

INTRODUCTION

This thesis is organised into four chapters. The first chapter following this introduction is the review of literature, the second chapter is the methodology, the third chapter is a statement and analysis of results and this is followed by the final chapter which details the summary and conclusions to the study. This section introduces the investigation by identifying the purpose and nature of the study and details the theoretical stance and framework that it is to be viewed from. The study details the implementation of a sports education innovation into a developing country. It is a descriptive and evaluative study of such an innovation, the first of its kind in physical education into Papua New Guinea. In determining the analysis of the innovation the research objective is to determine if a program designed for one cultural and sociological environment can be successfully implemented into another.

The nature of the problem

Physical education programs are challenged by the needs of youth in a changing environment. It is necessary that curricula integrate social change with discovering ways to motivate youth to develop life-long physical activity habits. Papua New Guinea has tried to achieve this goal by adopting an Australian sports education strategy.

Evidence suggests that no matter what the cultural context, physical activities were and are, a valued part of the societies known to mankind. The Greeks seemed to be the early leaders in such thought and from that time the physical, emotional, social and spiritual benefits to individuals and society at large has been well documented throughout the world.

Developing countries are no exception and in this case Papua New Guinea is the example. Unfortunately the “laissez-faire” attitude which has been adopted towards physical education and sport development in the country has resulted in a system poorly equipped to meet the needs of all Papua New Guineans. Particularly since independence in 1975 physical education and sport development has been ill prepared to adapt to many of the changes and developments that have occurred. Changing social and economic conditions are making it increasingly difficult for all Papua New Guineans to simply go out and play the sport of their choice with disregard for economic circumstances, social position or geographic location. The picture in the school setting is equally ineffectual with many students receiving no physical education at all and those that are, been subjected to ‘sport afternoons’. In PNG the terms physical education and sport education have become synonymous with each other.

In recognition of such factors the PNG governments over the last decade in particular have seen a need to develop policies and programs which are appropriate and effective. In relation to curriculum programming a cabinet decision in 1984 made physical education a compulsory subject, but years later little remains of this ideal. It was not until 1994 that the Papua New Guinea Sports Commission and the Department of Education took this problem on board and targeted children's sport. In February of the same year two experts representing Aussie Sport International visited PNG for a preliminary planning meeting. As such the sport education strategy of Aussie Sport with the accent on modified sports was to be taken on board and trialed as a pilot project. An innovation such as this tries to bring about desired changes.

PNG has created a social environment that is supportive of educational innovations and many have been introduced. In PNG the problems associated with educational change have been well recognised and it is now thought that the trialing of an innovation through a pilot project is of utmost importance. It is also understood that additional staff and extensive in-servicing is imperative as is the factor that for the innovation to be successful it must be capable of being implemented by the *average* teacher, not just the exceptional ones.

Physical education in PNG has struggled to maintain its place in the curriculum and there is an inordinate lack of teachers that are available to deliver programs in the schools. Fortunately the country is committed to re-training and in-servicing and has made some commitment to such via adult training programs. Innovation as part of this construct can not be seen in isolation and many factors and relationships need to be considered. Some of these include: how the education system works, philosophical and historical perspective's, relationships between schools, teachers, administrators, gender issues, economics and politics, geographical location, social background, the provision of facilities and personnel. Any innovation is part of the wider picture and development in the country.

As Bishop (1986) points out, any process of innovation will involve four major factors ; the change agent, the innovation, the user and time. In this study the change agent is the PNG Sports Commission / Education Department, the innovation is AUSSIE SPORT via the modified sport model, the user is the student via the school teacher and time is the duration of the pilot program from the Train The Trainers workshop in June 1994 to its implementation in the schools and its conclusion in November 1994.

The innovation process began with the dissatisfaction of physical education in the schools with the accent on the community schools. A solution was sought and acceptance given. The development and introduction of the innovation, Aussie Sport would then involve promoting awareness and interest, adjusting organisational procedures, provision of resources and training and monitoring and feedback procedures.

As Havelock and Huberman (1977) illustrate, for those designing and administering and advising on the program innovation generally they don't have to make very many changes themselves. It is the *others* who will have to modify their behaviours quite significantly eg. in this study the community school teachers, who had little previous or even gradual preparation. Most innovations require considerable change in the usual pattern of teacher behaviour. To break away from old behaviour patterns in which one feels secure takes time and can be difficult to attain. Often massive changes can be initiated very quickly but often the adoption of them is not a quick process and lacks stability and a sense of permanency

Purpose and nature of the study

This study intends to examine the introduction of a sport education innovation into Papua New Guinea via an exploration of the tool of the innovation process, the Train The Trainers workshop and then to examine two pilot schools in the program in one of the designated provinces. The study reviews the development and implementation of the pilot program from its inception in June 1994 to its conclusion in November of the same year. As this study takes place in the developing context of PNG several questions will be of significance.

The development and implementation of the program innovation adopted by the PNG Sports Commission and the Education Department are addressed. The origins, nature and evolution of this project are documented, and the analysis considers environmental, historical and socio political contexts of the innovation but focuses on the delivery catalyst, the Train The Trainers workshop and the data obtained during this week, its trainers and trainees to its impact in the community school situation.

To begin with the philosophical basis and conceptual thinking of physical education itself is important. Once traditional views have been established it is necessary to be aware of traditional views and habits in the area and where physical education sits in the educational arena. Secondly could the lack of qualified personnel be adequately catered for by providing a week long in-service course ? What would happen when these

teachers went back into the schools? Could an ideal formulated in a modern setting have relevance in a developing context where the illiteracy rate is over seventy percent and the highest in the Asia - Pacific region ?

Theoretical Stance

The history of physical education and its place in the educational arena can be characterised by ideological and philosophical shifts. It is well documented by researchers such as Siedentop, Mand and Taggart (1986), Lawson (1990) and Arnold (1979) that physical education can provide the individual with enormous benefits. These may manifest themselves in a variety of ways including health related factors, cooperation, self esteem development, skill acquisition, self realisation, social, emotional and intellectual development. The dominant curricular philosophy for the first half of the twentieth century emphasised education through the physical.

Fitzclarence (1987) notes that in the Australian setting the changing environment, both politically and socially, led to a dissolving of antiquated ideas. There was an infusion of new ideas and beliefs, an influx of overseas concepts, a change in pedagogical thought and a redefinition of physical education. These changes were evident throughout education and curriculum, with new practices and assumptions taking hold. As such it is evident that trends in education were manifested against the wider cultural backdrop.

Culture itself is linked to ideology and is inherent in the concepts of nationalism, religion, values and rituals. Siedentop (1994) when writing his belief statements incorporated in one of his points, that the values to be derived from physical education are appropriate to each gender regardless of economic or social status and educational attainment. If ones cultural setting is included in this, then the benefits of physical education should transcend all barriers and be in all school curricula and equally accessible to all students. The best scenario to achieve such an end is that physical education be taught by trained professionals.

Unfortunately in the developing world these ideals are seldom attained. In the case example of Papua New Guinea there has been an apparent lack of interest in and support for physical education as a school subject. The trained personnel to teach the subject are lacking, facilities are often inadequate, program development is basic, sport takes the place of physical education classes, credibility for the subject is extremely difficult in a nation where the literacy level is at thirty five percent, and apathetic teachers cloud the education system.

and documentary and background information are used. Case studies are used to portray the situation and as such illuminate the general principles made evident by the study.

As Bogdan and Biklen (1982) stress, the importance is not whether the piece of research is or is not absolutely qualitative, rather it is an issue of degree. There are several key factors which set it apart. The natural setting is the direct source of the data, the research is descriptive, the concern is with process rather than simply outcomes or products, and relationships accent the participant. As such this research uses the qualitative framework as its central focus but it does also include some quantitative data to illuminate certain focus questions.

Summary

This study will review the introduction and initial implementation of a sports education strategy (Aussie Sport) into the community schools in the Eastern Highlands province of Papua New Guinea. It will start with a review of relevant literature including a historical praxis of physical education, Aussie Sport ; its history and overall effectiveness, physical education in Papua New Guinea and an examination of adult training in developing countries.

The Train The Trainers workshop will be the case study examined as this was the catalyst for the introduction of Aussie Sport into PNG. This will include an analysis of the project coordinators, the project trainers, and the target group of the program, the trainees. Two further case studies will be detailed in examining two of the pilot community schools in the Eastern Highlands province. Student perceptions of physical education will be detailed and then observations will take place at the two schools in order to assess the programs implementation. Finally the trainees involved in the program implementation into their respective schools are surveyed in order to review the innovation. To conclude the study makes recommendations for further investigation.

A review of literature will follow this introduction and serve to develop the overall context of the study in order to give an understanding of the research questions involved.

Chapter 1

REVIEW OF LITERATURE

Introduction to the Chapter

This review of literature looks at and provides a background to the investigation into the implementation of a sports education development strategy in a developing country. Four areas will be dealt with in this chapter. The first of these provides an historical background from which a base is established. The second area examines adult learning and innovation. The third and fourth areas outline the history and effectiveness of the sports strategy and concludes with this in the developing context. The review is then drawn together and major ideas and issues arising from the key areas are set down as the basis of the research, and the research questions set.

PHYSICAL EDUCATION - HISTORICAL CONTEXT

This section will look at and highlight the background of physical education. It is essential to view it from this context in order to shed light on its meaning, its philosophy and its ideology. Attitudes toward physical education and their subsequent impact on its place in the societal sphere are considerations which need to be taken note of and it is through this that one is able to look at its impact today.

Ideology and Philosophy

Before insights can be made into physical education, its programs, innovations and acceptance, it is necessary to look at the ideology and philosophy behind it. Larson, (1976, p.109) searching for a basic definition of philosophy, sees it as ‘... mans struggle to understand the universe in some coherent systematic and meaningful way’. There is an emphasis upon thought, reasoning, reflection and understanding. The concept is broad and all encompassing, whereas ideology constitutes a narrower look into doctrines and opinions.

It was not until the Athenians in 1100 BC that physical education was so highly valued in the development of man. Harmonious development of the body, mind and spirit was of paramount concern. The Greeks recognised its utilitarian purpose for war preparation, but also understood the possibilities of care and development of the body for the benefit of the whole being. The philosophical perspective embraced in ‘mens sano in corpore sano’ was encapsulated. Albeit a Latin phrase it did not express the Roman philosophy

and ideology. Here there was a separation of the body and the mind. Zeiglar (1968, p.28) sees the Roman ideal as the preparation of a citizen to bear arms for his nation. Sports later become gladiatorial and bestial exhibitions, often demonstrating inhumanity and cruelty. Fortunately the humanistic educators who came later in history appreciated and valued the earlier Greek ethos.

Kalakian and Goldman (1976) stress the importance the Greeks gave to the respectability of physical education by according the body equal dignity with the mind. The humanistic philosophy embraced movement experience as a vital focus of physical education. The Romans on the other hand would have been far happier with the term training rather than education. However, many early definitions, including Webster's New Collegiate Dictionary (quoted in Baley and Field, 1970, p.3) defined physical education, as 'the development and care of the body, especially with reference to instruction in hygiene and systematic exercises'. As Baley and Field suggest, the definition is grossly inadequate and seems only to be concerned with biological outcomes. Fortunately no modern philosophy focuses so much attention on the body. As Williams (1948, p.247) concludes '... if the physical educator says, "well I will look after the biological, you take care of the social", the modern philosopher will reply quietly but firmly, "you too don't see the forest"'.

Two contrasting notions exist from education 'in the physical' which stresses technical competence, and education 'through the physical'. Hellison (1985) feels that the latter of these has often been ignored. Emphasis on education 'through the physical' highlights that it is not just a cognitive process. Larson (1976) expounds this notion by illustrating the effect that physical activity can have on human experiences and development.

Here it is evident that affective and social dimensions become part of the meaning. The concept and notion of physical education is heightened and the human is seen as an entity with physical, intellectual, social, emotional and aesthetic facets.

Lawson (1990) stresses the uniqueness of physical education in its goals and roles and demonstrates its all encompassing scope from physical fitness to self realisation and development of personal meaning. Those involved in the education of the child, that is the physical educationist, must concentrate on all aspects in the development of the whole person. As Pooley (1984, p 45) demonstrates :

Physical education and sport programs can make a definite contribution to the improvement of the quality of life for the communities and individuals they serve, but this can only be accomplished through a concentrated effort by the professionals in

these areas to provide outstanding examples and equal opportunity for all. Education through the physical becomes humanistic as the individual is guided towards an understanding of themselves, others and the activity. Physical education can be viewed on a more eclectic basis with the accent on the holistic being.

Siedentop, Mand and Taggart (1986) take this one step further and identify the following values; health-related fitness, self actualisation, skill development, joy, cooperation, relationships, equal opportunity, all characterised, hopefully, by commitment, intimacy and achievement.

As Kane (1966) shows us, the scope of physical education has widened considerably with the dropping of terms like 'drill', training, and exercises, substituted by education. This widening of the physical education concept is not a new one and can be traced back to early books by L.P. Jacks, *The Education of the Whole Man* (1931) and *Education Through Recreation* (1932) (Jacks 1932, quoted in Kane 1966, p.109). Even R.E. Roper (Roper 1911, quoted in Kane 1966, p.110) wrote in 1911 that,

...the teacher of physical education must above all be an educational expert, able to conceive of the training of mind and body as a whole, processing the wide general knowledge demanded of specialists in other subjects; then, and then only, will the children of the nation have a fair chance of a full education.

Education through the physical encapsulates this quote. It is not a by-product of education of the physical but rather an integral part of virtually all learning experiences through human movement. This can be further expressed as the notion of embodied consciousness as documented by Arnold (1979). It suggests that the mind and body are not separate, but that we act both knowingly and intelligently, and learn in and through movement. Physical education is described as a means of education in, through, and about the physical including the body and physical activity. Tinning, Kirk and Evans (1993) also view physical education in this way, but also make it clear, that with respect to physical education in Australia there is no established settled or shared definition of the term. What is clear is that there has been a shift from physical training to physical education.

Goals and Objectives

As such physical education has the obligation to develop the whole person including interests, skills, physique and attitudes. It provides a potentially powerful medium for meaningful human experiences and personal development, and is fundamental to all cultures. In this sense it is founded upon a humanistic philosophy and movement experiences are its essence. The aims and objectives of physical education are centred around this view and its survival in the schools must be based upon the educational purposes of participation in physical education.

Larson (1976), Kalakian and Goldman (1976) and Murdoch (cited in Alexander et al 1993) add the dimensions of self esteem and self- knowledge to the aims and objectives of physical education. These dimensions add to the totality of the discipline. Philosophically then, physical education in this sense seems to fit neatly into Maslow's hierarchy of needs which moves in progressions from purely biological or physiological needs through to esteem and self - actualisation. Jewett and Bain (1987) also place emphasis on this philosophical notion and state that the primary concern of physical education is the personal search for meaning by the individual moving in interaction with the environment. Once again the approach is holistic.

Physical education V Sport education

Siedentop (1994) has argued that sport has considerable educative potential. The prominent American has suggested that 'sport education' is a far more accurate and appropriate title than 'physical education' because sport is essentially the subject matter of physical education. He feels that physical education can not only be defined properly, but that it has also lost direction, becoming boring and unimportant. Tinning Kirk and Evans (1984, p. 86) ask '... does the passage of time blur the distinctions between physical education and sport or is it that there are really no particular differences ?'

Alexander, Taggart and Medland (1993) also ask if sport and physical education are at odds, mutually supportive, the same, or simply to be pursued in a prescribed order. Dry (1991, p.7) poses similar questions and feels that the poor distinction between the two has hindered its status and development, "... teachers talked of physical education but in reality offered a lesson on the 'playing a game' culture". He sees the physical education program as the base of the sporting environment, and that children need a program "...that offers scope for physical growth, motor skills, emotional and social adjustment".

What is actually happening? Do we know the central focus of physical education, its goals, aims, and objectives and the delineation's with sport? Siedentop (1994) illustrates, physical education is best known as a subject offered in schools. Do we know what its central focus is? What delineation's are made with sport?

Siedentop's sport education is encompassed in Taggart and Alexander's (1994, p.5) article where they define sport as 'occurrences of competitive play determined by physical skill, strategy and chance', and they define physical education as 'any process which increases an individual's ability and desire to participate, in a socially desirable way in the movement culture'.

One of the most powerful factors behind the emergence of sport education in Australia has been the Aussie Sport Program. Proponents of this program see it as a program to complement the physical education program. It is not intended to replace physical education as such but rather to work alongside and coexist with it. Sport is seen as a necessary facet of the total program. Baumgarten (1984) also looked at a youth sports program which had a similar philosophical base as the Australian model of Aussie Sport, but as a case example concentrated on only one sport. Fun was in the playing, not the winning, the environment was constructed for the children and not the adults, boys and girls played together, positive reinforcement was provided by the parents and community involvement and acceptance heightened. Philosophically speaking, physical education and sport programs are tenuous and now exhibit the previous struggle embodied in the statements 'cogito ergo sum' versus 'mens sano in corpore sano'

Tinning and Fitzclarence (1994) further examined the impact of sport or physical education on the lives of adolescent youth. What they found was that school physical education was largely irrelevant to them. Whatever one calls this education the study showed that an adolescent child might have to endure it as part of the school curriculum but it had little impact. Certainly there were some students who enjoyed physical education but for the majority it was boring. There was a need for teachers to recognise the educational rather than the sport or health related aspects. Hickey (1995) concludes that many of the problems facing physical education are connected with the way the subject is taught. Much had been said and done to the curriculum with not a lot of effort placed on altering how it is taught. Hickey concurs with Tinning and Fitzclarence by summarising that the long term future of the subject matter must rely heavily on teachers who are prepared to explore how to promote the educational value of the discipline to all participants. Grant and Martens (1982), empathise with these comments and in their study on teacher effectiveness in elementary physical education they found that the most effective teachers exhibited a more versatile behavioural pattern.

Whatever the case, whether physical or sport education, the issue can not be neglected or relegated, and the messengers of these programs must be well trained, resourceful and willing. As Hutslar (1986) illustrates, which can be applied to many cultures, the acceptance of physical education and its credibility rests on many factors but most importantly on the physical educators themselves and the national involvement via budgetary commitments.

Justification

Physical education as part of the curriculum has been eroded or has struggled to justify its existence in many cultures. There needs as Seefeldt (1984) claims, to be a re-examination of what one is trying to achieve and accomplish and an understanding of whether the needs are in concert with public education requirements. Perhaps then credibility and acceptance can be achieved.

Lawson (1990) adopts a similar concern and reiterates a need for improvements in physical education programs, via consensus and nationally endorsed program. Bomberger (1994, p.6) also stresses that the education system,

Should prepare the students to meet the demands of being a productive citizen - mentally, socially, emotionally, spiritually and physically. Not requiring physical education of students sends the negative message that as students age, physical education is not essential for their lifestyle.

Turner (1995) even argues from the point of view of the United Nations Convention on the Rights Of The Child. Article thirty one of the Convention specifies that every child has a right to play, leisure and cultural activities. These are all of equal importance in a child's upbringing. The physical educationist needs to be aware of these ideals.

Education through the physical becomes humanistic as the individual is guided towards an understanding of themselves, others and the activity. Once there is an understanding of what physical education is and what takes place in the overall curriculum then children, parents colleagues and the community at large will become aware of its value and importance. As the concept extends beyond the school playground and the school day it will be able to flourish and succeed.

Glover, Alexander and Walsh (1993) concluded that physical activity must appeal to, or be of some significance to, those involved in it. Hence physical activity and sport will reflect the nature of the people and the environment they are in. They also conclude that

patterns and trends of participation can be linked to many influences including, age, gender, ethnicity, geographical location and income.

Questions will need to be asked of every individual involved. These might include a definition of what physical education is, what it ought to be, what it ought to achieve and how it can best reach its objectives and goals. Misconceptions about physical education need to be addressed. Some of these common ones might include; physical education are free play periods, work is more important than play, it is frivolous, a needless waste of time, academics should be excused from physical education classes, girls who participate are 'butch', social interaction in the classroom is enough, play and lunch time is sufficient for play activities, it is too aggressive, and the like.

It is evident from the literature that the area and the concept of physical education has been and is in a state of dynamic equilibrium. Since the Athenians placed it at the acme of development along with mental competence the overriding instability has surfaced again and again. Physical education struggles to justify its existence and an understanding of it and what it stands for is paramount in assessing its importance and place in the 'educated' world. Misconceptions continue to exist as countries and education systems develop and expand the issues have to be addressed in order for it to be meaningfully implemented.

Some educational philosophers see physical education as being somewhat irrelevant and not suited to the main body of education. While this remains problematic that an embracing of this view could affect the uninitiated in the field of physical education one has to present a clear and appropriate standpoint from which it is to be assessed. One has to perceive the field to be of importance and hence embrace its goals, ideals and focus.

In many developing countries education is seen as the key to the move away from the adage "third world". However this ideal is clearly fraught with political, social, environmental and economic instability. Hence growth is inconsistent.

Developing countries have been inundated with innovative ideas and techniques and how these are transmitted is of paramount importance. They can not be viewed in a vacuum but instead must exist in close proximity to all that surrounds them. Physical activity itself and the resultant sport that develops from it will reflect the nature of the people and the environment and cultural beliefs of the country.

The literature expounds the thought that physical activity was and is a valued part of all societies. The Greeks placed it high on the list in the development of man and promoted

the tripartite harmony of the body, mind and soul. This ethos was overlooked by the Romans, but fortunately for the physical educator today the humanistic philosophy has prevailed. Many unique features encompass its domain from fitness through to self actualisation and physical education and sport programs have the potential to make an impact and positive contribution to the life of individuals and communities worldwide.

In most developing countries, including PNG, physical education and sport education are synonymous. Seward (1987) and Miller (1978) agree with this. Concepts and perceptions are dominated by the traditional views and cultural base and for many it has a low priority in the curriculum stakes. With an illiteracy rate of seventy four percent in PNG educational opportunities are minimal and physical education takes a back seat to the Three R's. However, sport has played a dominant part in the traditional culture and as developments have been made the international concept of sport has been adopted. Unfortunately the recognition of the value of physical education in the school curriculum in PNG has had a chequered history, and often the physical education programs in schools do not equate with the official syllabus.

Sport is usually an extension of a sound physical education program in schools but this is not the case in PNG. A very limiting factor is the lack of qualified trained personnel. Even today only thirteen students graduate who have a physical education minor. Most of these will not teach physical education in the schools as the accent will be directed to the core subjects. Adult training becomes vitally important when dealing with such statistics and it is a vital component of development in PNG. As Bishop (1986) concludes the problem is compounded in developing countries. Also in many developing countries, whilst illiteracy rates have been falling, the increasing birth rates mean that the absolute number of illiterates steadily increases.

Summary

This section has highlighted the ideological and philosophical base from which physical education can be viewed. It is necessary to begin any examination in this field of endeavour with some understanding of its scope, its uniqueness, its goals, and its meaning if one is to search deeper into its impact on the individual and society today. There is an understanding that physical education can make a definite contribution to the improvement of the quality of life for all communities whether they be advanced or developing. It has an obligation to develop the whole person and it provides a powerful medium for meaningful human experiences and personal development, fundamental to all cultures.

The controversy between the concepts involved in physical education and sport education have been discussed and the example of Aussie Sport demonstrates this. What is clear is that no matter which is been delivered it is essential that the messengers of these programs be well trained, resourceful and willing. Many misconceptions still exist and particularly in the developing world context, where physical and sport education become synonymous. In PNG this is also the case and the recognition of its place in the curriculum has been fraught with problems. Often it is not taught at all and in the situations where it is it is often mismanaged and poorly organised with programs not resembling any facets of the syllabus.

In developing countries in particular, there is a need for significant emphasis to be placed on the ability of the education sector to meet the demands of the people it is serving. Physical education is one such area. Physical education , sport and games have the potential to reflect and develop a society and its inherent culture, no more so than in a country like PNG. Unfortunately the development of physical education has been a long slow process in this context and change is needed if it is to make any substantial impact. One such concept been looked at is the Australian innovation of Aussie Sport. This next section will look at its history and effectiveness and then move on to examine the state of physical education in PNG and how such an innovation could prove beneficial.

AUSSIE SPORT : HISTORY AND EFFECTIVENESS

This section will address a sports initiative developed in Australia called Aussie Sport. Before it is possible to assess its application into PNG it is necessary to examine the history and effectiveness of this program. The impact that it has had on physical education and the part it can play is discussed along with its overall concept and ethos. The first area to be examined is a brief history of Aussie Sport including its goals and objectives along with the modified sports approach. The concepts of physical education and sport education are briefly discussed and this is followed by a summary of the strengths and weaknesses of the program.

The History Of Aussie Sport

One recent innovation into PNG has been the introduction of Aussie Sport (particularly the modified sports aspect). This section addresses its history and its effectiveness since its inception. Sport like other social institutions does not exist in a vacuum devoid of any relationship to societal needs. Hence it must be developed on a socially aware and

cooperative basis. Along with this premise is the notion that sport and its related facets stands amongst the political, economic, environmental and social gamut.

The body of the Commonwealth government responsible for the funding and development of sport in Australia is the Australian Sports Commission (ASC). It was formed in 1984 and has many divisions, including the Institute of Sport, Professional and Technical Services Division, Marketing and Communication Division, Corporate Services Division and the Sport Development Division.

Prior to 1985 many concepts and viewpoints existed in relation to involvement by the populace with particular reference to children in sporting endeavours. Many children were not participating on a regular basis, their skill development was poor, the range of sports they were exposed to was limited, girls seemed to have fewer opportunities than boys and many just didn't enjoy sport. Teachers, parents, sporting bodies and young people themselves highlighted these problems (Clough and Traill, 1987, 1988, 1989). The provision and the delivery of opportunities in the environment of physical education was poorly recognised. As a consequence of such evidence which was further heightened by extensive research and consultation an evolutionary concept was developed.

In 1986 the National Aussie Sports Program was launched by the ASC and it was to be included under the umbrella of the Sport Development Division. It became the first national program of sports education for children in Australia. Its contribution via its philosophies and resources was seen as a starting point to assist educators in the delivery of the sport education component of physical education as documented in the 1986/87 Annual Reports.

Since this time there has been a concentration on developing a range of strategies and programs to enhance the Aussie Sport ethos, which is 'enriching the lives of young people through quality sporting experiences that encourage lifelong participation'. It is a comprehensive approach to junior sport development. The initial focus was placed on children in their latter years of primary school. The flagship was the development of modified sports in 1987. This embraced the whole philosophical approach of 'sport for all' and 'fair play'. Tinning, Kirk and Evans (1993) illustrate this.

Sport for all tries to encourage all to take part in sport and calls for action to provide opportunities for all to do so. When one ponders on such an expression, its place in a developing country like PNG seems a little altruistic. The phrase was coined in 1966 at a Council of Europe meeting and considering the social and cultural environment of a

school in PNG carry over of the concept is of a low priority. However in this case of Aussie Sport the child has been singled out and put at the forefront.

The Goals Of Aussie Sport

The stated goals of Aussie Sport as cited in Siedentop (1994, p.140) are as follows:

- to improve the quality, quantity and variety of sport activities available to children
- to provide all children with the opportunity to participate in appropriate sporting activities
- to encourage participation and skill development in a variety of sports
- to reduce the emphasis on “win at all costs” and to promote enjoyment and good competition through participation in sport
- to improve the quality of sport instruction available to children

A large part of the initial program was the accent on modified sports. As Siedentop illustrates :

To make sports most fun and useful for children and youth, we must modify them to make them developmentally appropriate. There is seldom any situation in which children or youth should play the parent form of the game (Siedentop, 1984, p.137).

The Modified Sports Approach

By developing a modified sports program several areas were addressed. Dry (1993, p.17) summarises these as; field dimensions, equipment, duration of the game/season and the rules of the game. Aussie Sport now has details and resources on some forty three modified sports available to the public, so the teacher, the coach, the parent, the players and the headmasters can familiarise themselves with the materials and develop confidence and awareness of them.

As Dry (1993, p.17) points out, modified sports contain many advantages including; less risk of injury to the child, greater self esteem through achievement, fun and enjoyment, an understanding of the rules of the game, equity for all participants, skill emphasis rather than competition and less physical demands on the child. Siedentop (1994) reiterates some of these purposes and in addition stresses that if a child is younger or less skilled, then the greater the urgency to modify. The flagship program has now been repackaged, redeveloped and renamed, ‘Ready Set Go’ and gained a sponsorship association with Kellogg’s Australia.

The 1992-93 ASC Annual Report identified some of the forty three modified sports with resource kits and incentives as Netta Netball, Kanga Cricket, Mini Volley, Tee Ball, Minkey, Sofcrosse, Roo Ball and Gym Fun. Modified sports was the precursor of the Aussie Sports initiative and now other implementation strategies in the form of the following programs exist ; Sportstart (three to twelve years) Sport It (primary school), Ready Set Go (modified sports), Active Girls Campaign, Sport Search (sport counselling), Sportsfun (leadership) and CAPS (leadership program for fourteen to twenty years). These programs are sequential in their format and can be seen to progress from play to basic movement patterns and skills. Associated with all these programs are the philosophies of fair play, a fair go, maximum participation, informed teaching and coaching practices and the fostering of community involvement. It was in 1991 that the current name Aussie Sport was adopted from the original Aussie Sports. However slight this change may appear, as Clough and Trail (1992) indicate, it represented a repositioning of the philosophical base, instead of a name to describe the program elements. All junior sport programs came under the Aussie Sport banner. Goals and objectives were extended as indicated by the following diagram.

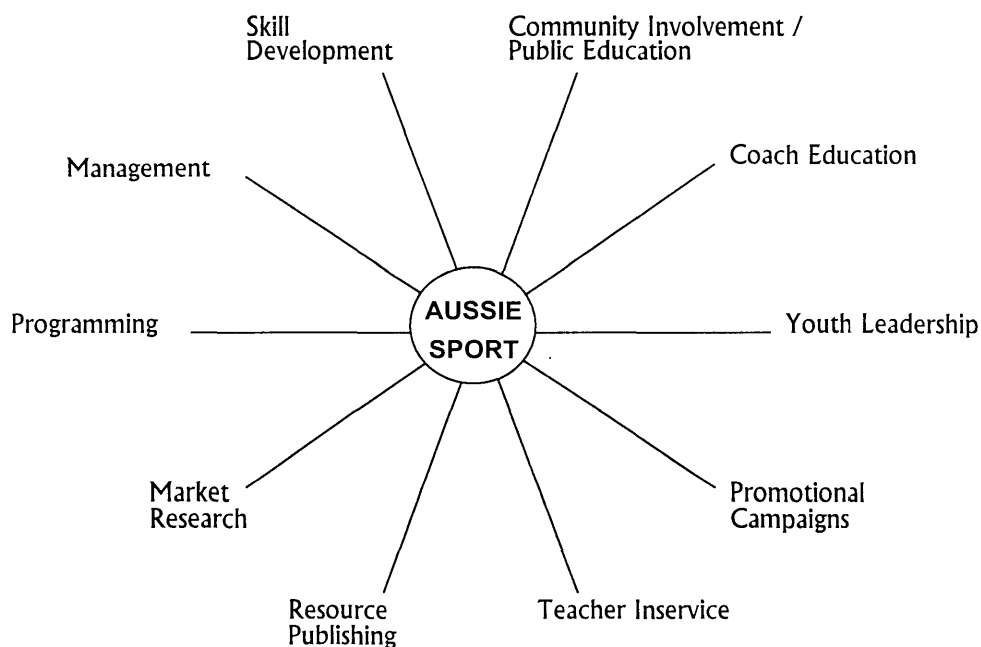


Figure 1.1 : Goals and Objectives of the Aussie Sport Program

Even as early as 1987 there were community service advertisements featuring athletes such as Herb Elliot and Glynis Nunn, and developments continued with expos, radio promotions television campaigns, and in 1990 the establishment of sport units in each

state and territory. From its inception in 1986 with a staff of ten, in 1990 there were seventy five salaried staff in eight state units and two hundred and fifty field officers at the community level. Aussie Sport clubs registered in 1990/91 was 3,821 and some eighty pre-service courses had been delivered to over 6,300 teachers. Over 7,000 Level 0 and 300 Level 1 community coaches and teachers qualified. At this time also publications of the Lets Get Into ... and The Name Of The Game Is ... books began. Appendix one illustrates some of these developments, and the impact of increased spending is documented in Appendix two.

All of these advancements came as a significant increase in Federal Government funding was allocated to the ASC. This was known as the 'Next Step' funding in 1989/90 and extended for a four year period. This funding enabled a much needed expansion of the delivery mechanisms of the Aussie Sport program and its philosophies. It also enabled a more coordinated approach. There was also the establishment at this time of sport units in each state and territory, the department of sport and in some education departments.

This started an involvement of not only the National Aussie Sport Units, but also State Units in conjunction with education departments, sporting organisations and the Australian School Sports Council. Aussie Sport shows a keen advocacy of this comprehensive type approach in order to reach as many participants as possible and to provide opportunities and encouragement for children across the country. This wider target audience via Next Step Funding enabled the increased penetration of Aussie Sport into schools, significantly benefiting students, teachers and coaches as indicated by the 1992 Aussie Sport Evaluation report.

The 1990/91 ASC Annual Report sees the priority of Aussie Sport personnel to work with schools and sporting organisations to bring about a more integrated as well as receptive environment for junior sport.

There has been constant remodelling and program modifications that have been made to achieve this. Target groups continue to expand, encompassing not only the parents, coaches principals and teachers but also the media, community sports club officials and national sporting organisations. By 1991/92, 800 Aussie Sport courses were attended by more than 8,000 primary teachers and 100 pre-service courses were delivered to 4,500 trainee primary and physical education teachers. Also in 1991/92, 11,500 coaches, teachers and tertiary students attended Level 0 and Level 1 courses. Registered Aussie Sport Clubs had increased and the sales of resource materials was 11% above budget. Further increases occurred in 1992/ 93 and are documented in Appendix one.

Many studies have been conducted by the ASC as part of its ongoing policy of monitoring the impact of Aussie Sport. The first was in 1986/87 by Russell and Trill, then in 1988, 1989, 1990, and 1991 by Clough and Trill.

Physical Education V Sport Education

As the studies have progressed over the years there has been an unfortunate decline in the national focus of physical education in the school curriculum. With economic rationalisation the ASC's objectives were refocussed on to the maintenance of interest of teachers and the community in the nature of sport. In this respect Aussie Sport seems to have emerged as a leader in sport education in alliance with Siedentops viewpoint. Tinning, Kirk and Evans (1994, p.47) also see this anomaly and ask ; whether or not the introduction of Aussie Sport has lead to a stronger focus on sport and major games at the expense of the other curriculum areas generally seen to be the responsibility of physical education. The premise here is that physical education is largely sports-based and little time is devoted to other curriculum areas including dance, gymnastics and outdoor education.

Forbes Carlile (1986) had already intimated this fear when he stated that the Aussie Sport initiative of modified rules for sport was not a good substitute for *regular statutory physical education*. Perhaps this is an astute view, particularly considering the year it was made. It places physical education in a very insecure position. Evans (1986) endorses this when he stresses the importance of the Children In Sport Policy in which it states that children's sport must be underpinned by a comprehensive program of daily physical education programming.

Another substantial effect on the issue of physical education and Aussie Sport is in its use of sports development officers (SDO's). These officers are requested to visit schools and conduct in-service programs on the Aussie Sport curricular. Here contention arises. Because of cut backs in support services an training in areas like physical education, SDO's are becoming de facto substitutes for the physical educator. Also there is evidence to suggest that when the SDO's arrive in a school the physical education teacher is content to sit back and do very little. As Tinning, Kirk and Evans state:

... SDO's are filling a gap and while this might be valuable, it benefits only one of the areas necessary for a comprehensive physical education curriculum - major games - and it may be leading schools

increasingly toward a sport-dominated physical education program (Tinning Kirk & Evans, 1994, p.47)

But besides these concerns, when one examines the evidence of the Aussie Sport program it is evident that it has made significant inroads especially in relation to the 'sport for all' message and the necessity to adapt or modify children's activities to suit their needs and abilities. When one considers that \$5 million was budgeted for Aussie Sport in 1990/91 something must be working. Researchers such as Tinning, Kirk and Evans (1994, pp.96-99) pose many questions in relation to the contribution of Aussie Sport, including quality of instruction, skill acquisition, teacher apathy and reluctance, and the value incentives and rewards.

Research Projects on Aussie Sport

Since Aussie Sport inception in 1986 there have been many research projects in this area. In 1988 the Australian Sports Commission developed a framework for on-going evaluation which detailed the procedures which would be followed in evaluating Aussie Sports. An evaluation done in 1988 by Clough and Traill provided data in three major areas in relation to responses to Aussie Sport. These areas were; the school, the teachers and the children. Four major research strategies were used by the evaluators. The first of these was a survey of participant schools, the next, interviews with Aussie Sport personnel, thirdly, the collation of data collected by Aussie Sport coordinators and finally interviews with non-participant schools. There was no case studies of individual schools.

The Australian Sports Commission was interested in determining if Aussie Sports was continuing to be viewed in a favourable light and what recommendations could be made for future developments and policy. Clough and Traill (1988) confirmed a high level of satisfaction with the program by pupils and teachers as they had done in their 1986-1987 survey. Despite its continued growth just twenty six percent of Australian primary schools were participating in the Aussie Sports scheme although there had been a wide acceptance of its basic philosophy. Possible reasons given for this low percentage were attributed to financial limitations and the inability of the limited number of trained personnel to service requests for assistance in implementing and developing the scheme.

In 1989 Munro and Hastie examined the implications of the introduction of Aussie Sports to one primary school in Queensland. As such this was a case study and the principal tools of inquiry were by interview and questionnaire. Observations were conducted over a three week period in order to gain a general idea of the reactions of the

class teacher and the pupils. Classes from years four, five and six were involved in the study. Reactions to the innovation of Aussie Sports from all school sectors were positive.

In 1990 Clough and Traill were commissioned to review the impact that Aussie Sport was having on children. Three areas were examined; an identification of the extent to which long term users of Aussie Sports were retaining their involvement and interest, to investigate why certain schools were continuing to be non-users of Aussie Sports and to determine which factors encourage children who play Aussie Sports in schools to be involved in community sport.

The research design consisted of a survey, interviews and a number of case studies. Common questions of interest were included in all three strategies thus enabling a triangulation of the data. One key ingredient of all the case studies was that there was a strong acceptance of the basis tenets of Aussie Sports relating to such issues as participation for all, use of a variety of sports, scaled down playing venues and equipment. As such the program had been viewed as one of flexibility and adaptability. Each school could mould the program to their own ethos and curriculum. In this respect the program did not always exist in its "pure" form.

Clough and Traill concluded that teachers remain a key to the success or otherwise of Aussie Sports programs in schools. Where there is an interested coordinator in the school this was linked to an enthusiastic and motivated approach and response from other teachers to the program. All teachers expressed the need for on-going in-service support, whether this be through expos, school based in-service resource provision such as videotapes, coaching guidelines and newsletters. Interviews in the secondary schools concluded two concerns; firstly that there was a high drop out from sports and secondly the appropriate training necessary for all coaches.

Monaghan, Rogers and Pace (1991) conducted a similar research survey on Aussie Sport in Victoria but here the accent was on the effectiveness of the in-service programs. Effective in-service programs is just one area towards improving the quality of the philosophies and ideals of Aussie Sport. The survey was designed to indicate the effectiveness of the in-service programs and the extent to which schools with staff who had attended such programs were including Aussie Sport in their school curriculum. Overall the findings from the survey firmly supported the ongoing provision of in-service programs for teachers. Some of the recommendations included the development of resource materials to suit the generalist classroom teacher as well as the physical education specialist, commitment made to provide follow-up activities to inservices

where and when the need arises on a local basis, more detailed and specific information be provided at inservices as to the availability of equipment to assist with the introduction of sports in school programs, and assistance to individual school cases.

Also in 1991 Clough and Traill compiled an evaluative report on Aussie Sport. In conclusion it was evident from this report that the aims of Aussie Sport were being achieved. Even though only thirty three percent of schools were registered program users it was stated that the actual statistical data on participation rates was not indicative of the impact that Aussie Sport was having on children's sport in the primary sector. Another area of concern was the decline in the numbers of trained physical education teachers in primary schools. In the random sample of just under five hundred Australian primary schools used for the telephone interview survey only four point five percent of teachers in the schools held such qualifications.

Robertson (1992) provided useful information on the impact of the Aussie Sport program over a ten year period from 1981. Trends made evident by his research indicate a positive development in children's attitudes towards sport. Aussie Sport experiences corresponded to increased enjoyment in sport, and Aussie Sport experiences were directly related to children playing organised sport and staying longer in their chosen sport.

Tinning Kirk and Evans (1993) in their analysis of Aussie Sport pose several pertinent questions on the conceptual basis for the program. The first concerns physical education programming: how is Aussie Sport different from what is, or should be offered, in a well planned physical education program? The hoped for answer lies in a combination of factors including, getting back to basics and teaching correct techniques, yet the research indicates that most children's motor skills are still poorly developed. The second question has at its core the concepts of what Siedentop (1994) termed sport education, and physical education. Proponents of Aussie Sport see it as complementing rather than replacing physical education. No matter what questions are asked it is evident from the research provided by Clough and Traill that there is a clear indication of the acceptance of Aussie Sport into schools throughout Australia. The 'sport for all' message has raised public awareness and the focus of the program of 'having a go' is clear.

In 1990 with the lifting of a number of sanctions, including those in the area of sport the Australian Government through the Australian International Development Assistance Bureau (AIDAB) made \$278,000 available to assist in sport development in South

Africa. In 1991 a delegation from South Africa met Australian officials to ask for assistance from Australia in developing non-racial sport in South Africa.

It was felt that the Aussie Sport program could be make a valuable contribution, and money was made available and for the first time a sport-development project was implemented under an aid scheme. As made evident in the ASC paper on Aussie Sport in South Africa and information gained from project coordinator, Colin Brown, the idea was to send a training team from Australia to South Africa to train participants in the Aussie Sport concept. The training team was to be made up of development officers from four sports and two Aussie Sport personnel and they would train between eighty and one hundred participants from black townships in each of four regions around South Africa.

Information from Aussie Sport Action (1993) illustrated that the participants would be made up of teachers and members of the wider community. The sports and regions were decided by the National Sports Congress (NSC) of South Africa. The sports chosen were soccer and netball, the two sports played in the disadvantaged communities, and baseball and rugby league been relatively new sports in the country and townships. The participants were to receive training in each of the sports as well as some basic sports administration over a one week period. This would be repeated in different townships and different venues. Four hundred 'leaders' would be trained by the end of the project.

The project had several stages. The first was the visit to South Africa by two Aussie Sport coordinators who were involved in finalising the project, including dates and venues. This took two weeks. The second phase was the implementation phase of the training program into the four selected regions and this took six weeks. The third phase involved the evaluation of the skills training program (involving the graduates of the courses) and the assessment of the future needs (of the participants and the project) and the viability of addressing those needs. This included the South African coordinator spending two weeks in Australia to brief team members on the status of the project and the future needs of participants. The final stage was the implementation of the second training program to address those needs identified in stage three. This took three weeks. The overall delivery of the program in South Africa was coordinated by the Australian Sports Commission and the National Sports Congress.

Strengths And Weaknesses of the Aussie Sports Program

From all this information and the many evaluations and research projects that have been undertaken in the field of Aussie Sport several key factors are evident. These will be

summarised under the categories of strengths and weaknesses from Clough and Traill (1989). Highlighted strengths included the following: participation and fun, a wide variety of sports, modified versions, organised support, administrative support, exposure of the different sports, the encouragement of skill development and acquisition, program flexibility,

Weaknesses included; lack of follow up, teacher/school apathy, lack of facilities and resources, communication difficulties with the education departments, lack of funding especially for the minor sports and lack of links between schools, clubs and associations, lack of trained personnel.

These strengths and weaknesses may exist in a far greater proportion in a developing country where the overall infrastructure is not as refined. Also the lack of trained manpower will be a large influence in the recognition of these factors. Two case study community schools in the Eastern Highlands Province of PNG will be looked at in this context.

However, when looking back at the philosophies of 'sport for all', 'fair play' 'good sporting behaviour' and 'enjoyment and fun', the Aussie Sport program commitment to the development of young people through sport is paramount. The then Senator, Graham Richardson at the launch of Aussie Sports, as it was called then, in relation to the sport for all initiative said that:

...children with this basis of sport education will have greater self-esteem, be healthier, will be more confident and more able to contribute to society. All children have the right to learn and enjoy basic movement patterns and the basic skills of sport (quoted in Aussie Sport Action 1988 p.1)

Today, more than ever, with the tenuous position of physical education in the schools, the Aussie Sport mission is dependent upon partnerships between the key agencies involved in junior sport. This is needed to ensure a coordinated approach to issues, and programs. Links must exist between individuals and groups. Parents, teachers, coaches, principals, club administrators, associations and local government. By establishing such a support network all client groups benefit. This community approach was identified in 1992 as a major implementation strategy for the Aussie Sport program. By using this approach and the schools as the key focus Aussie Sport will continue its influence on young children, and above all, continue in providing sport situations commensurate with the skill level of the child.

Aussie Sport has a large contribution to make to the education system with its philosophical and resource base. The issues are: supporting quality teaching and coaching, the promotion and development of quality sport for young children, increasing the accessibility of sport, developing essential skills and the fostering of community involvement in junior sport.

One of the goals of the Aussie Sport campaign includes the export of the concept overseas, and in 1994 the concept was exported to Papua New Guinea. This international recognition will continue the mission of Aussie Sport: 'the enrichment of the lives of young people through quality experiences which encourage lifelong participation'

Aussie Sport has a simple concept and ethos and a simple mission. The enrichment of the lives of young people through quality sporting experiences to encourage lifelong participation is at its core. Extensive research went into its development with a great deal of consultation with teachers, parents, sporting bodies and young people themselves. The Australian Sports Commission in conjunction with state departments of sport and education initiated the project and work closely to make it a success. Strategies and programs are the backbone of the concept along with community education and support. It is unable to exist, develop and succeed without this unity.

Summary

The concept of Aussie Sport, its strategies and programs gives developing countries a starting point from which to begin. There is a hope that its success can be transposed into the new environment. Because the messages it gives out are simple and obtainable it is essential that a laissez-faire approach is not developed, but instead one of purpose and commitment.

Before looking at its impact into PNG it is necessary to examine physical education and its status in the educational and cultural arenas. Papua New Guinea is a diverse country, one of many cultures, languages, geographical constraints and literacy problems just to mention a few of the constraints on the country and its people. Physical education has not been viewed favourably in the educational sphere and as such it has had an ever changing role in the development of PNG. Physical education in the developing context of PNG will now be detailed.

PHYSICAL EDUCATION - THE PAPUA NEW GUINEA CONTEXT

This section addresses the place physical education holds in the Papua New Guinea context. The concept and background of physical education has already been looked at but now its place in the developing environment will be taken into account. What is regarded as sound philosophy in one context may not necessarily be able to be transposed onto another. In a country with an illiteracy rate at some fifty four percent - the highest in the Asia Pacific region - considerations must be made as to the overall importance of an area such as physical education. If innovative programs are to be introduced then perhaps they should be in the areas of literacy and numeracy. If programs are not introduced into areas of concern by the populace at large, then conditions may exist for poor results. The questions to be asked must involve; what can physical education do for a child, physically, intellectually, emotionally and socially.

The first area under review will be the historical background of PNG physical education and in this the school system is set down. Educational change is the next area which is examined and this demonstrates the place of physical education on many levels. Children in sport is the next area which leads into the development of the Pikinini Sport Pilot Program and all its associated planning, goal setting, and the delivery catalyst via the Train the Trainers workshop.

Historical Background

In contrast to the obvious importance physical development has had in traditional society in PNG, recognition of the value of physical education in the school curriculum has had a chequered history. Traditionally physical skills would have been dancing, gardening, fishing, canoeing, hunting and swimming. Even fighting demonstrated mastery of physical skills. Many of the activities had a direct relationship to the development towards adult life. This is illustrated by Rosenthal :

The sea plays a paramount role in Motu life. Motu children learn to swim even before they learnt walk. Children also learn to build and sail small lakatoi (outrigger canoes) and hold miniature races while the men are away on the hiri (sea trading expeditions), thus developing assurance in the water and competence in handling the craft which are to be so important to them in adult life (1976, p.67).

Even in the 1930's the first Director of Education, W.C.Groves advocated that the training of native educational leaders should include as part of the curriculum, "...native dancing, recreative physical exercises... ball games; cricket, a form of native

scouting; archery and spear throwing” (1936, p.143). His educational philosophy included such terms as “love of games”.

At this time education that existed did so in a few primary schools which were mainly of the ‘mission’ type and there was no recognised program of physical education. The village life of the Papua New Guinean depended on physical activity anyway, as there was a great deal of hunting, fishing, gardening and fighting. Prior to Western influence the concept of physical education had not been formalised. Even the colonial educationists placed emphasis on mass literacy. After the war “... many village people wanted education for their children, believing it was bound to transform their society”. As Louisson (1974) documented education was looked upon as the source of Western influence, power and privilege and wealth.

However, the development of education faced many difficulties all of which exist today. The multilingualism of the people including over seven hundred languages, the variety of climates and terrain, disease, widespread dispersion of the population, isolation, political, social and economic influences are some of these problems. The 1922 Education Ordinance in New Guinea authorised the establishment of schools and teacher-training institutions, but little was achieved. Even in the 1950’s the following objectives were set by the Australian Minister for Territories, “... universal primary education, the blending of cultures, the voluntary acceptance of Christianity by the indigenous people and the fostering of English as a common language” (Louisson 1974, p.18).

In the sixties the task was to train a core of Papua New Guineans with the idea of replacing Australian administrators and hence physical education took a back seat to reading, writing and arithmetic. All came to a head in 1974 when physical education was removed from the high school curriculum. Before this date only a handful of Papua New Guineans had received any formal teacher training in physical education (Miller, 1978). Physical education had become a haphazard extra curricular activity with little coordination or structure.

Miller (1978) explored the status of physical education in his study which was done in collaboration with the PNG government and UNESCO. The PNG government was aware of the universal value of physical education to the holistic development of the individual and wanted some guidelines as to what existed and what should be implemented in providing an adequate program. There was the obvious importance physical education had in traditional society but its impact in the formal education system was a substantial contrast to this. The planning and teaching of physical education and its

place in the curriculum seemed to have little priority in the minds of the colonial educators.

Miller (1978) found : apathetic teachers, limited syllabus, lack of traditional games, major games being played far too early, and reluctance of teachers to teach it as they saw no promotional pathways. The Ministry of Education had proposed to include physical education under the subject area of expressive arts, and the teacher training colleges were content to be involved in games type programs rather than a full embodiment of physical education training. In one college no physical education had been taught for some eighteen months because the teacher left and was not replaced. Miller found some teachers using the 1967 syllabus. There was constant repetition of the same activities.

The School System

The current PNG public school system may be described as a 6-4-2 system of education. In this system there is a six year primary education, offered in what are called Community Schools, a four year Provincial High School, equivalent to junior secondary, and a two year National High School or senior secondary. Most children start their education in the community school at the age of seven and continue to the age of thirteen. Some, however start at a later age.

In Millers' 1979 study the community school (six years primary education) situation faired a little better. The curriculum unit in 1976 suggested one hundred minutes per week in grades one to three and ninety minutes for grades four to six with a sport afternoon of sixty minutes duration one day per week. The general aims of community school physical education as outlined in the syllabus includes :

- a) to help children understand the idea that they can find themselves interesting and useful ways to use their bodies and things around them
 - b) to help children be good at doing things with their bodies
 - c) to give children the chance to work together, share things and help each other
 - d) to teach children how to organise sports and games
 - e) to teach children that it is good to exercise and so have strong and useful bodies
- (Dept. of Education 1981, p.1)

The curriculum is organised into four broad types of activities: body control, games skills, fitness games and activities such as soccer, basketball, volleyball, netball, softball and athletics (see Appendix three). Miller (1979) found that facilities and equipment

were inadequate and that there was no evidence of lesson notes from the teachers, the majority of whom lacked physical education training and hence confidence to teach the subject. Regular in-service programs were not evident and generally in the physical education classes students were 'let loose' to play games.

Avalos and Neuendorf (1991) shows that only seventy four percent of the seven to twelve year age group are enrolled in the primary school and of these only sixty percent will sit the sixth grade national examination which allows them entry into high school if they succeed. Because of the insufficient secondary school classrooms only thirty five percent of those who would be eligible to enter the secondary level manage to do so, and those who reach the end of the lower secondary only ten percent will enter the upper secondary level leaving a total of some 990 students for entry into the University system.

The National Executive Council (Sept. 1991) in reviewing the Education System and Proposals for Reform set an objective of the Education Department to "...develop a schooling system to meet the needs of PNG and its people which provides appropriately for the return of children to the village community, for formal employment or for continuation to further education and training".

With such a small proportion going on to higher education as presented by Avalos, the very high attrition rate and the very large rural sector what is important and relevant in education must preside. This will need to be considered in light of the social disparity and stratification in the country.

Educational Change

The Education Sector Review (1991) outlines the philosophy of educational change and the dilemmas it faces. The dilemma of curriculum developers is how to provide relevant education for the eighty five percent of the children who will grow up to remain in their rural and semi-rural communities. As Vulliamy (1987) states many attempts have been made to make education more relevant to the national development needs of rural, developing countries. But by whose standards are these determined ?

Into this schemata fits the idea of physical education. It has a niche to fill especially in providing learning experiences which assist in developing the whole person. Concepts of self esteem and knowledge are paramount in this holistic approach, particularly where much of the youth populace is discontented and bored. But this education must begin

early on in the child's education and it must be seen in the total educational environment and not in isolation.

The World Forum on Physical Activity and Sport held in Quebec in May 1995 drew many conclusions but clear leaders included the following : firstly that physical and athletic activity, language and universal values are crucial to personal and social equilibrium, health, personality development, and social and cultural integration. Secondly that there must be national commitment to regional or local implementation, there is to be a sharing of responsibility for actions and the implementation of proposals. Next, there has to be a sharing of ideas, knowledge, technology and resources. Finally there has to be a maximisation of opportunities whether it be education, research and funding. These conclusions are relevant to all countries, and especially developing ones.

The future educationalists in PNG have to take this into account and provide programs and initiatives which can be utilised by out of school children and youths especially at the village level. Community involvement is also a necessity in the success of such innovations. With so much of the population (some eighty two percent), as cited by Avalos and Neuendorf (1991), centred at the village there seems to be a direct link between the schools and their associated communities. Physical education has an important role to play within the school system and has a strong affinity to 'community based' education.

Miller (1978), at the conclusion of his survey, made an important philosophical standpoint in that he stated that there is a necessity for a proper understanding of what physical education is and what contribution it can make towards the full development of an individual. He also saw a distinction between physical and sport education occurring in PNG schools as already documented by Siedentop.

The Board of Studies decided in 1980 that physical education should be reintroduced to the high school curriculum as an optional course in grade seven for 1982 and in grades eight, nine and ten for 1983, 1984, and 1985 respectively.

In 1987 Seward continued a similar research process to Miller and detailed the following outcomes. The first of these was that at the community school level physical education lessons if been taught were timetabled after the completion of academic courses. Secondly, in many of the rural schools, Friday afternoon was a popular time slot for physical education, but by this time most teachers had left early. This was particularly the case on pay Friday. To conclude the lessons were haphazard and unstructured with little or no actual teaching.

Prior to this study, in 1979, a senior curriculum officer for physical education was appointed to the curriculum unit of the Education Department. His brief was to assist in the development of the community and high school programs. Considering the enormity of the task especially disadvantaged by communication and travel expenses this was perhaps a little optimistic. Also the almost total lack of financial and manpower resources coupled with the almost total lack of formal physical education previously made this an onerous appointment. However, as already stated, it wasn't until 1982 that the subject was reintroduced to the high school curriculum and then, only as an optional course. It wasn't until 1986 that it was recommended to be a compulsory subject.

It is worthy to note that the 1981 National Education Strategy gave general support for physical education:

Physical education remains a voluntary extra-curricular activity in high schools; it should be put back into the syllabus. It should be taught at Goroka Teachers College and physical education staff are needed at UPNG. The community teachers' colleges also need to give proper attention to physical education. It is not simply 'playing games'. Teachers should have an understanding of physical education, the reasons for it, and what it can do for the overall development of their students (p.38).

As Seward (1987) had noted, as formal physical education had been dropped from the high school curriculum some schools ran extra-curricular sports activities. In this sense sport was existing in isolation with no physical education base. Sport became the focus in the curriculum and the concept of physical education waned and in PNG today it is now synonymous with 'sport education'. Also there were no qualified or trained personnel and Seward's study indicated that seventy three percent of schools in the country had no physical education at all on the timetable. In light of such alarming statistics the National Sports Training Institute (NSTI) in conjunction with the Goroka Teachers' College initiated a program for the training of physical education teachers. This was in 1982 and documented by the UNESCO paper. By 1984 the NSTI had also appointed national coaching directors, an accreditation scheme for coaches in the country, and a small library, all as part of physical education awareness boosting.

Both institutions were within close proximity and this assisted program delivery. Each student had to select two teaching majors from mathematics, science, english, social science, agriculture, physical education, expressive arts, practical skills, commerce and home economics. As an adjunct to this all students undertook professional studies. In

1982 twenty four students selected physical education as one of their two majors. Only thirteen graduates will take up positions in 1995, three of this number returning to their homes in the Solomon Islands, leaving ten to fulfil the needs of PNG.

In 1991 Kinavai presented a paper at the annual provincial recreation officers conference and contended that there needed to be a renewed national awareness of the value of physical education to the community if it was to be successful in the school curriculum. He stressed the involvement and social conscience awakening of government leaders, sporting bodies and the department of Education.

Physical education and sport have obvious roles to play and functions to perform in the education system but still advancement has been slow and plagued by a plethora of problems. This is made evident by the fact that only thirteen physical education graduates will take up positions in 1995, three of this number returning to their homes in the Solomon Islands, leaving just ten to fulfil the needs of PNG (figures from the National Sports Institute). Limitations abound and this lack of qualified, trained personnel can be viewed as one of the most important factors. Another limitation can be deemed as resources. Lack of facilities and sports equipment is a severe limiting factor. Having now been in the country for four years and experiencing three blocks of teaching practice supervision, the author has seen first hand what is available in a number of schools, both at community and high school levels.

Evidence from Miller (1979), Seward (1987) and field research by the author, most schools have basic facilities consisting of at least one volleyball court, one field and only ten percent would have some sort of covered area. Sports equipment is also extremely scarce. All these factors can lead to a poor attitude towards physical education, not only by the students but also by the teachers. However in a developing country where the school lacks sufficient funding from the national or provincial governments, many aspects of neglect and scarcity of equipment is taken for granted. The school and particularly its students know no different, as it is not as if something has been taken away. It wasn't there in the first place. If a teacher conducting a volleyball unit, consisting of forty students only has three balls to conduct the course, this is accepted. This has an obvious detrimental effect on student learning and achievement and thus advancement in physical education particularly with respect to skill development.

However, once again what must be considered is the cultural values of the Papua New Guineans. Our values of achievement in physical education in a westernised society may not parallel those of Papua New Guinean teachers or students. Mixed sporting activity

for example is not usual and many clans do not allow male and female children to play together. Many young female educators have great difficulty commanding respect from their male counterparts and the male students. Some of these students even refusing to be taught by a female teacher. Coyne (1973) demonstrates that the stress on women in PNG culture is to be a wife and mother entailing the growing and gathering of food, cooking, cleaning, and minding the children and this factor has a severe result on female intake into academic institutions. Flaherty (1991) details some relevant statistics, including the proportion of female students at university level at around twenty percent. Other problems identified by Flaherty include: women's minority status, male-centred curriculum, shyness in class, lack of leadership opportunities, male domination, pregnancy and insecurity. This discrimination will remain for a long time but perhaps physical education especially at the community level can help to ease such irregularities.

Most of the conceptual viewpoint of physical education in PNG does not have a traditional basis, instead a westernised one. As an example all of the sports in the working program of the National Sports Institute came from outside PNG. Missionaries and colonial government officials introduced most of the activities.

All the teachers will also have to cope with the students background. Age is an important factor as there will be a great deal of variation in the one class. From the researchers own experience a grade six student could be anywhere from twelve to seventeen years, making it a challenge to the physical educator to provide learning experiences relevant to all. Social and home backgrounds also need to be considered especially because for many parents their children are often " first generation" in the formal education system. The parent has had no formal schooling in the Three R's let alone an exposure to physical education classes. On top of this many children will bring expectations of a traditional nature to their school.

The schools themselves exist alongside a community structure which itself has to be consciously aware of educational expectations. For many parents their level of education makes it difficult for them to assist in the formulation of the school product. Bacchus (1981) feels that too often basic social and economic reforms are left behind. These necessary prerequisites are lost to the ideal of curriculum change. He argues that one can not precede the other. If innovative programs are to be accepted by the community at large then the socio economic responsibility must be taken care of first. How accepting will a community be of an innovative physical education program when it has limited knowledge about it and the social and economic conditions that prevail are poor? Perhaps basic education for all would be a worthy starting point.

In addition to these problems and variables O'Donoghue (1992) argues that the visage of universal education by 1999 will be financed by the country's vast natural resources. To date, there has been the Bouganville crisis, the Ok Tedi compensation claim, the collapse of cocoa and copra and the fall in coffee prices. All seem to have frustrated this premise. Added to these are the demise of the Wingti government, devaluation of the monetary system, catastrophic natural disasters (eg. Rabaul)and an overall nationwide cash flow dilemma. Education Minister, J.Onguglo (Post Courier 1994, p.3) revealed that the governments cash shortage had meant drastic measures would have to be taken and hence he had cancelled the rest of the school year for a number of the national high schools and teachers colleges. His department required K8.5 million to get through to the end of the year and that the money was not available. Many schools had no money in their accounts and the University of PNG (Goroka Campus) had to bring forward graduation and cancel study week as there was no funds available.

On top of these problems, budget cuts in the area of sport have caused programs to be halted and general promotion in coaching, referring and administration to be stopped. The three national sports complexes in the country are also in need of renovation and maintenance, but funds are unavailable. The National Sports Policy was revised updated and a draft policy was adopted in June 1993. A. Posai reiterated this statement from the policy as been based on "... national pride and unity, self reliance, junior sports, children's sport, elite sport, sport for people with disabilities, women in sport, masters' sport and traditional culture and lifestyle".

Children in Sport

In 1983 Newton highlighted the concepts of sport and physical education :

Sports played in school should be regarded as an educational experience and seen as an extension of the physical education program. Physical education provides the basic fitness, skills, knowledge and attitudes from which children can develop competence and interest in sport (p.4)

One year later in 1984 physical education became a compulsory subject in the curriculum via a cabinet decision, but still some ten years later little had been done to ensure it was been taught and that all children were given access to it . Principle Four - Children In Sport, from the National Sports Policy (1993, p.15) looked at changing this. The aim of this particular principle is : the provision of opportunities for children to benefit from the exposure to sports and physical education.

Its goals include : to ensure that physical education is taught in every community school in PNG, to provide facilities for physical education and sports within the school premises, to provide opportunities for participation in school sports programs and finally to provide opportunities for participation by out of school children.

In 1994 the Papua New Guinea Sports Commission (PNGSC) took this on board and made a commitment to children's sport in the country. The PNGSC, national and local sporting associations and the Department of Education came together to work cooperatively towards problems facing junior sport. These included :

- decline in the standard of skill development of young people
- limited teacher training in physical education
- quality and availability of teaching and coaching being provided
- lack of opportunities for out of school children to participate in sporting activities
- lack of opportunities for talented young sportsmen and women to gain from higher level coaching and competition in their respective provinces
- lack of appropriate equipment
- lack of facilities
- young people not playing sport regularly

The PNGSC in an attempt to redress these inadequacies identified four areas of attention:

- Pikinini Sport Pilot Program
- Physical Education in-service training
- Youth Sports Leaders Training Course
- Regular organisation of youth sporting activities

It is the first of these that will be looked at as it relates directly to the philosophy of physical education and innovation in education already looked at.

In 1993 the possibility of conducting a pilot program in PNG had been mooted after a presentation on the Aussie Sport initiative was provided to the Oceania National Olympic Committee's annual meeting in Auckland, New Zealand. This followed the adoption of the concept into South Africa at the time.

In late February 1994 two experts representing Aussie Sport International visited PNG for a preliminary planning meeting with the PNGSC, Department of Education and National sporting body representatives. At this meeting the Australian representatives

gave an overview of the Aussie Sport Program, and the position of children's sport in PNG was analysed by the group. After discussion the following mission statement arose: "To develop young people through active sporting involvement which encourages lifelong participation and contributes to an improved society"

It is evident how analogous this statement is when looking back at the Aussie Sport ethos, and one wonders as Havelock and Huberman (1977) acknowledge if educational innovations are typically too ambitious in the degree of rapid and massive changes expected.

To date the development and placement of a comprehensive sports policy which attempts to extend to all sectors of the community is still in its infancy. As Coghlan (1983) documented the beneficial effects of sport to health, social educational and cultural development were at this time underdeveloped. One can term this the sport for all catch-cry and ten years on many problems exist in PNG making this ideal perhaps unrealistic. McIntosh (1980) summed up such problems as manifestations of trying to implement western ideals and concepts. One can ponder the aspects of junior sport development and its place in a country where illiteracy is such an acute problem.

Development of the Pilot Program

A task force was established to meet the mission statement and from this the pilot program developed. The task force was made up of representatives from the PNGSC, the Education Department and the national sporting bodies. There was also a representative from the National Sports Institute (NSI) but this person was on leave when the workshop got underway. The pilot program was named the Piginini (pidgin word for child) Sport Pilot Program and it was to be run by the Australian Sports Commission, the PNGSC and the Department of Education.

PNG is an extremely diverse country with twenty provinces, over seven hundred languages, enormous social disparity and stratification and it was up to the task committee to decide where the program was to be initiated. In March the trial provinces were selected and included East New Britain, East Sepik, National Capital District, Oro and Western Highlands. The sports selected were volleyball, soccer, netball, rugby league, softball, athletics, basketball and rugby union. These sports are played by the majority of children in the country. The trial was to be conducted in grades four to six of the community schools only.

At the second task force meeting in April the provinces were changed. National Capital District, East New Britain, Eastern Highlands and Morobe were chosen. These are illustrated in Appendix four. This selection made far more sense as the PNGSC has centers and personnel in each of these provinces. Also the workshop was to be held in the Eastern Highlands, but it was not included originally. The sports were also changed and finally, netball, softball soccer and volleyball were to form the basis of the pilot program.

The mission of the pilot program can be stated thus: to establish a pilot program utilising the highly successful Aussie Sport Program to assess the viability of establishing a Pikinini Sport Program in PNG.

The specific objectives are :

- to utilise the experience, expertise and resources from the Aussie Sport International to conduct the pilot program
- to establish a cooperative agreement between the PNGSC, the Education Department and National Sporting Associations for the development and implementation of the pilot program
- to identify five community schools in each of the four selected provinces
- to train the teachers and sports personnel to implement the pilot program
- to increase awareness, understanding and support of the value of Pikinini sport at community, provincial and national level
- to utilise the findings of the pilot program to work towards establishing our own Pikinini Sports Program with materials and resources designed specifically for PNG
- to provide increased opportunities for participation, enjoyment, physical fitness and skill development for young people

The crux of the overall project was to be the “*Train The Trainers Workshop*”. This was to be the delivery catalyst for the introduction of Aussie Sport to PNG. A PNGSC representative worked on the structure of the workshop and the major questions to be looked at were ; for who, where, when, by whom and financing. It was decided that the beneficiaries would need to be the community school teachers, provincial recreation officers, youth and sport leaders. It would be held in Goroka in the Eastern Highlands province.

Goroka is the central town of this province. It is approximately a fifty minute plane flight from Port Moresby, the nation’s capital. It is connected to the cities of Lae and Madang via the Highlands Highway. The climate in the highlands area of Goroka is at a

constant twenty five to twenty eight degrees celsius and it is particularly suited to training camps for athletes. Such a venue was the obvious choice for the week long workshop. There are some twenty thousand people in its surrounds two hundred community schools in the province with five in Goroka itself, and eight high schools, a campus of the University of PNG, and the National Sports Institute (NSI). This institute has reasonable facilities, with two outdoor courts which are marked for volleyball, netball and basketball, three moderate sized playing fields, four tennis courts, a small covered hall and a lecture theatre capable of seating approximately one hundred people.

The workshop was to take place from June 25th to July 1st 1994. This was to be the project catalyst. The basis for the development and implementation strategy had been detailed at an initial meeting in February and subsequent task force meetings reinforced the nature of the project. Aussie sport via the modified games strategy would be the overall crux of the project. It was to be headed by Australian development officers and sponsorship from Government and corporate sectors would be pursued. In the case of South Africa, the Australian Government, through the Australian International Development Assistance Bureau (AIDAB) made available \$278,000 to assist the program. The PNG project received resources and a donation of K5,000. from the Australian Government. Fortunately on May 20th 1994, Coca-Cola Amatil (PNG) Ltd. headed by the general manager, J.Edwards approached the PNGSC with an officer for sponsorship. To be the naming sponsor the offer was K35,000 in year one and K50,000 for each of the next four years subject to the success of the pilot program and satisfaction with the project. J.Edwards was quoted as saying :

... it seemed to us that such a program - which will be rolled out to the youth of PNG via all of the primary schools - will do a lot to encourage the fitness of the youth and involvement in social and teamwork activities which will lead to a more cohesive and interactive society (Edwards, J. 1994 pers.comm., 20 May)

The whole concept was to be introduced via this pilot program and it was to be assessed on its completion. The expatriate trainers ranged in age from twenty one years through to fifty years. Of the four trainers three were women and their experience in dealing with delivery of adult education programs ranged from no experience what so ever through to thirty two years of coaching of all ages. They trainers were recruited from varying sources.

Hurst (1981) highlights the World Bank Education Policy viewpoint on the transition from a pilot project to a large scale national adoption. Significant problems exist. Often the provision of necessary complementaries whether they be teachers, textbooks and

physical resources are lacking. More importantly monitoring and evaluation procedures are often not included in the overall project. Also fundamental social and educational questions about the system have not been asked. Often plans have been ill conceived, policy has been changed, funds have not been available and skilled personnel have been in short supply.

So even though the overall concept is simple; a training team from Australia made up of development officers from four sports and two Aussie Sport personnel would train some one hundred participants from throughout PNG the execution and the acceptance of the innovation is far from simple. The whole process of innovation in a developing country has contributing factors inherent in its application. The socio-cultural factor is also of paramount importance when any analysis is to be made on the outcomes of such a program. In a country where there is not the same infrastructure, facilities, financing, expertise, social stratification and educational background the success or failure of such innovations can not be viewed in isolation. Such a view could give false impressions to those conducting such programs, those initiating them and those receiving them.

Pervading an innovation such as this one into a developing country, is the philosophical base physical education comes from. The status of physical education in such a setting will be influenced by reflection and discussion by those trying to promote its place in the educational arena. The literature in general shows the philosophy behind physical education and where it stands in relation to sport education. The consensus is one of need for the concept and field of endeavour inherent in physical education. There is a desire for its inclusion in the educational forum and evidence exists to demonstrate its lifelong benefits. However when the stage is a developing country internally imposed patterns manifest themselves. Some of these have been termed socio-cultural factors and others including adult training, facilities, financing, gender issues, parental and student backgrounds and expectations. As Hurst (1981) concludes, administrators must be provided with training which indicates that implementing innovation is, intellectually and practically, a very different exercise from allocating resources, school locations and planning teacher /student flows.

Williams and Williams (1994) in their study identified several factors that are believed to have a significant influence in determining the successful adoption of curriculum innovation. The issues arising from these are: the quality of the innovation, access to information, advocacy of the chief education officer, teacher advocacy, pupil perceptions, the input of linking agents relevant to the program, community involvement, availability of funds, and problem solving capabilities. Some of these were positive while others had a detrimental effect on the overall adoption of the innovation

they looked at. By using this example it is important to note the total picture and the wider contextual factors were seen as influential in the final outcome.

Summary

Physical education and its development in PNG has been shown in this review to be in a state of dynamic equilibrium. The importance of physical development in traditional society is not doubted but the recognition of its value in the school curriculum is in a precarious position. It can not be seen in isolation but rather in light of a multitude of contributing factors which have been discussed.

Children are the focal point and a positive step towards redressing educational inadequacies in this field has been taken. The time frame is now set and the development and placement of comprehensive programming is at the core of the status of physical education in the curriculum in the country. The Aussie Sport initiative became the chosen innovation with its positive outlook and historical foundation. For any initiative or innovation to go ahead, particularly in a developing context there is the need for adult training programs. It is only through this avenue that innovative ideas can be implemented.

Many attempts at training programs and initiatives have been met with mixed success and in a country like PNG, with its many cultures and hundreds of different languages this is a difficult process. This next section will look at innovation and its subsequent training programs with PNG as the focus. The maxim 'every adult is a teacher' is one which has been adopted in a number of countries. This is the case in many developing countries particularly in the areas of folklore, customs, dance and drama, however when there is a high illiteracy rate and many not reaching the end of primary school there is an increasing need for specialists and experts to guide and impart knowledge in the areas of education and training.

ADULT TRAINING IN DEVELOPING COUNTRIES

As have been illustrated changes in developing countries must come through adult training programs. Often the situation in PNG is one in which many of the teachers in the education system have less than grade ten education. Many of the training programs are geared towards upgrading and improving competencies. Many attempts at training programs and initiatives have been met with mixed success. In a country like PNG with its many cultures and its hundreds of different languages this is a difficult process. This section will look at innovation and its subsequent training programs with PNG as its

focus. Several areas will be looked at. The first of these will be education in PNG with particular emphasis on its background, its training programs with respect to adult education. The process of innovation is looked at next with emphasis on the trainer involved in innovatory programs.

Education in PNG / The Background

It is necessary to examine the concept of adult education and training in the environment of the developing country context to be able to understand the difficulties faced by this problem. In many circumstances many of the adults who are involved in innovatory programs and their delivery have had very little formal schooling. Avalos and Neuendorf (1991) in the example of PNG reveals that many of the adults involved in training programs have not been past grade six. In the PNG system this means finishing school at about twelve years of age. Adult training becomes crucial in these situations. This will be examined in this section as it has direct relevance to the case study to be detailed.

Papua New Guinea (PNG) has had a short history of formal education and this has been plagued by inconsistencies and problems, which have manifested themselves politically, economically and socially. The early Christian missionaries who established the first schools in PNG for example did so within the bounds of their own ideologies and beliefs "... the missions enjoyed a virtual monopoly of education, the new knowledge was bound to be thought of as religious knowledge". "...education was literacy, was Bible reading, was Christianity, was civilised values, was education" (Swatridge, 1985, p.14). Swatridge implies that the nature of the missionary education is "neither to be wondered at nor deplored" (1985, p.13).

In 1929, the Director of Education from Queensland, (E. J. McKenna) stated in his report: "...it is undesirable to educate natives ... Training natives makes them more cunning." (Meere 1967, p.41)

What this meant was that the curricular during the colonial administration placed an accent on what was considered appropriate for the "natives". Academic curricular was largely confined to the males and it played a small part in the overall educational policy. The girls curriculum centred around homecraft type activities and overall they were excluded from much of the educational process. Even as late as 1950 there were no secondary schools in PNG, and some twenty years later, at Independence there was no well educated class to take on demanding managerial tasks and duties. As Hasluck (1976) points out, there was a rush in the mid 1960's to train a small core elite with the

academic credentials to take over at Independence. Until this time it was assumed that Australia would stay in administrative control.

As Smith and Guthrie (1980) illustrate, many educational problems were evident. These were rural/urban migration, gender, cultural anomalies, Western education, traditional education, and expectations of parents and students. There was a need as Smith and Guthrie determine to prepare Papua New Guineans for involvement in the exchange economy. Many issues needed to be addressed and in 1972 the “PNG Eight Point Improvement Plan” (Crossley 1983, p.135) was documented. It stressed the urgency for the development of a national consciousness, a more traditional system and a redirection of formal Western style education to cater more for the rural masses. Post colonial education has tried to achieve universal academic education, but the pendulum between practical and academic components continually swings. As the 1991 Education Sector Review illustrates the social disparity and social stratification of the country places much debate on the relevance of varying sectors of education. This still exists even as PNG operates in the so called modern age.

Training Programs / Adult Education

Many attempts have been made to organise and implement training initiatives and programs and these have been met with mixed success. One such example is the Secondary Schools Community Education Project (SSCEP) which was the most important post independence innovation. However, this was not a universal scheme and was trialed and used only in a few schools in the country. It tried to solve many problems but unfortunately failed. Its demise was largely based on the break down between Western and Melanesian cultural constructs among other factors. As Vulliamy (1987) suggests, the implementation of new educational techniques and models are fraught with difficulty especially when the context of the innovation is divorced from the mode of implementation. The implementation mode must differ from place to place inherent on the innovation context.

The Education Sector Review, (1991) lists many educational concerns including ; access to education is limited (gross enrolment estimated to around seventy three percent), there is an appalling attrition rate between grades one and six, (almost forty five percent), initial literacy is largely provided in a foreign language resulting in many children leaving school functionally illiterate, only thirty two percent of children continue beyond grade six, of those who enter grade seven only about sixty six percent complete grade ten and only one third go on to further education.

Innovations try to bring about desired changes in varying constructs, including education. The aims are complex and varied but they are seen as investments in the future of the country. As has been made evident the educational context in PNG has been a dynamic one with the system in a constant state of flux.

By providing adult education training and programs there can be a move towards improving the quality of education, upgrading management practices reducing disparities, preparing personnel to cope with the demands of new developments and trends and processes (UNESCO 1987, p. 23) .

This could be an easy process, however, Papua New Guinea is a country of hundreds of cultures, hundreds of different languages and geographically a difficult terrain. These factors combine to complicate the developmental process. Many teachers have less than grade ten education so many of the in-service training programs are geared towards upgrading and improving competencies. Thomas (1976,) adds to the list and includes, departing expatriate teachers, lack of school buildings, teachers housing, textbooks, educational aids and materials, isolation and language difficulties to the equation.

All these factors which occur inside and outside the educational systems have implications for the implementation and resultant outcome of training programs. As McKinnon (1976, quoted in PNG Education p.59) points out, that in a developing country there is a need "... to simultaneously do many things, for many people, at many levels"

What also has to be considered is adult learning itself. Corrigan (1980) stresses the recurring ideas of focus, which include the person, the context they are in and the process they are attempting. The adult learner is asking of a program; will it work and will it be worthwhile? These will in turn affect the learning process. Dove (1986 p.212) also reiterates these conclusions in investigating teachers and teacher education in developing countries. She stresses that teacher education and training must "be indigenous, taking account of the unique socio-economic, political and cultural context to which they apply". What is also evident from her statistics across Africa, India, Indonesia, Philippines, Sri Lanka, Pakistan and Malaysia is that those involved in the concept of in-service training must not be passive recipients but rather active recipients involved in the planning, implementation and evaluation phases. She favours the term 'workshop' in which there is an implication of participation from those involved. All too often the trainers lack the high level of skill needed to make such workshops a success.

Townsend Coles (1977) also detail problems such as lack of confidence in their ability to learn, the relevancy of school to the learner, and lack of materials and inappropriate methods of training. This is especially true of literacy and general education training. The trainees will also want visible results for their efforts. Townsend Coles (1977 p. 90) states that the most important rule of learning is that "... the learner must derive satisfaction from the experience".

Several methods can accomplish this; relevancy, maintaining interest, appropriate levels of communication, attainable goals, a sense of accomplishment, satisfaction and enjoyment. Lehr (1984, p.74) reiterates some of these factors with the accent on the physical educator.

In any adult learning there must be recognition of the teacher as an adult learner who should be given experiences which are closely aligned to his/her teaching environment. A physical education staff development program should be designed to allow more time for the introduction and practice of specific skills. In conclusion, the physical education department ... must make a commitment in providing such opportunities and must incorporate a philosophy which best meets the needs and interests of the teacher.

Arends (1980) contends that the traditional model for staff development is incompatible with what we know about adult learning and that mature professionals are different from the neophytes who are trying to master the basic skills. The programs provision and construction comes under this context and the ultimate effect will now depend upon the deliverer, trainer, facilitator. Aspects which need to be considered are; the trainers experience, their cultural understanding, attitudes and behaviours, whether they have been imported from another country and mastery and delivery of the information.

The Process of Innovation / The Trainer

Havelock and Huberman (1977) also stress that knowledge of the process of innovation is an important factor in training requirements. Bishop (1986) reiterates this and documents phases in the innovation process. To begin with, a need must exist, some *problem* or dissatisfaction has been recognised. Possible *solutions* are then considered, an innovation or solution is selected, this is then *trialed* and *evaluated* and if promising the solution is *implemented* on a wider scale. Finally the solution is absorbed into the system and is therefore *institutionalised*. Then all of these ideas and concepts need to be addressed in relation to the cultural context.

Williams and Williams (1994) believe several factors have a significant influence in determining the successful adoption of innovation in relation to curriculum. Some of the factors they identified included the quality of innovation, access to information, teacher advocacy of the program, community involvement, availability of funds and problem solving orientations. The greater the number of factors adjudged to be positive then the greater the chance of success, otherwise the innovation is seen to be meaningless for the majority of people involved. All of these ideas and concepts need to be addressed in relation to the cultural context. As Vulliamy, Lewin and Stephens (1990) advocate, one has to consider culture, economics and politics if there is to be educational innovation.

Improvement in educational provisions programs and opportunities is greatly dependent on these factors. PNG is going through a period of political social and economic instability, including a deposed government, devaluation of the currency huge revenue loss, natural disasters and decline in economic growth. Initiatives in many areas have subsided, including all aspects of education, with foreign aid getting less and less.

Avalos and Neuendorf (1991) highlights this impact especially with a literacy level of the adult population at approximately thirty five per cent. It is only through adult education and education programs generally that this level can improve. When the context of developing teachers and trainers for these programs is documented Narakobi makes a significant point :

I believe that if we can develop teachers and trainers who are excited about knowledge and ideas we will be moving more positively towards taking knowledge in the same way a potter takes the soil, the earth and shapes it into a pot with the capacity to contain water. However, if we insist on a particular perception of what the pot should look like, take the clay and slavishly shape it into that pattern, then in a very short time we will find it will not be able to contain the water needed to nourish our society (Narakobi 1990 quoted in Avalos 1991, p.29)

Simons (1974) suggests several points with respect to the trainer involved in these programs. These are as follows. To begin with the trainer has to be equipped with the knowledge and the ability to fulfil the cognitive, affective and psycho-motor categories of learning. The trainer has to see him/her self as a catalyst. The approach to be adopted by the trainer needs to be non-directive and culturally aware and equipped. Methodologically, the trainer must use variety. Examples may include; lecture method, discussion groups, case studies, role playing and team teaching. Language is the next area of concern.

The trainer has to be aware of language barriers in their own vocabulary, idioms and sentence structure and also be aware that the trainee might be listening in his/her second or third language. Also the degree of maturity, length of experience and educational background of the trainee must be taken into account by the trainer. Finally, the trainer needs to adopt theory and practice in relation to the cultural perspective they find themselves.

The trainer is the facilitator, mediator, educator, a specialist in program delivery and if they are not competent or aware of these factors then successful implementation of any educational training program could be at risk. Dove (1986 p.238) agrees, “workshop resource persons and facilitators require a high level of skill in order to motivate and sustain the efforts of teachers to produce good results from training activities”.

These factors can not be seen in isolation and having them as the only checklist would be unwise. One needs to consider other pertinent factors relevant to the place of innovation. For example political, economic, environmental and social facets are the back drop. These need to be considered not only from the national perspective but also at the provincial and local levels. Innovations and their innovators can not stand outside the ambit of these sectors.

All these factors will prove invaluable in the evaluation of the effectiveness of providing adult education training programs. These become even more paramount in developing countries, especially where poor schooling conditions are evident. As Levin and Lockheed (1993, p.32) point out, these poor schooling conditions result in “... too few children complete primary school, students who do complete school are often poorly educated; and consequently the adult labour force is uneducated”.

Adult education training programs in PNG are either school based or institutionally based. Guy (1991) discusses the various forms these take and concludes that they have been met with mixed success. Often apathy, negativism, poor conditions and lack of responsibility hinder improvement. Change at the adult education level will only develop if all areas come to the ‘party’. Governments must be supportive, adequate implementation provisions have to be made and there must be involvement and participation of all those concerned. For there to be success the learning theory of adults and the implications of the trainer and the trainee are essential components.

Lowe (1975) sees the importance of adult education especially as the population increases and life becomes more complex. In developing countries the population is increasing rapidly and also there has been an influx of people into the cities and towns

away from their traditional rural environment. There are few jobs to find and the ones that are available are open only to the educated elite. This necessitates the need for this education and training. Wendt (1974) astutely noted that for the reduction of social, economic and political inequality, people had to be liberated from their state of passivity and to do this immediate adult education had to be provided on a national scale.

PNG continues to suffer from a low level of human resource development, low moral esteem, gender equity, intellectual leadership and vision. Sir Barry Holloway a former Education Minister expressed his feelings when he intimated that politics had overridden human resource development to such an extent that the education system was barely surviving.

The illiteracy rate in PNG is the highest in the Asia- Pacific region at some fifty four percent and many see this as a direct result of the approach to education. Papua New Guinea must take heed of what is happening and strive to provide programs which will ultimately benefit its society on all levels of human development. Hurst (1981; p.185) in looking at issues of education and training makes the apt conclusion that :

... to ask someone to collaborate in an innovation is to ask him to take risks and make extra efforts, and people who lack self esteem, self confidence and trust in others are unwilling to risk change. Their ability to change - assuming they are willing to do so - is not much helped by current managerial methods and dispositions in education, both those of ministries and external aid agencies.

To add weight to this argument Havelock and Huberman (1977) point out that those designing, administering and advising projects do not generally have to make very many changes themselves. Their task remains the same. it is the others who will have to modify their behaviours and very often to modify them rapidly in fairly significant ways and with little previous or even gradual preparation.

The World Bank education Sector Policy Paper (April 1980) makes a number of comments about serious problems that exist in implementing innovations. These include : misunderstandings by 'consumers' leading to resistance, ignorance or misrepresentation, changes are often simply applications of overseas experiences, the transitory stage from pilot project to large scale national adoption is often made without the provision of the necessary complementaries (eg. teachers, texts, physical resources) the complete lack of monitoring and evaluation procedures, failure to ask basic social or

educational questions, and little awareness of the factors that influence educational reform in relation to feasibility of proposals and reform.

One pertinent principle Hurst (1981, p.189) documents is that many 'pilot' projects are never followed up and one must avoid believing that '... because a first - phase project has convinced national planners and officials that it is worth developing and replicating it has also convinced the ordinary schoolteacher'. In other words it is not sufficient to carry out a trial in country or region X and then expect teachers in countries or regions Y and Z to take it up unhesitatingly. They should be able to carry out their own trials.

The second principle is that of adaptation - which requires that the new idea can be modified so as to adjust it to fit the requirements and capabilities of those who are supposed to employ it. Experimentation, adaptation and flexibility must be paramount if educational innovation is to succeed.

Tester and Watkins (1987) looked at the anatomy of innovation when documenting the implementation of the Daily Physical Education Program in Australia. They found that all too often that there is a failure to recognise the processes involved in innovation and that they are fundamental to successful adaptation of a change. The process is inextricably bound up in phases of mobilisation, in which the extent of motivation and support for the innovation are critical, implementation, in which there is a translation of project proposals and plans into practice, and thirdly, institutionalisation which marks the final transition of a project to an accepted part of regular school system's operations. Tester and Watkins found that the basic problem in trying to achieve daily physical education was one of acceptance, both by the primary teachers and the public. There was a need for flexibility. The notion of one best way to do something is extremely difficult to obtain and hence standardisation is short lived.

Couzner and Harris (1987) experienced similar concepts when they undertook a teacher in-service program in the Republic of Kirabati, an independent nation in the Pacific region. In 1984 the Ministry of education requested lecturers to go to Kirabati to in-service teachers in the areas of physical education. A study was made of several Australian programs in order to ascertain which sections were possible and relevant to the culture and school system. Many problems were experienced including, lack of equipment, children being shy with the Australian component, too hot during the day, children wanting to 'play the game' not practice the skills, large class sizes, and competition with the academic subjects. accordingly flexibility became a key factor in implementation.

The methodology used involved many strategies including, inservicing the teachers in alternative ways of teaching children physical education, curriculum development by a comprehensive study of the Daily physical education program, the recording of all physical education lessons undertaken (including problems and successes), recording of Kirabati games and finally a documentation of all the material resulting in 285 lessons being produced in draft form. Two teachers attended classes in Adelaide at an education Department office and stayed for one term to study physical education and its methodology.

The concepts involved in adult education training are all pervasive and when innovative reform is initiated it is plagued by complex interactions. Innovations try to bring about desired changes in varying constructs, including education. Physical education, sport and games have the potential by themselves to reflect and develop a society and its inherent culture. However they are encapsulated in the socio-ethnic framework which transcends all systems in all countries. Ethnicity here relates to a human group having traits in common. These can be racial, religious, and linguistic. In a developing country this factor is ever more prevalent and it can engender disorganisation, tension, and difficulties. This manifests itself in the society at large. No matter how astute a trainer may be or how sound the innovative program may be, if the socio-cultural factor as they shall deemed to be called are ignored then the process of innovation could be hindered. The total process must be more than an amalgam of externally imposed ideas and values.

PNG is heavily committed to re-training and in-servicing but unfortunately many constraints and difficulties plague such developments. These has been shown in the Secondary Schools Community Extension Project (SSCEP) as documented by Crossley (1983). Another educational innovation was the attempt to develop generalist teaching in all high schools in the country in 1975. It was pronounced a failure at the end of 1977. An evaluation of generalist teaching after the innovation had been abandoned blamed the failure on poorly defined objectives, lack of planning, absence of support, and minimal preparation. Overall the teachers had neither the educational background, training or experience to cope with the demands required by the change. Added to this was the failure to trial the innovation through smaller pilot projects.

Many other innovations were developed. Another example was the Agricultural and Nutrition Education Sub-Project in the East Sepik. The original objective was the 'strengthening of facilities of the teaching of improved agricultural techniques and aspects of nutrition in local schools'. it was to be accomplished by phasing in work with sixty 'project schools' beginning with ten in 1978, fifteen in 1979, twenty in 1980 and

fifteen in 1981. Implementation of the project was through an eight week in-service course followed by subsequent courses. Unfortunately the original planning of the innovation was too speedy and faulty. The time schedule was probably a quarter of what it should have been.

Summary

The concept of adult training is vital in any developing nation where demand far outweighs supply. It is essential that this demand is met and in most circumstances it is only through the training of the adult sector. Many of the implementors of new programs will be this adult sector in the system. They will have to participate in workshops and programs in order to foster the advancement of innovations. The need for education and training becomes paramount as the population increases and their lives become more complex. PNG suffers from a low level of human resource development and it is only through human development that benefits will be provided for the society.

Physical education, sport and games have the potential to reflect and develop a society and its inherent culture, no more so than in a country like PNG. Unfortunately the development of physical education has been a long slow process in this context and change is needed if it is to make any substantial impact. One such concept been looked at is the Australian innovation, of Aussie Sport. Its history and effectiveness has already been looked at as has the state of physical education in PNG and how such an innovation could prove beneficial.

CONCLUSION

Physical education in general has gone through many changes and phases, and it is from these that its future directions will be dependent. These will in turn be dependent on the cultural patterns of the society it finds itself a part of. The dichotomy between education of the physical and education through the physical have challenged each other constantly. Implicit in the latter view is the now commonly held belief that physical education not only contributes to the physical and health development of the individual but also the social, spiritual, intellectual, emotional and psychological development.

A discouraging picture has been drawn of physical education in PNG. Inadequate staffing, poor facilities, lack of timetabling of physical education, haphazard and unstructured lessons with little or no actual teaching, apathetic teachers, an emphasis on

sport rather than physical education, and no trained personnel are some of the problems that have existed and still exist today.

There is also a lack of a proper understanding of what physical education is from a philosophical base. This has caused a limited understanding of what sort of a contribution it can make towards the full development of an individual. Hence its poor standing in the academic arena. In most cases throughout the country too few students are involved at even a low level of participation. Schools, whether they be community or high schools exhibit little support from the administration and little leadership is provided. Added to this is the disparity between what the curriculum is supposed to be, and what actually occurs in the school setting.

Against this backdrop is a picture of discouraged youth, high illiteracy, violence, crime, an increase in lifestyle diseases, gender inequity, and cultural and social disparity in a rugged and at times inhospitable terrain.

The PNGSC along with the education Department and sporting bodies acknowledged the difficulties faced by physical education as part of the curriculum and took on the task of providing quality programming. The avenue for this came via the Aussie Sport innovation program with particular accent on the modified sports program. There was a genuine desire to improve the quality of what was been provided in the schools and they targeted the community schools in years four to six. The objectives that arose were commensurate with many of the outcomes documented in the 1993 National Sports Policy.

The innovation via Aussie Sport personnel and its overall ethos, enlisted the support of not only community school teachers but also provincial recreation officers, youth and sport leaders. A broad learning base was to be established through the introduction of modified sports as many of the participants at the workshop had minimal or no experience in teaching physical education. As such adult learning projects in education in general are not new to developing countries. In PNG the literacy level of the adult population is approximately thirty five percent. Therefore it is only through adult education and education programs generally that this level can improve. Above all this learning has to take place in the wider cultural, economic and political context.

Many factors have been identified in determining the successful adoption of innovative programs. Some of these include : the quality of the innovation, access to information, teacher advocacy, community involvement, funding, and importantly the factors inherent in the trainer who is providing the program innovation. All will ultimately

determine the success or failure of the innovation. Simons (1974) also details several points with respect to the trainer as looked at earlier, including, the knowledge of the trainer, the trainer been culturally aware, be able to use a variety of methods, have a degree of maturity, be aware of their own language idioms and to see him/her self as a catalyst.

Implications of these factors along with the influence of traditional culture and the philosophical basis of education itself whether it be in general or in relation to physical education specifically will be the cornerstone of an increase in the status of physical education. If physical education is to command proper attention and respect in the curriculum then the deliverers of it must be dedicated, backed up by an appropriate framework both in terms of philosophy and strategy. The philosophical base from which the deliverers come must be solid and reflect a committed and dedicated approach. There has to be a belief in physical education as a concept and discipline is to demonstrate its contribution to all societies whether they be established or developing.

This review of literature has established the basis of physical education by initially looking at an historical perspective. This historical view explains the early conceptions and at times misconceptions of the subject area. It is argued that education by the physical and education through the physical have both had their place in the ever evolving area one can term physical education. Central to this development has been the tussle between sport and physical education. Here is evidence of contradiction once again. Gone are the 'halcyon' days and whatever terminology is settled upon the result is one of low priority in the educational arena.

In PNG this is very evident with still limited evidence of physical or sport education programs in the schools. In 1986 physical education was recommended to be compulsory subject in the curriculum. Since this declaration by the Education Department progress at attaining this has been haphazard and disjointed. The National Sports Policy (1993) listed several goals of attainment and one of these was to ensure that physical education be taught in every community school in the country. In 1994 the PNGSC along with the Education Department and sporting associations made a commitment to children's sport in the country via the introduction of an Aussie Sport innovation. Given the circumstances of this innovative program and the issues arising from the literature this study aims to look at the following research objective:

Can a program designed for one cultural and sociological environment be successfully implemented into another ?. In this case, the concept of Aussie Sport into Papua New

Guinea, via the Train The Trainers Workshop. The research questions generated by this are the following :

- Will the quality of instruction and the trainers competency level affect the successful delivery of the training program ?
- Will the characteristics of the target group of a training workshop impinge on its successful implementation ?
- Will the existing perceptions of the community school children about physical education influence the implementation process
- Does a Train the Trainers Workshop effect the successful implementation of the sports program into the community schools