. (2000), *Leadership for change and school reform: International perspectives.* London: RoutledgeFalmer.
- Rink, J, Mitchell, M. (2002). High stakes assessment: A journey into unknown territory. *Quest*, 13 (2) 205-223,
- Ryan, K., Cooper, J. (2004). Those who can teach. In *What are Ethical and Legal Issues Facing Teachers* (10th ed) New York: Houghton Mifflin Company.

- Salter, G. (2000). Marginalising indigenous knowledge in teaching physical education: The sanitising of Hauora (well-being) in the new HPE curriculum. *New Zealand physical educator*, *33*(1), 5.
- Sarason, S. B. (1990). *The predictable failure of educational: Can we change course before it's too late?* San Francisco: Jossey-Bass.
- Schuster, S. (2019). The novice Health and Physical Education Teacher in Samoan secondary schools: Needs assessment of the preparedness, challenges and constraints. *Pacific-Asian Education Journal*, 31.
- Shulman, L. S. (1987). Knowledge and teaching foundations of the new reform. *Harvard Educational Review* 87 (1) 1-22.
- Siedentop, D. (2009). Content for physical education. In R. Bailey & D. Kirk (Eds) *The Routledge physical education reader*: London & New York: Routledge.
- Siedentop, D., Tannehill, D. (2000). *Developing teaching skills in physical education* (4th ed) London: Mayfield Publishing Company.
- Siedentop, D. (1991). *Developing teaching skills in physical education (3rd ed)*. Palo Alto, CA: Mayfield Publishing Company.
- Sio, B. (2009) Samoa secondary certificate examiner's report 2009: Health and physical physical education. Ministry of Education, Sports & Culture.
- Snyder, J., Bolin, F., Zumwalt, K. (1992). Curriculum implementation. In P. Jackson (eds), *Handbook of Research on Curriculum*, (pp.402-435). New York: Macmillan Publishing Company.
- Stothart, B. (2000). Pegs in the ground: Landmarks in the history of New Zealand physical education. In Journal of Physical Education New Zealand Te Kotuku Rerenga Special Millennium Issue: A Tribute to Teachers. 33 5-15.
- Tinning, R., Kirk, D. Evans, J. (1993). *Learning to teach physical education*. Australia: Prentice Hall.
- Taulealo, V. (2007). Fetaia'i i Gafa: We shall meet in our children. An investigation into contemporary Samoan art. Thesis submitted for the Degree of Doctor of Philosophy at the University of Newcastle. NSW. Unpublished thesis.
- Tavana, G. V. A. (1994). *Cultural values relating to education in Western Samoa: A conceptual analysis of the perspectives of Samoan social leaders* (Doctoral dissertation, Brigham Young University).
- Vigilio, S. J., (1984) A paradigm for curriculum implementation. In *Journal of Teaching in Physical Education* 4 57-63.