Technical and Vocational Education Training for Sustainable Development in the Secondary Curriculum

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Abstract

This project identified the absence of well-defined TVET policy at the MESC which would contribute to a sustainable and effective managing and implementing of TVET courses at the national and school levels. TVET courses are necessary for individuals as they provide basic skills for lifelong education as well as wage and self-employment. It is regarded by many of its stakeholders as 'second class' rather than a 'second chance' education option. The lack of parental and community participation in the management of TVET courses at the school level has made it difficult for sustainable and realistic implementation. Moreover, indigenous knowledge and skills were not adequately catered for in the TVET courses and thus the graduates were not sufficiently prepared for relevant employment opportunities in Samoan rural setting. There is a need for on-going professional staff development programmes in TVET at the national and school levels. There existed a shortage of appropriately qualified and experienced people to implement TVET courses successfully.

Keywords: (TVET, sustainable, second-chance, lifelong)

Introduction

It is widely recognized that Technical and Vocational Education and Training (TVET) is a crucial component in the development of an individual as well as a nation. This is because TVET encompasses a range of training programmes, courses and activities designed to address personal and national needs. A United Nations Development Program Report on Curriculum Development in the South Pacific (UNDP 1997) clearly stated the great need for Pacific educators to create more relevant curricula in schools. Such curricula should be sustainable and based on the needs and requirements of island nations and be distinct from those of the colonial masters. The Second International Congress on TVET in Seoul, Korea 1999 declared that TVET has a fundamental role to play in preparing young people for employment and a fulfilling life as well as accelerating social and economic development of the country (UNESCO 1999a). The 1976 United Nations Educational Scientific and Cultural Organization (UNESCO) conference on TVET urged the less-developed countries to introduce vocational and technical subjects in secondary schools and other levels of the education system (Network in Education Innovation for Development in Africa (NEIDA), 1982). If the small Island Countries of the Pacific is looking to education to facilitate sustainable development and reduce the unemployment in youths, then it is crucial to improve the provision of TVET in the Pacific region (Wilson 2020).

The theoretical and conceptual underpinnings of the study were informed by the literature on change management, TVET and the fieldwork data. While the conceptual framework of the study took shape as the study unfolded, Fullan (1991) three-stages of the change process -

initiation; implementation; and institutionalization was useful in analyzing the status of TVET in Samoa, particularly looking at the secondary level of education.

There is a perceived need to establish a balance between the traditional academic areas and the practical-oriented vocational subjects. It became clear that vocational-oriented subjects were required not only by technologists, technicians and artisans but also by the majority of pupils who would not proceed further in the formal school system. The initiatives by UNESCO and UNDP led to the development and improvement of many TVET programmes in Pacific Island Countries (PICs) such as Fiji, Kiribati, the Solomon Islands, Tonga, Vanuatu and Samoa (Asia Development Bank, 2008). This was an attempt to ensure student attrition was curbed with opportunities to venture into practical areas which most PICs needed. Nevertheless, TVET in these countries has remained a weak partner in the formal school setting or academic-driven school curriculum (Burnett 1999; Sharma 2000; Aveau 2003). In Samoa, TVET programmes have been upgraded to align with the new technology and the wage employment sector including the focus on sustainable development.

Vocational subjects, however, have remained as optional subjects in the school curriculum. For this purpose, it is appropriate to define TVET in the Samoan context. Technical and Vocational Educational and Training (TVET) is seen in the Samoan context as any formal or informal training that teaches people the knowledge and skills necessary for wage or self-employment opportunities as well as for further education and training (Government of Samoa 2000a).

TVET in Samoa

The three TVET courses offered in schools are relevant to the needs of the Samoan people but teachers were not sufficiently empowered about TVET teaching. Moreover, unavailability of suitable resources hindered its successful implementation. At primary level TVET courses were not offered and hence there was no smooth transition of knowledge and skills from primary to secondary schools.

Samoa's economy backbone is in agriculture, fishery and tourism. As such there is an acute need for more TVET courses in these subjects in the secondary school curriculum. Due to the lack of job opportunities many young Samoan graduates are forced to migrate to overseas countries for better employment opportunities. The teaching and learning process in the classroom is teacher-centered although this is gradually changing to student-centered but continues to be examination-driven. Consequently, TVET does receive the attention it deserves in the school curriculum. Results from this project have significant implications for policy and practice as well as for future developments.

TVET in Higher Education

When this study was under taken the main provider of TVET in Samoa was the Samoa Polytechnic Institute (SPI). It was established in 1963 under the name Western Samoa Teacher's

Technical Institute (WSTTI). It focused mainly on prospective teachers in the Vocational areas. The Institute was upgraded to a tertiary level in 1993 and became Samoa Poly-technical Institute (SPI). SPI was merged with the School of Maritime Training in 1998. The Institute offered TVET courses in management, plumbing, carpentry, auto-motive, engineering and designing, crafting (Government of Samoa (GOS) 2000a; Aveau 2003). In 2006, the SPI merged with the National University of Samoa as the Institute of Technology, and in 2010 it was known as the Faculty of Applied Science that oversees the Schools of Engineering, Nursing and Health Science and Maritime. It continue to offered courses in the certificate and diploma levels. During this time it only catered for students who had completed senior secondary schools up to Year 12 or Year 13. This implied that early school leavers did not have the opportunity to enroll in technical courses. In 2016, the School of Applied Science became the Faculty of Technical Education (FOTE) with a broaden vision and goals in educating young Samoans. Now FOTE continues to offer a variety of courses in Construction, Electro-engineering and Mechanical engineering in the certificate, diploma and degree level (NUS Calendar, 2021). In addition to NUS providing technical and vocational educational training, The Australia Pacific Technical College (APTC) based at Papaigalagala also offered a variety of TVET courses in Carpentry, Air conditioning, Electro-technology, Fashion designing, Plumbing, Tourism and Hospitality, Cookery and Floor Tilling to name a few (https://www.aptc.edu.au/courses/course-fees).

There were also post-secondary technical institutes privately owned by religious organizations. They played an important role in providing TVET training for the early school leavers (GOS 2000a). This was welcomed by parents as students have the opportunity of staying on in school to learn employable skills. Table 1.1 below indicated such privately-owned technical institutes.

Table 1.1: Non-Government Post-Secondary Institutions

Institutes	Location	Owner
Don Bosco College and Vocational Center	Moamoa, Upolu and Savaii	Catholic
Leulumoega School of Arts	Leulumoega, Upolu	CCCS
Sauniatu Agriculture School	Sauniatu, Upolu	LDS
Penehuro School of Arts	Lelata, Upolu	Private
Punaoa Technical School	Faleula, Upolu	Methodist
Uesiliana Vocational Center	Savaii	Methodist
Vaiola College	Savaii	LDS
Congregational Christian Church of Samoa Vocational School	Savaii	CCCS

(Source: GOS - Samoa Polytechnic Corporate Plan 2001-2002, 2000; Batram, 2004; http://www.aptc.edu.au/news, 2019).

Samoa does not have separate TVET schools at the primary and secondary level. However, technical and vocational courses such as Design and Technology (DT), Food and Textile Technology (FTT), Agricultural Science (AS), and Business Studies (BS) have been integrated in the school curriculum as optional subjects for Years 9 to 11. Consistent with UNESCO and UNDP curriculum project, the Ministry of Education, Sports and Culture (MESC) in Samoa extended these vocational courses (DT, AS and FTT) to Years 12 and 13 in the late 1990s but it was not examinable in the SSLC and PSSC until in the late 2000. This initiative was taken to strengthen the range and level of skills of secondary school graduates.

Despite the efforts discussed, TVET continued to receive minimal attention that it deserves in both the primary and secondary curriculum. (Sharma 2000) indicated that some educators, parents and students perceived TVET as a 'second class' rather than a 'second chance' option. This perception is also seen in other developing countries such as Nigeria. (Nwagwu's 1998: 122) study of Nigerian students reveals that both parents and students preferred the Grammar schools, TVET were only accepted as a 'second choice'. A Report by the Commonwealth Secretariat on TVET in the Pacific Region (1986: 29) stated three factors that have accounted for the low status of TVET in PICs. These include the: 1) influence of values inherited from the colonial education system; 2) high status attributed by the community to white-collar employment; 3) different quality of the instruction provided by some institutions. This scenario is reflected in the education systems of many other Pacific countries (Thaman 1993; Afamasaga 2001; UNESCO, 2015). According to (Watson 1994) and (Thaman 1995), this negative attitude

towards vocational education is derived from the idea that formal education promises better employment opportunities.

Examination Oriented Curriculum

The current system of education in Samoa has been described as examination-oriented and irrelevant to local life (Government of Western Samoa 1995a). For years Samoa followed a dual-system structure of education, which separated Junior Secondary Schools (JSS) and Senior Secondary Schools (SSS). The former followed a vocational oriented curriculum, which was generally regarded inferior to SSS. Students who received poorer grades in the Year 8 examination were enrolled in the JSS while those who obtained high marks were enrolled in the SSS. This perception has gradually changed with the education system being mainstreamed and the JSS eliminated.

The Western Samoa Education Strategies 1995-2005 found the dual-system structure "inequitable and inefficient" (Government of Western Samoa 1995a: 12). The curriculum in both the JSS and SSS streams lacked relevance to village life and labor market needs. The dual-stream has been merged into a five-year single stream with the same curriculum and assessment requirements which apply to all government, mission and private schools.

There are three government certificate examinations and one regional. The first is at the end of Primary education and was sat by Year 8 students and were phased out in 2012. The second was at the end of Year 11. The SSC is the third which was taken at the end of Year 12. The PSSC is a regional examination and this was conducted at the end of Year 13. These examinations were considered crucial for students' academic future as it determined the next level of their education. The curriculum has been revised several times; however, it is still NZ-based and examination-oriented and, thus, serves only a small number of Samoan students (Government of Western Samoa 1995a). It is this reason that (Petana-Ioka 1995:14) commented that schooling in Samoa is a 'blueprint' of New Zealand schooling.

The Government of Samoa (GOS) through its Ministry of Education, Sports and Culture (MESC) has worked with overseas donors to upgrade school facilities, improve teacher education, school management, and provide resources for urban and rural areas (Afamasaga 2001). Although a lot has been done to improve the quality and relevance of Samoa education, the problem of unemployment and related social problems, such as school dropouts, burglary and drug taking still persist (GOS 2001). A survey by the GOS Statistics Department in 1994 found that 14,541 of the age group 10 to 34 that resided in the Apia urban area, of which 3,607 or 25 per cent were neither in full time employment nor engaged in full time education. The survey concluded that unemployment existed in both urban and rural areas (GOS 2001). Likewise, a survey by UNDP showed a growing number of youth unemployment, a decline in the school enrolments and a high dropout rate of 16 per cent (GOS 2000b). GOS MESC Education Statistical Digest (2003c: 11) showed similar results for recent years. This is shown in Table 1.2.

The Education Strategies Report clearly stated that the education system in Samoa is examination-oriented and it de-selected students so that only a few reach secondary level (Government of Western Samoa 1995a). The low number of students entering secondary education meant that most school leavers would not have had the basic education to prepare them to undertake further education and training, and perform in the workforce or fit back into the rural and mixed subsistence sector.

School enrolment from 1990-2000 showed the majority of the students who enrolled in Grade 9 dropped out before reaching Year 13. In essence these students returned to the village ill prepared to utilize the resources available owing to the lack of vocational skills taught at the secondary level (Source: GOS, MESC Education Statistical Digest 2003: 13). Furthermore, a report by UNESCO showed that the average number of students who passed the University Entrance examinations and move to universities was about one per cent of the total school age population. Another four per cent were selected to attend local institutions. The remaining students did not find employment and return to the village, disappointed, disoriented and ill prepared both in attitudes and skills (Government of Western Samoa 1984; Lee-Hang 2002).

The DOE Statistical Report (Government of Western Samoa 1995b) made it clear that the performance of students in the National and Regional examinations was very important because it determined who would go to universities and who would enter the workforce. In reality, the majority of students would have to look for work in private or public sectors. However, owing to the shortage of employment opportunities in urban areas and lack of employability skills many return to the villages. They are unable to generate self-employment in rural areas because they are not sufficiently prepared for it (Lee-Hang 2002). Thus, a more vocational-oriented school curriculum seemed appropriate. The government proposed a five-year social economic plan in the early 1970. It challenged the validity of the existing school system. It claimed that the curriculum was unsuitable to the national development needs and to the realistic ambitions that could be attained by Samoan youths (Thomas 1985; Harrison 1973).

Consequently, certain measures have been initiated to help foster changes in order to provide more quality and relevant education so that the students obtain employability skills both in urban and rural settings. In order to accommodate the changes, the GOS introduced its first statement of economic strategy (SES) entitled "A Partnership". The document incorporated the MESC policies and strategies for the period 1995-2005. These policies were designed to build an education system was characterized by ‘equity’, ‘quality’, ‘relevancy’ and ‘efficiency’ (Government of Western Samoa 1995a). The policies aimed at improving special education, teacher education, school facilities, curriculum materials and school management. Additionally, it emphasized the significance of effective vocational and technical training in the secondary and post-secondary levels of education. This project examined the management, implementation and sustainability of TVET courses in the secondary school curriculum in Samoa.

My Interest

My interest in vocational education began when I was a secondary school teacher at a well-established, prominent high school in Samoa. This school is noted for high external examination achievement because of the school structure, qualified teachers. Its environment and resources were conducive to student learning. The school enrolled students from the elite society and competition for high external examination results were high among students. The school's goals were consistent with Samoa's examination-driven curriculum. This system of education seemed to serve the academically-bright students who generally came from good families. The majority of the 'slow' learners either dropped out of school altogether, or enrolled in vocational subjects.

The major concern was that TVET continued to be relegated as an unimportant area of learning. Despite numerous educational reforms to upgrade the standard of TVET, not much improvement had been noticed in the provision of education to adequately prepare school graduates for the world of work in the Samoan context. Often the questions asked are: 1) what are the reasons for this? Are TVET programmes not implemented well? Or is the education system in Samoa directed by wider social, economic and political factors? No doubt the above-mentioned problem is a product of the current education system itself.

The TVET courses at the secondary school level in Samoa need more attention (Sharma 2000; Aveau 2003; Fiji 2000). It has been a component of the secondary school curriculum for many years but its effectiveness in contributing towards a more quality education has not been realized fully (Aveau 2003). To-date there has not been much research on sustainable management and implementation processes. It is towards this end that stakeholders including the MESC, schools and communities with useful knowledge and insights could contribute to the following:

1. Sustainable management and implementation of vocational education and training at the secondary school level in Samoa;
2. Appropriate section of the TVET teaching and learning, assessment and evaluation approaches currently used in Samoan secondary schools, and the ways in which it can be effectively implemented;
3. Samoa with its agricultural and tourist industry needed to offer relevant curriculum to prepare graduate for employment in these fields.
4. Various stakeholders views in regards to TVET courses at the secondary school level.
5. Policies and practices of sustainable TVET management at the secondary school level and how these may be improved to provide quality education; and new knowledge that could complement the Samoan perspectives.

The Samoan Context

Social

Samoans have tended to retain their traditional ways despite exposure to European influences for more than 150 years. Most Samoans live within the traditional social system based on the 'aiga', or extended family group, headed by a 'matai' or a chief. The title of chief is conferred to any eligible member of the group, including women. In addition to representing the family in village and district councils ('fono'), the chief is responsible for the general welfare of the family including the use of family lands and other assets (Meleisea 1992).

The Samoans recognized the value of learning and teaching which they believe enhances family, village and the community. In the village, there are councils or committees such as chiefs and untitled men ('Matai' and 'aumaga'), women's council ('komiti a tina'), and the Sunday school organisation ('Aoga Aso Sa').

These organizations teach men, women and children skills in crafting, hunting, carving, pottery, fishing, cooking, weaving, gardening and health issues. (Malo 1984: 19) illustrated this type of learning and teaching as:

1. realistic and based on life skills and experiences;
2. preparing individuals for their roles in the family, church, and the community;
3. depending considerably on stories and traditions as strategies for helping children to learn about their society; and
4. aiming to preserve the culture and language of Samoa.

Similar to other PICs, Samoan culture, knowledge, skills, customs and vocations are transmitted through observations and in daily village activities (Fanaafi 1957; Thomas 1985; Meleisea 1987b). A great deal of this informal learning continues in the villages today where the 'faa'-Samoa (Samoan way of living) is strong.

Apparently, a great deal of informal training in life skills is done in rural areas. Therefore, life skills such as crafting, carving, gardening, landscaping, flower arrangements, food preservation and canning could be introduced in the schools. Introducing and teaching these skills and techniques could assist the rural community in setting up self-owned and self-managed enterprises to earn their livelihood.

Although Samoa has been changing from traditional way of living to more western lifestyles, the people of the island still have a lot of respect for their culture, traditions and language. It is their unique identity amongst other Polynesian and Pacific Islanders. Including Samoan culture and tradition in the school curriculum has strengthened the younger generation in upholding and maintaining their status and identity. The Samoan language is the dominant language, but English is widely used in education, commercial and government sectors (Mata'afa 2004).

Economic

The Samoan economy is among the fastest growing in the Pacific Island economies, although growth is heavily dependent on a few industries such as tourism and fisheries (GOS 2002c). Samoa's economy is dominated by subsistence village agriculture, which absorbs two thirds of the country's labour force. The main food crops are coconuts, breadfruit, bananas, cocoa and taro. Some progress has been made with measures to diversify the agricultural base and the fisheries sector has shown major growth in the last 5 years and is now the country's biggest commodity export earner (GOS, 2002).

Tourism developed in the 1990s as Samoa's top foreign exchange earner. According to the Human Development Report, the total revenues for tourism in 2004 accounted for 15 per cent of GDP (GOS 2005). The major tourist markets for Samoa are New Zealand (25 per cent) and American Samoa (35 per cent). Many of these visitors are expatriate Samoans returning to visit friends and family, but the number of holidaymakers is increasing (GOS 2002).

Remittances and development aids also play an important role in shaping the Samoan economy. Assistances from aid donors goes into the developments and upgrading of schools, hospitals, roads and government buildings.

The largest foreign owned Multinational Corporation was once Yasaki Samoa which was closed in 2012, a Japanese-owned company processing automotive wires for exports to overseas countries under a concessional market arrangement with the Samoan Government. The Yazaki Samoa Limited employed about 2,000 Samoans, ranging from degree holders to the early school leavers (GOS 2001).There are also other industries such as the breweries, the cigarette company and timber factories that provided employment for the Samoan people.

Samoa's main exports are nonu juice, kava, coconut, taro, banana, coconut oil and beer. New Zealand is Samoa's principal trading partner, providing between 35-40 per cent of the imports and purchasing 45-50 per cent of the exports. Australia, United States of America, American Samoa, Fiji, Japan and China are also other important trading partners (GOS 2002).

Since agriculture remains the bulk of Samoa's economy, the application of new forms of agricultural technology has opened up new opportunities in rural areas. Such a process has implications for TVET programmes in farm management and crops and animals productions. TVET programmes should focus on these areas to equip the majority of students who would be unable to proceed to higher education with the necessary skills to utilize the natural resources that Samoa has in abundance.

Fishing is another important industry. Recently, new methods of fishing and fish conservation have been introduced and are taught in the rural and urban communities by the Fisheries Department. Such courses can also be introduced at the secondary school level. Samoa has attracted a lot of tourists from different countries in the past years. Therefore, courses in tourism and hospitality should be emphasized in both formal and non-formal educational

institutions. TVET has a lot to offer to improve the economy of Samoa in the areas of agriculture, fishing and tourism.

Education

Traditional Education

Vocational education and training began long before the arrival of the first European missionaries; however, it was informal and not institutionalized. Although Margaret Mead's (1943: 634) study of Samoan societies is controversial, she indicated that formal schooling did not exist but definitely there were teaching and learning. She further stated, "Parents taught the children to master their environment, to swim, to climb, to handle fire, to paddle canoe, to judge distance and to calculate the strength of materials". (Petana-Ioka 1995:14) also referred to 'traditional knowledge 'that was passed through generation by 'word of mouth' and through engaging in cultural activities.

The Samoans had for generations taught pragmatic skills in which women and young girls participated in activities such as craft making, weaving, tapa making, pottery, cooking, decorating and tending little children. The young men also learn to fish, hunt, cook, carve and draw by working with their parents or other village adults.

Through these activities, the girls and boys learned about the Samoan culture, knowledge, skills, attitudes and values (Fanaafi 1957; Meleisea 1987b). (Derrick 1957: 21) mentioned these skills were transferred from one generation to another within the family or social group in an "informal way" and was "regulated by custom". Likewise, Fanaafi (1957: 166) also alluded to training that "was intricately bound together with the native ceremonial life-style and had not a common home or schedule". (Taufe'ulungaki 2002: 5) stated that "although it was informal, practical, inter-active and life long, it was considered worthwhile learning". This is the type of education Samoa had in the past. This system of education was "tradition", "the faa-Samoa" or "the Samoan way of life". Malo (1984: 19) articulated these educational groups as: (1) the family; (2) the extended family; and (3) the village or the community.

Mission Schools

The Missionaries introduced a new method of learning and teaching through "reading and writing" (GOS 1997). Basic literacy and numeracy skills as well as History and Geography were conducted in the vernacular in most schools (Keesing 1934). In addition, skills such as carpentry, farming, cooking, crafting and sewing were taught (Derrick 1952; Meleisea 1987a; Kurian 1988). According to (Turner 1962) the missionaries followed the "European model" of education (cited in Cox 1984). The missionaries prospered and before the 1900 almost every village in Samoa had an 'Aoga Faifeau', school managed by the missionaries.

It is important to note that the missionaries emphasized the significance of teaching practical and life skills manifested through schools established from 1800-1900. The London Missionary

Society (LMS) established a school at Leulumoega Tuai where practical skills in carpentry and agriculture were taught. Furthermore, a girls' school at Papauta was established in 1891 to train girls in their roles as mothers and homemakers. They also received secular education in Mathematics, English, Reading, Social Science and Christian Education (Malo, 1984).

Similarly, the Methodist established a Girls' school known as Avoka in 1914. This school became the main centre for training women to become wives of ministers. Courses such as cooking, sewing, decorating, house management and childcare were taught at the Avoka Girls School. In 1922, a school was established at Faleula to teach skills in carpentry, engineering and agriculture.

A Boys' school was also established in Satupaitea, in the island of Savaii for the same purpose (Allardice 1984; 1989). The Latter-Day Saints (LDS) followed in 1916, and developed a secondary school in 1954 with a diversified curriculum that continues to exist today (Cox 1984). Courses in agriculture, woodwork, mechanic, home economics, secretarial studies, and art were taught with the main purpose to train students for the 'world of work'. In addition, academic courses such as English, Mathematics, Science, Social Science and Samoan Language were also part or the curriculum (Cox 1984).

The desire of the Samoan people for material things, goods and "money for church contributions" opened the way for the traders, explorers and colonists, who also played an important role in Samoa's education (Keesing 1934: 401). During the German regime, little development was made in education because they were more interested in their trading operation (Derrick 1952). During their rule, the missionaries continued to run the school affairs (Petana-Ioka 1995). According to Keesing (1934), the German administration paid little attention to the teaching of practical skills. They built the first government school at Malifa to educate children of the expatriates, the Germans, Americans, English and mixed-blooded Samoans for government services. The German Language was taught at Malifa School and selected Mission schools

Government Schools

When New Zealand (NZ) came into power, there was no coordination among the mission schools. Therefore, the first thing they did was to set up a national school system so that all schools (both Missions and Government) in Samoa could be regularized and rationalized. New Zealand also took over most of the schools operated by the missionaries and transformed them into village public schools. Furthermore, they implemented a new system for secondary schools with a school curriculum based on the New Zealand model of education where students were required to sit examinations such as the New Zealand School Certificate and the University Entrance examinations (Mai'ai 1957). English was also made as the language of instruction in all the public schools. In 1922, the New Zealand administration built a government school at Vaipouli, Savaii. In addition, they relocated the Malifa School to Vailima and in 1924 it became an agricultural school. This school exists today, but it is no longer an agriculture school (Keesing 1934). A Teachers' Training College was also established in 1939 to provide training for Samoan

teachers. This was later named as the Western Samoa Teachers' Training College (WSTC), which was instrumental in organizing Home Economics and Industrial Arts in the schools in the early 1980s. The WSTC is now the NUS Faculty of Education and continues to provide education for Samoan teachers. Another government school was established at Vaivase in 1953. Samoa College is highly regarded as one of the best schools on the island. Years later a Technical Training Institute, Marine Training Centre and a Primary Teachers' College were established. Before independence, the secondary education was based on the New Zealand model with imported curricula and teachers. Students sat the School Certificate and University Entrance examinations to qualify for overseas universities and to hold government jobs (Keesing 1934; National Institute for Educational Research, 1986). This system of education attracted many policy makers, educators, administrators, parents and students because of its good reputation.

This meant that young people considered the prospect of working on the land or at sea unattractive and of low of status and the notion reflected the changing attitudes of the time. In part this has accounted for the limited number of students enrolled in TVET courses in secondary schools. Young Samoans today have embraced western ideas and styles which sometimes contradict Samoan culture and values. Nowadays most Samoan school leavers prefer office jobs with high salaries rather than being a farmer, home maker or a carpenter.

The majority of parents' push their children to study English and other academic subjects and not vocational and technical subjects. This mentality has contributed to the low status received by TVET education in Samoa (Aveau 2003).

Formal Education System

Rural JSSs generally have poor facilities, and do not attract the best teachers. As a result, they normally cater for students who are 'pushed out' of the formal system because of low grades in internal and external examinations (GOS 1995c). According to the Education Policies 1995-2005, 50 per cent of students who enter Year 9 at JSSs do not complete Year 11 and only 10 per cent of them are able to access government senior secondary schools (Government of Western Samoa 1995a). In addition, a survey by the Ministry of Youth indicated that the majority of the unemployed youths in Samoa are from the rural JSSs (GOS 2000b). The majority of Year 8 students end up in rural JSSs. This has implications for TVET courses in the primary schools. According to some TVET officials, TVET courses could be offered to Years 7 and 8 students in preparation for the TVET program in the junior and senior secondary schools (Ahhoy-Wright, 2003: 16).

Secondary Education

Secondary education is for five years from Years 9 to 13. It is divided into three years of JSS program from Years 9 to 11 and two years of SSS program, Years 12 and 13. The core and examinable subjects in the Year 11 national examination are Samoan, English, Mathematics, Science and Social Science while Agricultural Science, Business Studies, Home Economics and Industrial Arts are optional subjects. Art and Craft, Music and Physical Education are non-

examinable. By contrast, the SSS curriculum offers Samoan Language and Culture, English, Accounting, Biology, Chemistry, Economics, Geography, History, Physics and General Science. All subjects are examinable in the Year 12 Samoa School Certificate (SSC) and the Year 13 Pacific Senior Secondary Certificate (PSSC) examinations. The Samoan Language and Culture is non-examinable in the PSSC (Government of Western Samoa 1995a). Progress through the secondary system depended on three examinations: the Year 11 National; Year 12 SSC; and Year 13 PSSC now localised and is currently the Samoa Senior Secondary Certificate. In 2002, the government upgraded two JSSs to SSSs, Vaimauga and Siumu districts (Ahhoy-Wright, 2004: 22). A common problem in government and mission SSSs is over crowding due to the limited space and amenities (GOS 2003b).

For years, the Samoan education system had followed the dual-stream structure of education. The dual-stream structure separated the junior and the senior secondary schools with different curricula. For example, the JSSs offered five core subjects, Mathematics, English, Samoan Language, General Science and Social Studies and optional courses (Business Studies (BS), Physical Education (PE), Food and Textile Technology (FTT), Agriculture Science (AS) and Design and Technology (DT). By contrast, the SSS curriculum included English, Mathematics, Samoan Language, Biology, Geography, History, Computers, Economics and Accounting. Three of the SSSs (Samoa, Avele and Vaipouli Colleges) do not offer TVET subjects.

In the past, streaming using Year 8 examination results relegated students with lower grades to JSSs and those with higher grades were enrolled in SSSs. This dual-system was found to be inequitable and inefficient. Furthermore, it was widely considered to lack "relevance to village life and labor market needs" (Government of Western Samoa 1995b: 16). Furthermore, the Year 11 national examination was seen as the gateway to Year 12 in any of the mission or the government SSSs. Usually the government SSSs had better students and better-qualified teachers. By contrast, the below average students were pushed into district junior secondary schools with poor facilities, less qualified teachers, limited resources and poor infrastructure (GOS 2000c; Government of Western Samoa 1995b).

The government acknowledged the inequitable and inefficient dual-stream structure of education. Therefore efforts were made to remedy the problem and streamlined the education system. In doing so, the dual-stream structure was merged into a five-year single stream. This new single stream system of education has been implemented in the government JSSs. This includes the upgrading of all government JSSs to include Years 12 and 13, and improving their facilities, teacher training and teaching materials. Moreover, the curriculum and assessment requirements in the new single stream applied to all secondary school students in both government and mission schools and students in both rural and urban areas take the same courses and participate in the SSC and the PSSC examinations regardless of their academic standing (GOS 2000c).

The Year 11 national examination was used as a selection criterion for Year 12. In 2003, the improvement of some JSSs to include Years 12 and 13 made the Year 11 national examination

redundant. The goal of the new single stream provided for equity, quality, efficiency and relevancy in education. The mission and private secondary schools have since operated in a single stream (Government of Western Samoa 1995b; GOS 2000c).

Tertiary Education

The SSC and the PSSC examinations qualified Year 13 students for tertiary education. The National University of Samoa (NUS), Samoa Poly-technical Institute (SPI) before amalgamation with NUS and the University of the South Pacific (USP) at Alafua provided tertiary qualifications for Samoan students.

The NUS offered certificates, diplomas, and bachelors' degrees in the fields of Arts, Commerce, Education, Science, Mathematics, Nursing and Computing, Technical and vocational education, and Maritime training (Aveau, 2003; NUS Calendar, 2021). In addition, NUS provides seventh-form education, under the Foundation Certificate Program. To be eligible for the Foundation, students must pass English and three other subjects in the PSSC examination. The GOS, MESC Education Statistical Digest (2003c) indicated that in 2001, 34 per cent of Year 13 students who sat PSSC made it to Foundation. Therefore, only one-third of students qualified for further academic education. Project data indicated 52 per cent of the students enrolled in the SPI for training in technical and vocational skills and some took up employment in the public or private sectors. The remaining 14 per cent added to the rising number of unemployed youths in Samoa.

These students "return to the village disenchanted with the education system and forced to work in the plantation, or remain disillusioned in the urban area and join the ranks of dissatisfied and unemployed sector of society" (Lee-Hang 2003: 22). In 2016, 29% of Year 13 students were dropped out of school and it is assumed that they enroll in TVET institutions, or migrate overseas through the Quota scheme become unemployed (MESC Education Statistical Digest, 2016).

Another institution that offered tertiary education is the University of the South Pacific (USP). The USP has its Agricultural Program based in Samoa at the Alafua Campus. The Campus offers diplomas and degrees courses in Agricultural Science. This set-up has taken advantage of Samoa's natural resources and arable land for agricultural activities, which greatly benefit Samoan students because of its accessibility and therefore economical and cost saving to many families. The university also offered diplomas and degrees in other areas including Business Management, Education, Accounting and Computing. Post-graduate and Master courses are offered through the USP's Distance and Flexible Learning (DFL) program. APTC also offered such courses in the certificate and diploma levels. In addition, APTC work closely with TVET schools in the Island of Savaii in providing the necessary services for TVET students.

In the later 2000 there had been an external push for TVET which was reflected in the funding allocated for technical training. Additionally, the establishment of the Samoa Qualifications Authority (SQA) in 2006 added impetus to this change and influencing the mindset of students,

teachers, community and policy makers. Previously, students were channeled towards academic pursuits in the more traditional subjects undermining the technical vocational areas which were deemed more relevant and appropriate for Samoan students to pursue. With the momentum in TVET opportunities for students to be trained in specific careers to contribute towards the country's economic development there was a gradual change in the number of students that enrolled in the TVET programmes. Currently the total number of students that have enrolled in the FOTE has increased. This marked increase in enrolments number attested to the community perceptions that TVET programmes are viable and sustainable for Samoa's economic growth.

TVET and Sustainable Development

The key to a sustainable future is to integrate and align technical and vocational education and training with societal needs and local employment. Education and skills development are essential for preparing young Samoans with the capabilities to secure jobs, drive entrepreneurship, innovation, and economic growth which contribute to the development of the country as a whole. TVET in Samoa has come a long way in ensuring its stability. Although, there is a growing population interest in TVET and a flood of funding is allocated to strengthen and improve TVET at all levels of education, implementation and institutionalization is yet to be fully realized. Therefore, stakeholders in policy making, research, teacher training, resource utilization and curriculum alignment have to work in partnership to ensure the effective application of TVET for sustainable development.

Conclusion

Although schools in most PICs have improved, and more Islanders have access to educational opportunities, problems such as unemployment, dropouts, suicide, the lack of resources, untrained teachers, poor management, poor facilities and inadequate funding are common throughout PICs (Teaero 2002; Thaman 2002; Taufeulungaki 2002; Vanerere 2003). This has implications for the current system of education in Samoa and the Pacific Island countries, which needs to adequately address the problems that PICs face in terms of unemployment and the high level of school dropouts who are left with no vocational skills and knowledge to enable them to enter wage employment or generate self-employment. Long term sustainable development should target TVET areas as these could provide the backbone for the nation's development in terms of its tourism, agriculture, carpentry, plumbing, electrical and mechanic to name a few.

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