

Vocational education and training programs (VET): An Asian perspective

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This paper makes an attempt to provide a review on challenges, outcomes and present situation in vocational education and training (VET) programs in some Asian countries. Various country-specific studies indicate that the VET system has not responded very well in the South Asian region. The VET stream is quite small. Despite there being a growing demand for a skilled labor force, the labor market outcomes of those who have followed the vocational path are not good. However, the governments are giving full attention to making the VET system robust in these countries. Various new policy initiatives have been undertaken by the governments in recent years (*Asia-Pacific Journal of Cooperative Education*, 2013 14(1), 15-26).

Keywords: labor market; vocational education and training; skill development; South Asia

Vocational education and training (VET) focuses on specific trades and imparts the practical skills which allow individuals to engage in a specific occupational activity. VET is not only important in providing employment opportunities to individuals but also helps in enhancing the productivity of firms: "Vocational education and training are indispensable instruments for improving labor mobility, adaptability and productivity, thus contributing to enhancing firms' competitiveness and redressing labor market imbalances" (Caillods, 1994, p.241). VET comprises all skill transfers, formal and informal, which are required in the improvement of productive activities of a society (Carnoy, 1994).

Overtime, various terms have been used to describe elements of the field of VET. These include apprenticeship training, vocational education, industrial arts, technical education, Technical/Vocational Education (TVE), Occupational Education (OE), Technical and Vocational Education and Training (TVET), and Career and Technical Education (CTE) (Maclean & Lai, 2011). Many of these terms are commonly used in specific geographical areas. For example, in Europe, the term VET is in common usage, while in the United States the current term is CTE.

Benavot (1983) describes some perspectives on the rise of vocational education in the world during the early part of the twentieth century, based on a review of literature from sociology and history of education. The most common view relates the rise in vocational education with technological changes produced by the industrial revolution. Due to mechanization of processes, jobs became complex and more specialized, which resulted in a demand for skilled workers. This, in turn, promoted the growth of education that could provide training and skills for technically proficient labor. At this stage, the traditional modes of training became inefficient and skill requirements of old jobs were upgraded. The main aims of the expansion of vocational education during this century were to meet the demands for a technically proficient labor force, integrating children from the lower socio-economic background and training a loyal and disciplined workforce.

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After the mid-twentieth century, independent nations started expanding post-primary education and many vocational training programs were introduced at the secondary level (Benavot, 1983). During the post-World War II period, many international agencies, such as the International Labor Organization (ILO) and UNESCO, played major roles in the development of vocational education. It has been opined that after the Second Industrial Revolution at least three 'ideal models' of the vocational system emerged. One is a market-led system in which a labor market characterized by substantial mobility provides much of the vocational training. Another is a school model where most of the VET takes place in schools. And third is a dual model with the presence of an apprenticeship system (Nilsson, 2010). These models continue to distinguish today's national systems.

In recent years, creation of a skilled labor force has been a challenge in many countries, where there is a growing demand for a skilled labor force which has remained unfulfilled. To meet the requirement for a skilled labor force, more emphasis has been given to the VET programs. This issue has been at the centre of the policy agenda of many national governments, particularly in the South Asian countries. Governments in these countries have initiated various steps towards building a sound VET system.

This paper discusses the current scenario, challenges, outcomes and policy measures taken in VET programs in some of the South Asian countries: Afghanistan, Bangladesh, India and Pakistan. However, from a policy perspective, the case of two other Asian countries, Korea and Singapore, is also discussed. The paper relies on the existing literature and does not attempt to provide comparison among these countries.²

VOCATIONALIZE OR NOT TO VOCATIONALIZE

Whether to vocationalize or not, has remained a debate in the literature (Psacharopoulos, 1987; Abrokwa, 1995; Oketch, 2007), and the relative benefits differ from one country to another. General or academic education is more flexible because it allows a person to change their job easily whereas largely vocational education is suitable for a particular type of work. Vocationally trained workers are more efficient in handling old technologies. However, since technology is unpredictable and changes over time, such workers require frequent training, and general education enables workers to adapt to new technologies (Krueger & Kumar, 2002). VET is important in other aspects such as alleviating mass unemployment, providing specific skills for self employment, preventing mass movement of school leavers from rural to urban areas, and re-orientating student attitudes towards the rural society (Lillis & Hogan, 1983; Tilak, 2002).

Another related issue is the extent to which the education system should be vocationalized. This is important for at least two reasons: firstly, how the required skills will be provided, if not through vocational education, and secondly, given the substantial amount of subsidy allotted to VET programs in many countries, whether the returns on this spending are optimal. These issues are difficult to resolve, and owing partly to data unavailability, have hardly been addressed in the literature. Both the supply side (for example, Where should vocational education be focused?), and the demand side (for example, Who wants to be vocationally trained?) factors are important to identify in these issues. Another macro-element that influences this decision is the availability of job opportunities in an economy.

² This is due to unavailability of data on VET in many of these countries. Moreover, data on VET is not uniform so does not allow comparison across the countries.

VET IN ASIAN COUNTRIES

In the Asian countries, experiences of the outcomes of VET are mixed. The policies undertaken by the governments have played a major role in these countries. Japan, Korea and Singapore are the best examples of the VET system being well established. In these three countries, the VET system has contributed significantly in the process of economic development (ADB, 2004; Cantor, 1985). As Ul-Haq and Haq (1998) argued in the *Human Development Report in South Asia 1998*:

[v]ocational and technical education is a passport to better employment opportunities. This is the experience of Japan the East Asian industrializing tigers where unemployment rates have remained consistently low, both because their populations possessed employable technical skills and because of the high economic growth rates that these skilled populations engineered. (p. 96)

Indonesia, Malaysia, Philippines, Thailand and Sri Lanka have 'fairly developed' VET systems, whereas Bangladesh, China, India, Myanmar, Nepal and Pakistan have 'patchy' VET systems (Tilak, 2002). In most of the South Asian regions, the system has not been successful:

The system of vocational and technical education in South Asia is thus characterized by low enrolment, high drop-outs, poor-quality of teachers, inequitable access for women and rural populations, limited private sector involvement, and very inadequate budgetary allocations. In other words, technical training in South Asia is neither supporting a high economic growth rate, nor expanding global markets, nor increasing employment opportunities. The whole system requires fundamental review and restructuring. (Ul-Haq & Haq, 1998, p. 100)

The following section will discuss the cases of the Asian countries of Afghanistan, Bangladesh, India, Pakistan, Korea and Singapore.³

AFGHANISTAN

According to the *Afghanistan Human Development Report-2007*, Afghanistan is ranked 174 out of 178 countries (Wardak, Saba & Kazem, 2007). The youth literacy rate (15-24) of the country is 39 per cent and for females it is only 29 per cent. The rates of unemployment and under-employment are in the range of 25 to 30 per cent, and 70 per cent of the unemployed population have no or very few skills (World Bank, 2008b). In 2001, there were 38 TVET schools with 550 instructors and 1,510 male students. In 2008, 51 vocational schools were active in 22 provinces. Enrolment in technical and vocational education had increased from about 9,000 in 2006 to 16,000 in 2008 with a 16 per cent share of female students.

The TVET system in Afghanistan is particularly important to rebuild the country since the conflict in the past decades has destroyed the country's training infrastructure. There is an absence of a well-educated and trained labor force and for this reason the growing demand for skilled labor is being met largely by neighboring countries. A weak institutional and policy environment, poor outcomes and weak market linkages, disparities in access to

³ This paper uses a country-specific term (which is in common usage in that country) for VET.

educational facilities across gender, geography and population subgroups, and inadequate financing for training and infrastructure facilities are the key issues in the training system (World Bank, 2008b). Teachers are not adequately trained and many of them have little exposure to changes in technology or other advances in their field. The shortage of teachers is another concern: there were only 674 TVET teachers in 2008 (Islamic Republic of Afghanistan, 2007).

A recent report, *Afghanistan TVET Providers Inventory*, produced for review by the United States Agency for International Development (USAID) raises some other issues in the TVET system such as weak linkage with market needs, under-utilization of on-line and international resources, and low women's participation (USAID, 2011). A large proportion of females in TVET are in the informal sector, participating in training in more traditional female occupations like sewing, handicrafts, carpet weaving and beautician services.

Every NGO is teaching women to sew and giving them sewing machines at the end of training.... There are so many women sewing that there is no one left to sell to: women just sew for their own families now. (USAID, 2011, p. 21)

There is a need to identify new skill areas in which there is unmet demand in the country. Not as much emphasis has been placed on training in emerging occupations and skills.

According to a donor representative, every public hospital has a room full of non-functioning medical equipment that has been purchased over the past 10 years with donor funding. The cost of importing repair people from Germany, the U.S., India and Japan (where the equipment is manufactured) is prohibitive. This presents an excellent opportunity for demand-driven TVET. Unfortunately, there is currently no training program teaching Afghans how to calibrate, maintain or repair this delicate equipment. Similar examples exist for other types of modern equipment. (USAID, 2011, p. 21)

Of late, the Ministry of Education of the Islamic Republic of Afghanistan has developed a National Strategic Education Plan (NSEP) 2010-2014. The plan sets out the policies and objectives of the education system of Afghanistan which will be attained during the next five years. The plan is structured around five priority programs designed for permitting the Ministry of Education to achieve the main objectives of the education system, one of them being TVET. The goal of the TVET program is to provide relevant and quality technical and vocational education for both males and females in order to enable them to meet the requirements of the labor market (Islamic Republic of Afghanistan, 2007).

The objective of the program is to increase access to technical and vocational education by expanding TVET regional institutes from 16 to 32, increasing TVET provincial schools from 32 to 102, and establishing 364 TVET district schools by 2014. The number of students in technical and vocational education will also increase to 150,000 with 30 per cent being female students. In addition, the Ministry will promote the establishment of private TVET centers and will support major industries to set up training units within the industries in close collaboration with chambers of commerce where students in grade 9 can enroll and obtain vocational training. The Ministry will, through public awareness, also encourage the enrolment in TVET of girl students and students from rural areas (Islamic Republic of Afghanistan, 2007).

BANGLADESH

The level of education in Bangladesh has remained low. The literacy rate was 56.5 per cent in 2009; however, the country has made remarkable progress towards increasing both primary and secondary school enrolment. This progress has been attained despite a high poverty level in the country. A large section of the population continues to live on subsistence farming in rural villages. A survey report by the Bangladesh Bureau of Statistics (BBS, n.d.) shows that the labor force in the country has increased from 49.5 million in 2006 to 53.7 million in 2009.⁴ The unemployed population rose from 2.1 million to 2.7 million from 2006 to 2009 (BBS, n.d.).

The Directorate of Technical Education was established in 1960 for the development of technical and vocational education. Later, in 1969, the Bangladesh Technical Education Board (BTEB) came into existence for organizing, supervising, regulating, controlling and developing technical and vocational education. There was a total (public and private) of 3,116 technical and vocational education institutions with 20,703 teachers and 453,375 students (23.62% female enrolment) in 2008.⁵

There is a scarcity of skilled labor; people with technical or vocational qualifications are in short supply. One of the main problems is lack of linkages between employers and the job market. The training institutes are not able to produce skills required to fulfill the market demand (CPD, 2001). Also, the quality of graduates is not good. In Bangladesh, 80 per cent of employed population is associated with the informal sector. Though the unemployment rate of the country is low (5%), the main problem has been the high underemployment rate which is more than 28 per cent (BBS, n.d.). Underemployment rates of females are higher than those of males both in rural and urban areas. Given these facts, too little attention is paid to the training programs needed in the informal sector.

A World Bank report states that the capacity utilization in the VET system is low; half of the student capacity is not utilized (World Bank, 2007). Although reliable estimates are not available, a tracer study of labor market outcomes finds that only 9.7 and 5.2 per cent of males and females, respectively, were employed after completion of the course.⁶ About 47 per cent were unemployed and 45 per cent were pursuing higher education. Wages of graduates of the VET system are also low compared to those with graduating from general education. Financing of VET is also a problem due to their high cost, with the unit cost being three times higher than that of general higher education. A key contributing element for the high cost is the low student-teacher ratio. The large fixed and recurrent costs of machinery, the constant need for consumables, and a scholarship scheme provided to the large majority of students are some other reasons for the high cost of training.

However, due to skills mismatch and increasing overseas employment, there is a need for investment in the vocational system. The report suggests that the government should focus on improving the efficiency of the system rather expanding it. The development of a clear policy statement for the VET sector should be an immediate priority for the government (World Bank, 2007).

⁴ The labour force comprises economically active population consisting of persons (aged 15 and above) employed for pay or profit during the specified week, plus persons who sought work during that week, the underemployed.

⁵ Ministry of Education, Government of the People's Republic of Bangladesh.

⁶ Although this tracer study is useful in examining performance of vocational graduates, but it should not be seen as a substitute for a rigorous impact evaluation.

INDIA

VET programs in India have gained much greater attention in the past few years. The programs are in the main policy agenda of the government. During the Eleventh Five Year Plan (2007-12), a major 'Skill Development Mission' with an outlay of Rs. 228 billion was launched (Government of India, 2008, p. 91). VET programs are aimed at creating employment opportunities and imparting suitable skills for self employment, particularly in the rural and unorganized sectors.

There are 17 ministries/departments which administer VET programs; the Ministry of Human Resource Development and the Ministry of Labor and Employment (MoLE) are the major ones. The programs are offered at secondary and higher secondary levels. Some programs are also offered at pre-secondary level. Vocational education is offered at school level in grades 11 and 12 in the formal schooling cycle. Vocational training includes institution-based training programs which fall outside the formal schooling cycle, and is mainly provided through public Industrial Training Institutes (ITIs), private Industrial Training Centers (ITCs) and polytechnics (both public and private).

The Directorate General of Employment and Training (under the MoLE) initiated the Craftsmen Training Scheme (CTS) in 1950 for providing skills in various vocational trades to meet the requirement for skilled manpower in the country and initially 50 ITIs were established. The oil boom in West-Asia during the 1980s increased the demand for skilled manpower in those regions resulting in the establishment of many new private training institutes, particularly in the southern part of the country. In 2011-12, there are about 9000 ITIs/ ITCs having a capacity of more than 1.2 million students under the MoLE. There are 1244 polytechnics with a capacity of more than 295,000 students under the Ministry of HRD (Government of India, 2008, p. 88).⁷ In addition, a number of institutes are involved in providing training for the informal sector under various ministries. Some of these are Community Polytechnics, Jan Shikshan Sansthan and National Institute of Open Schooling. Agencies like Khadi and Village Industries Commission, Entrepreneurship Development Centers, Department of Women and Child Development, and National Renewal Fund also run some training programs.

According to the employment and unemployment survey of 2004-05 conducted by the National Sample Survey Organization (Government of India), in the age group age 15-29 years, about 2 per cent of the population are reported to have received formal vocational training and another 8 per cent are reported to have received non-formal vocational training (Government of India, 2006). At present, the capacity in the VET programs is 3.1 million students per year. The government has set a target of up-skilling 500 million people by 2022.

However, the VET programs have also not been very successful in India. An ILO efficiency/impact evaluation study of the ITIs and ITCs, in three states of the country (Andhra Pradesh, Maharashtra and Orissa) shows that the labor market outcomes of the trained candidates are not good. The study finds that in the states of Andhra Pradesh, Maharashtra and Orissa, 41, 35 and 16.2 per cent of graduates, respectively, from ITIs were able to get wage employment/self-employment/joined family business. The corresponding percentages for those graduating from ITCs were 22.8, 35.6 and 21.3 per cent, respectively (International Labor Organization ILO, 2003, p. 31).

⁷ The number given for polytechnics is only for those who offer diploma courses in engineering. In addition, there are 415 institutions for diplomas in pharmacy, 63 for hotel management and 25 for architecture courses.

A World Bank report on skill development in India (World Bank, 2008a) also mentions other various issues in the Indian VET system. The report points out that more than 60 per cent of all graduates remained unemployed even three years after completion of a course. Public training institutes are not able to fulfill their role in producing skills for the informal sector. There are several challenges in the existing system: quality and financing of the system, an ineffective funding model, strong mismatch between demand and supply side factors, and lack of match between labor market needs and vocational courses. The report suggests that the major reforms in different areas are required before expanding the VET system and making the system more responsive to the need of the labor market.

A recent study shows quite a high rate of unemployment (11%) for VET holders in the age group 15-29 years at the secondary level (Agrawal, 2012). Although the unemployment rate of VET holders is higher than the overall unemployment rate in the same age group, the rate is lower than that for general secondary graduates. The study also finds that average daily wages are higher, both for regular and casual workers, for VET holders.

In recent years, the government has taken many initiatives such as encouraging public private partnership, upgrading of ITIs into centers of excellence with the World Bank assistance and skill development initiative scheme.

PAKISTAN

The vocational and technical education stream in Pakistan is quite small. There are about 315,000 students enrolled across 1,522 technical and vocational education and training (TVET) institutes (National Vocational and Technical Education Commission [NAVTEC], 2009). Enrolment in the vocational and technical training institutions was planned to be raised to one million by 2010; a four-fold increase over 2005. Vocational institutes offer courses that vary from three months to two years in length, after grade 8. Vocational education is provided through polytechnic, vocational training centers, apprenticeship schemes, and various training and vocational institutions.

TEVT in Pakistan is structured on a bi-layered pattern, at Federal level there is a National Vocational & Technical Training Commission (NAVTEC) while at the provincial level there are Technical Education & Vocational Training Authorities (TEVTAs). The programs are administered by a number of federal, provincial and private agencies; vocational institutes are managed by the Provincial Education Department while Technical Training Centers and Apprenticeship Training Centers are administered by the Provincial Labor Departments.

Skill development has been among the most neglected areas in Pakistan. The country has not been able to improve vocational and job skills (Kemal, 2005). There are five main challenges in vocational education in the country. The first is the shortage of teachers: 30-40 per cent of teaching posts are lying vacant and teachers do not have enough industrial experience. The next is course curriculum: most text books are imported and in the English language, the curriculum followed in the institutes is out-dated and the examination system is mainly theory oriented. The teaching and learning materials are of not good quality, and drop-out rates from the institutes are very high. Finally, there is a lack of linkages between schools and industry (Amjad, 2005; Shah, 2010).

Recently, the National Vocational and Technical Education Commission (NAVTEC) of Pakistan developed a seminal policy document *Skilling Pakistan: National Skills Strategy 2009-2013 (NSS)* (NAVTEC, 2009). The NSS has three main objectives: the provision of relevant

skills for industrial and economic development; the improvement of access, equity and employability; and the assurance of quality through an integrated approach. The government is planning to set up additional technical and vocational institutions and increasing the enrolment in institutes.

KOREA

VET has played an important role in Korea's economic development by producing a skilled labor force. Vocational education and training are separated in the country. Vocational education is provided under the formal education system (under the Ministry of Education and Human Resources Development) at the secondary level by vocational high schools and at the post-secondary level mainly by junior colleges. Vocational training is carried out as non-formal training and comes under the Ministry of Labor. Vocational high schools offer three year programs and fall into the following major categories: agriculture, technology-industry, commerce, fishery and marine transportation, and comprehensive vocational. Junior colleges mainly provide two year programs that lead to a diploma or associate degree (Government of Alberta, 2009, pp. 37-39). In 2007, there were 702 vocational high schools which accounted for slightly less than one third of the total high school enrolment and 148 junior colleges (Chae & Chung, 2009).

In the past, Korea's VET has contributed substantially to economic and social developments but the country is facing profound changes with the arrival of the knowledge based economy and global competition (Chung, 2010). Mismatch between demand and supply, low participation rates of adult workers in education, linkage between school and industry and rigidity and linkages of VET System are some major issues in the current VET system. An earlier study by Tzannatos and Johnes (1997) had also noted some of these problems. The study mentioned that the curriculum does not match well with the requirements of the economy and is not flexible across regions with differing needs. There has been a shortage of skilled technical workers within the manufacturing sector. The quality of vocational education is also not high.

A study by Chae and Chung (2009) finds that the status of VET system in the country is deteriorating. Higher education is gaining much importance and general education is becoming more attractive for students and their parents. Only 20 per cent of the vocational high school graduates enter the labor market directly, whereas 70 per cent continue with higher education. Their findings indicate that the current vocational high schools are not associated with better labor market outcomes in terms of employment rate and wage levels. Still, the role of public vocational training cannot be neglected in order to supplement any market failure in the supply of labor. The study finds that the VET institutes are important in supplying technical labor to small and medium enterprises.

SINGAPORE

In the economic and educational successes of Singapore, its education and training system has played a vital role.⁸ Singapore (and Korea) gave considerable attention to upgrading workers on the job. For example, they introduced training levies to induce enterprise interest in worker training (ADB, 2004, p. 21). Singapore's system of Vocational Technical Education

⁸ Seng (2008) and Mun (2008) provide a comprehensive overview on role of vocational education in economic development of Singapore.

(VTE) is a 'world-class model' today (Seng, 2008, p. 129). In 1964, the government established the first secondary vocational schools, initially with an enrolment of 4910 students (Boon & Gopinathan, 2008, p. 18). These were students who did not pass the primary leaving examinations to enter into academic secondary schools. During the 1970s, several ITCs and vocational institutes were opened.

In order to attract the multi-national companies (MNCs) and developing a strong manufacturing sector to solve the unemployment problem, it was important for the government to ensure that the requisite skills were in place. The government followed the systematic policies and recommendations to upgrade education at various levels. For example, "as a way of tackling the 'drop-out problem' and the difficulties encountered by those students who were not 'academically inclined', it was decided that the less 'academically-able' students would now have a vocational route within the education system" (Ashton, Green, James, & Sung, 1999, p. 38). The government has undertaken various reforms from time to time. An interesting innovation was the introduction of a scheme in 1993 similar to voucher system to further subsidize education and training (Tzannatos & Johnes, 1997). According to this scheme, the Ministry of Education makes a regular payment into an EduSave account for each child aged between 6 to 16 years. Parents may use the resources provided by this account to buy whatever additional education they want for their child.

Technical and polytechnic education in the country is not just as a terminal, industry-ready exit qualification but it is also seen as a viable alternative to a junior college education for progression to the university. For instance, many students and their parents opt to enroll in a polytechnic because they prefer a practice-oriented education to an academic one at a junior college. Others choose for polytechnic education because of the wide range of programs and courses offered in these institutes which lead directly to employment opportunities. These include programs in new fields such as design, interactive and digital media, biomedical and life sciences, and hospitality and tourism management. The government maintains the separation between polytechnics and universities (higher education) in order to keep their distinctive focus. Employer demand for high and semi-technical skills, and their feedback to the government is that the polytechnics are best placed to provide these skills. Education through polytechnic has been the 'backbone' of Singapore's industrialization. These institutes have a very clear mission: to train and produce technologists and middle level professionals to support the economic, social and technological development of the country (Mun, 2008, pp. 136-139).

The employment rate of the graduates has been consistently high and was at 90 per cent in 2005 (Seng, 2008). Returns to vocational/technical education are also slightly higher than those with secondary formal education (Sakellariou, 2003).

The experience of Singapore has shown how the Institute of Technical Education (ITE), which is recognized as a world-class institution focusing on VTE, has been successfully transformed into a world-class post-secondary educational institution. Since independence in 1965, VTE has evolved in response to the various phases of economic development.

As the economy restructured and moved from labor intensive to capital intensive, and then to knowledge intensive, the VTE system responded to ensure that the workforce had the relevant knowledge, skills, and values. The educational and training systems were reviewed, upgraded, and

remodeled to stay relevant and responsive to the needs of school leavers, industry, and community. (Seng, 2008, pp. 132-133)

VTE college education created by the ITE is widely recognized locally and globally for its relevance, quality, and values in a world economy.

CONCLUSIONS

The discussion above indicates that while in most of the developed countries in the Asian region, VET system has played a major role in their economic development, in the South Asian region, specifically in developing countries like Afghanistan, Bangladesh, India and Pakistan, the VET system has not been very successful. Though governments in these countries have paid much more attention to this sector in the past few years, outcomes are still poor. The VET system is facing several challenges; quality of institutions and lack of linkages between VET providers and industries are two major problems.

What is more surprising is that the VET system in the South Asian countries has not improved in the last decades despite the widespread recognition of the system. As rightly pointed out by Ul-Haq and Haq (1998) more than a decade ago:

The vocational and technical education programs in South Asia are often inadequate, irrelevant, and qualitatively poor. There is perhaps no other field in education that requires from South Asian policy-makers more fundamental rethinking, sweeping reforms, and extensive change. (p. 96)

Since all the South Asian countries are expanding the VET system, it needs to be ensured that expansion in quantity does not result in decline in quality of the system. Governments of these developing countries may look at the policies that have been put in place in developed countries like Singapore to strengthen the system to be responsive to market needs. Because of globalization and technical changes, there is need for a skilled workforce and many countries are already facing the problems resulting from an unskilled workforce. VET programs could serve this purpose by providing the marketable skills to individuals.

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About the Journal

The Asia-Pacific Journal of Cooperative Education publishes peer-reviewed original research, topical issues, and best practice articles from throughout the world dealing with Cooperative Education (Co-op) and Work Integrated Learning/Education (WIL).

In this Journal, Co-op/WIL is defined as an educational approach that uses relevant work-based projects that form an integrated and assessed part of an academic program of study (e.g., work placements, internships, practicum). These programs should have clear linkages with, or add to, the knowledge and skill base of the academic program. These programs can be described by a variety of names, such as work-based learning, workplace learning, professional training, industry-based learning, engaged industry learning, career and technical education, internships, experiential education, experiential learning, vocational education and training, fieldwork education, and service learning.

The Journal's main aim is to allow specialists working in these areas to disseminate their findings and share their knowledge for the benefit of institutions, co-op/WIL practitioners, and researchers. The Journal desires to encourage quality research and explorative critical discussion that will lead to the advancement of effective practices, development of further understanding of co-op/WIL, and promote further research.

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Typically, authors receive the reviewers' comments about a month after the submission of the manuscript. The Journal uses a constructive process for review and preparation of the manuscript, and encourages its reviewers to give supportive and extensive feedback on the requirements for improving the manuscript as well as guidance on how to make the amendments.

If the manuscript is deemed acceptable for publication, and reviewers' comments have been satisfactorily addressed, the manuscript is prepared for publication by the Copy Editor. The Copy Editor may correspond with the authors to check details, if required. Final publication is by discretion of the Editor-in-Chief. Final published form of the manuscript is via the Journal webpage (www.apjce.org), authors will be notified and sent a PDF copy of the final manuscript. There is no charge for publishing in APJCE and the Journal allows free open access for its readers.

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Research reports should contain; an introduction that describes relevant literature and sets the context of the inquiry, a description and justification for the methodology employed, a description of the research findings-tabulated as appropriate, a discussion of the importance of the findings including their significance for practitioners, and a conclusion preferably incorporating suggestions for further research.

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