ISSN 2210-1543

Int. J. Ped. Inn. 2, No. 2 (July 2014)

# Towards Improving the Quality of Technical and Vocational Education and Training in Bahrain

## Osama Al-Mahdi

Bahrain Teachers College, University of Bahrain, Bahrain

Received: 12 Feb. 2014, Accepted: 3 April 2014

Abstract: This article gives an overview of the technical and vocational education and training (TVET) system in Bahrain and proposes suggestions for improving the quality of TVET based on the international standards. The article begins by presenting a brief introduction about the demography, economy and the labour market in Bahrain. Then, it discusses the structure and organizations of the country's education and training systems. Next, it highlights the main challenges currently facing TVET by illustrating the results of the four Bahraini TVET schools in the Quality Assurance Authority (QAA) review report. Then, the article presents some examples of the initiatives currently taken by the Ministry of Education (MoE) for improving TVET. The article concludes by outlining proposed suggestions for improving the quality of TVET in Bahrain by drawing on international recommendations presented by (1) the European Training Foundation and The World Bank Report (2005) on reforming TVET in the Middle East and North Africa, (2) the principles of efficient TVET proposed by the Management and Training Corporation Institute (2010) in the United States, and (3) Jay Rojewski's TVET framework (2009). The proposed suggestions are adapted to the Bahraini context, they emphasise the following elements of TVET: developing TVET framework, involvement of the private sector, improving accountably, diversification of funding, decentralisation, and improving the effectiveness of teaching and learning.

Keywords: Technical, vocational, training, educational reform, quality of teaching and learning, TVET framework.

recymords. Technical, vocational, training, educational felorini, quanty of teaching and featining, 1721 framework

# 1. Introduction: Demography, Economy and the Labour Market

The Kingdom of Bahrain is an archipelago of around 36 islands situated between Saudi Arabia's east coast and the Qatar peninsula. The total area size of Bahrain is approximately 757,50 Sq. Km. The total population is around 1,195,020 (48.5% Bahrainis, 51.5% non-Bahrainis). The percentage of males is 51% and females is 49% in the Bahraini population. For non-Bahrainis, males are 73% as they constitute most of the foreign working labour in comparison to 27% for females. The annual rate of population growth amounts to 2.1%. The density of population in Bahrain is very high with 1,461 people per square km (Central Informatics Organization, 2010).

Bahrain is considered as a youthful country in terms of its population. Those who are less than 20 years of age constitute around 42% of the population: 51% males and 49% females, whereas the percentage of

people who are 50 years of age and over is 14% (Central Informatics Organization, 2010).

Bahrain was one of the first countries in the Gulf region to discover oil and benefit from its production. During the 1970s and early 1980s, the oil price boomed in the region and consequently Bahrain experienced a rapid economic growth. Although Bahrain's economy is small when it is compared to other Gulf Cooperation Council (GCC) countries – with a GDP of 26.9 billion US\$ and a GDP Per Capita of 21.345 US\$ - however the country is rapidly developing and it is well known in the global economy as a promising financial centre. Bahrain also scored high in human development indicators. It ranked 48 out of 187 countries in the Human Development Index in 2012 (United Nations Development Programme, 2013).

The economy in Bahrain relies on petroleum revenues and it has a large public sector. Revenues from oil and natural gas currently account for 11.1 % of the GDP and they provide about 76% of the

E-mail: Oalmahdi@uob.edu.bh



Government income (United Nations office in Bahrain, 2010). The petroleum production and refining industries and the financial sector is the largest employers and the largest contributors to the GDP. In recent years, the government has moved towards diversifying the economy. The Kingdom at present has significant tourism, industrial-trading, construction and ship-repairing sectors (International Labour Organization, 2010). These efforts reflect a series of investments and trade policies by the government. The expanding banking centre is the main component of the country's economic diversification strategy consequently the largest component and contributor to GDP at 27,6%. With its highly developed communication and transportation facilities and strong regulatory system, Bahrain has become home of many Islamic financial institutions and multinational firms (United Nations office in Bahrain, 2010). However, Bahrain is currently facing various challenges such as the need to diversify more into other economic resources, rapid population growth, high proportion of youth and the dependence on foreign labour which increases the pressure for job creation. These challenges pushed for the need of more and better training and education for the Bahraini youth.

The following official statistics illustrate the current situation of the labour market in Bahrain:

- The total number of employed people in Bahrain is 487,735. The labour force is around 19% Bahrainis and 80% non-Bahrainis. The labour force participation rate in Bahrain for females is 39,4% while males' participation is 87,3%. The employment to population ratio is 72,2% (Ages 25 and older) (United Nations Development Programme, 2013).
- There are 32,572 people working in the public sector, approximately 82% of them are Bahrainis, and 18% non-Bahrainis. In the private sector there are 422,335 employees, 16% of them are Bahrainis, and 84% non-Bahrainis. In addition to 32828 non-Bahraini domestic workers (Labour Market Regulatory Authority, 2011).

In 2011 the Central Bank of Bahrain reported that the financial services sector employed over 14,300 people, with more than 9,000 Bahraini nationals employed (around 65% of the financial services sector workforce). The Conference Board, an independent U.S. organization, indicated that Bahrain's labour productivity was five times that of the GCC average (Economic Development Board, 2013).

Unemployment among Bahraini nationals will remain a concern. The current unemployment rate is

4%. The private sector is continuing to depend on foreign labour. Expatriates, mainly from South and South East Asia account for nearly 60% of the labour force who tend to work in lower-paid jobs (International Labour Organization, 2010). In an effort to boost Bahraini employment in the private sector, the government introduced the Bahrainization polices. The government is seeking through this policy to expand employment opportunities for Bahrainis by promoting private-sector growth.

A study carried out by McKinsey & Company (2007) has analysed the issues of expatriate workers and the Bahrainization programmes in the country and tried to find possible solutions for labour market asymmetries. The results of McKinsey's study indicated that there are obstacles that hinder the labour market reform projects they are mainly: the inadequate workplace skills among Bahraini jobseekers, their unwillingness to take up unskilled work, and reluctance of some employers to recruit Bahrainis (International Labour Organization, 2010).

# 2. The structure and organizations of Bahrain's education and training systems

Bahrain was the first member of the Gulf Cooperation Council to introduce formal education in the region, establishing the Gulf's first public boys' school in 1919 and the first girls' school in 1928. Schooling is free and compulsory for all Bahrainis. Governmental schools are single-sexed, higher education institutes are coeducational. The kingdom is among the highest countries in the region in adult literacy rate with about 87% percentage. Almost 11% of all government expenditure is directed towards education (Economic Development Board, 2013).

The Constitution of Bahrain (Bahrain Institute for Political Development, 2002) stipulates that the State guarantees educational services to its citizens. According to Education Law No. 27: basic education – that is nine years of schooling – is compulsory and free of charge. The law provides that education is a right guaranteed to all citizens. The MoE is responsible for the administration of public schools in the country (International Bureau of Education, 2011). MoE is also the highest official authority of higher educational institution, mainly: University of Bahrain, Arabian Gulf University, Bahrain Training Institute, Bahrain Polytechnic, and Bahrain Teachers' College.

The structure and organization of the educational system in Bahrain is divided as follows:

Pre-school education



- Primary education (Cycle 1 grades 1 to 3 and Cycle 2 grades 4 to 6)
- Intermediate education (Cycle 3 grades 7 to 9)
- Secondary education (grades 10 to 12)

The Secondary education in Bahrain lasts for three years. A unified tracks system was generalized in 2009 to replace the separate track system (general, science, literary, and commercial). A Vocational apprenticeship program was first introduced in the academic year 2007/08 in secondary schools and has been expanded since then. The credit-hour system is applied in this level: 156 credit hours for scientific, literary, commercial, and applied studies tracks; and 180 credit hours for the technical track (International Bureau of Education, 2011). In 2012-2013, the numbers of students in the four TVET schools in Bahrain were as follows: in the technical education branch 723 students, in the vocational education 363 students, in the GSVEC - technical 4735 students, and in the GSVEC - commercial 1149 students (more details about the TVET schools will be presented in another section).

The organizational structure of school consists of the school principal, the assistant principal, administrators, senior teachers, teachers, social workers, learning resources specialists and others. The Directorate of Curricula in the MoE is responsible for the curriculum development for all educational levels. For examples, the curriculum framework in TVET schools is based on an approach that aims to:

- Provides a planned programme of vocational skills development and work practice for a student
- Assists the student in career exploration and selection of a career focus
- Teaches job skills that relate to the student's career focus
- Links school-based learning and work-based learning
- Teaches foundation skills, such as positive work attitudes and interpersonal skills
- Provides opportunities for students to participate in structured workplace learning and to apply vocational skills and knowledge gained in the school-based programme (Ministry of Education, 2012).

The MoE's criteria for appointment of teachers include the following: Teachers having at least BA / B.Sc. in the major subject plus a diploma in Education, passing a test in the specialised subject, must be proficient in English and Arabic, and passing a job interview.

Working conditions are similar for both male and female teachers with regard to salary, number of teaching periods, students, promotion prospects and occupational development. However, TVET schools are only for male students and they only appoint male teacher staff. As for the teachers' salaries, a newly appointed teacher starts on grade 3 and moves to higher grades through professional development programme (as accomplishment of more training hours can help the teacher in promotion). Teachers can also be promoted into higher positions (e.g. senior teachers, assistant principals, and school principals). Teachers in TVET schools teach 24 periods a week. They are subjected to regular official evaluation which seems to focus on their occupational behaviour more than their teaching competence. The MoE is currently introducing the Practice Management System (PMS) to improve the quality of teachers' evaluation. The number of students in each class is limited to a maximum of 30. Students to teacher ratio is 30:1 in academic subjects and 12:1 in practical subjects.

## 3. Challenges facing TVET in Bahrain

The Quality Assurance Authority for Education and Training (QAA) was established in 2009. It is responsible for reviewing and assessing schools, universities and training institutes as well as conducting national exams. The QAA has four main review units responsible for: schools, vocational education, higher education and national examinations. This section highlights some of the main challenges and opportunities for the four TVET schools in Bahrain based on the recent (QAA) review reports (Quality Assurance Authority, 2013).

School 1: Jidhafs Technical Secondary Boys School is a government school established in 1969. There are around 1000 male students (age 16-18, grades 10-12), 15 administrative staff, 15 technicians, and 142 teachers. The QAA review (2013) indicates that the school's overall effectiveness is 'satisfactory' and it has a 'good' level for capacity to improve. The school achieved satisfactory level in students' academic achievement as the students have made good progress in the MoE examinations with better performance in practical subjects than theoretical subjects. They also made good progress in personal and behavioural development. The quality and effectiveness of teaching and learning were also considered 'good' as the teachers varied in their use of teaching strategies. The quality of the curriculum, the support and guidance for students, and the effectiveness of leadership and the learning resources and environment were



considered as 'good'. The school did not achieve 'outstandingly' in any area. The QAA report recommended that in order to improve, the school should focus more on enhancing students' performance in the theoretical subjects and provide more support for low achieving students. The teachers need to improve the learning and teaching process through developing the basic skills of the students especially in the English language, using different assessment methods and having better time management skills.

School 2: Aljabreyah Technical Secondary Boys School is a government school established in 1984. It has around 1342 male students (age 16-18, grades 10-12) mostly from limited income families, 28 administrative staff and 219 teachers. The school has a variety of vocational training programs. The year 2010 data presented in (QAA review, 2013) indicates that the school's overall effectiveness was 'inadequate'. Students' academic achievement is the main weakness in the school, as the students generally 'pass' the practical courses but perform poorly in theoretical subjects especially Arabic, English and Mathematics. Most teachers need to improve their teaching methods and assessment approaches. They also need to take into consideration the individual differences among their students and to allow them to work in teams and challenge their thinking. The personal development of the students and behaviour are satisfactory especially in attendance and safety aspects. However, the students need more opportunities to develop their selfconfidence, active participation and higher thinking skills. The QAA report recommends that in order to improve, the school needs to focus on developing students' basic skills, improve their thinking and communication skills, give more opportunities for team work. It is also important for the school to focus on the professional development of the teachers for better classroom teaching practices.

School 3: Sheikh Khalifa Bin Salman Institute of Technology is a modern government school founded in 2003. It has around 1065 male students (age 16-18, grades 10-12) mostly from limited income families. The school has a variety of vocational training programs technical track, vocational apprenticeship, printing specialization, and information technology specialization. The QAA review data of year 2010 (QAA review, 2013) indicated that the school's overall effectiveness was 'inadequate'. The school has strength points such as good vocational skills of the students in specialised courses, good relationships among students and teachers, and active and motivating administration. However, the school has many areas for development such as: the wide use of traditional teaching strategies, inadequate students'

basic skills especially in the English language, assessment methods need improvement, higher thinking skills need more attention by teachers, the students need more opportunities to work and learn together, and finally the safety and security procedures in the school workshops also need improvement. The report concluded by emphasising the necessity of developing better communication with labour market and training providers.

School 4: Sheikh Abdulla Bin Isa Al-Khalifa Technical Secondary Boys School is a government school established in 1987. It has around 1582 male students (age 16-18, grades 10-12) mostly from limited income families. The QAA review of year 2010 indicated that the school's overall effectiveness was 'inadequate'. Both "students' academic achievement" and "the effectiveness of teaching and learning" in the school were considered inadequate. The school achieved satisfactory level in other areas such as: the improve, capacity to the students' personal development, students' support and guidance and the effectiveness of school administration. The OAA report recommends that in order to improve, the school must focus more on improving teaching and learning strategies, improving students' basic skills and motivation towards learning, enhancing students' thinking and communication skills, giving more opportunities for the students to work together and the school have to respond more to the job market requirements.

In general, the QAA reports gave evidence of major weaknesses in TVET schools, especially in the following areas: unsatisfactory academic achievement, low proficiency in English, Arabic and vocational skills, and insufficient opportunities of students' personal and higher thinking development. Therefore, various actions have been taken by the MoE to improve the quality of TVET. Some of these initiatives are presented in the next section.

#### 4. Educational initiatives for improving TVET

As mentioned earlier, the government and the people of Bahrain saw education as a key to a successful future. There is a real need for improving the quality of education in general, and the improvement of TVET quality in particular because it is the key to economic development. The government of Bahrain introduced the Economic Vision 2030 which came as a general framework for a set of initiatives that believe in improving the quality of education since this will enable Bahrainis to fulfil their needs and achieve their aspirations socially, educationally and economically. The 2030 Economic Vision has three main objectives:



- To reform education and training by improving Bahraini skills through education and training to better meet job market demand.
- To reform the economy by stimulating private sector job creation, especially in the medium and high wage job segments
- To reform the Bahraini labour market by eliminating the distortions first to make education and economic reforms effective

The educational reform, as part of the wider reform in the country, introduced a set of new projects which include: establishing Bahrain Teachers' College for inservice and pre-service teacher training, establishing Bahrain Polytechnic College for equipping high school graduates with labour market essential skills, establishing the QAA for inspecting the quality of educational institutions, and the improvement in TVET. The target of the educational reform in Bahrain was to provide education and training that is relevant to the economic needs of the country. This was planned to be done by raising the standards and performance of schools, vocational institutions and universities. The priorities of this strategy related to TVET include: (1) improving teacher recruitment and training and increasing their effectiveness and performance, and (2) providing quality training in the applied and advanced skills required in the new competitive industrial and (International technological fields Bureau Education, 2011).

The MoE is in charge of monitoring the educational system in the country. The MoE worked to achieve a set of educational policy goals. The MoE directed its efforts towards the development of school in different aspects based on the recommendations of the QAA reports. The MoE introduced a number of educational improvement projects in all governmental schools - including the TVET schools - to meet the QAA review recommendations:

- The Excellent School Model: where role model schools are identified and then their innovative practices are shared with other schools.
- Improving School Leadership: through providing educational leadership professional development programs for senior teachers and assistant principals in Bahrain Teachers' College.
- Teaching for Learning Project: introducing modern teaching skills and methods for the teachers through professional development programs in the MoE and Bahrain Teachers' College.

- Improving school performance: through giving more attention for improving the weakness points in school practices identified by the OAA reports.
- The School of the Future: training teachers in using ICT and how it can be utilised efficiently in the classroom.

Improving TVET schools has been a major issue for the MoE. The following initiatives have been introduced to these schools as part of the educational reform efforts:

- TVET secondary schools earned the recognition of the Scottish Qualifications Board in addition to applying Quality Assurance System certified by the International Standardisation Organisation (ISO)
- An academic advisory system was introduced in the schools.
- Shaikh Khalifa bin Salman Institute of Technology was opened in 2003
- Implementing the vocational apprenticeship programme
- Introduction of ICT in TVET schools.

One of the most important projects that is taking part in the educational reforms in TVET is the General Vocational Educational Secondary Certificate (GSVEC) program. This programme was established in 2009 with the collaboration of Holmesglen Institute in Australia. The GSVEC has been modelled and adapted from the Australian qualification system and the Victorian Certificate of Applied Learning. The GSVEC tries to strengthen the connection between Industry and Education. It has two fields. Commercial and Technical, with a number of specialisations existing within each. The most important part of the GSVEC qualification is the Structured Workplace Learning (SWL) component which requires students in their second and third years to undertake work placements where they are assessed against employability skills and industry endorsed occupational standards.

The GSVEC curriculum framework consists of four compulsory strands (Ministry of Education, 2012):

- Core subjects: consisting of academic subjects from the current secondary school curriculum,
- Supportive subjects: that provide a range of vocational related subjects such as English, mathematics and science skills in addition to ICT delivered within the vocational skills classroom.
- Careers and personal development courses related to career exploration and planning skills and



- personal skills, knowledge and attitudes related to the environment, personal goals, civil and civic responsibility, and improving health and wellbeing.
- Vocational specific skills related to developing generic employability skills, specific vocational skills, and knowledge required to work in a particular industry or occupation.

The learning elements of this system are linked to school based learning (e.g. strong knowledge in general specialised subjects, competency assessment, health and safety, and team work). It also focuses on work based learning (e.g. students working in the field for 4 to 6 weeks as a preparation for future work) (Alseddigi, Mishra & Pislaru, 2012). The students are evaluated according to the following components: occupational standards (e.g. practical activities) (50%), tests (20%), homework and classwork (10%), employment skills (10%), students behaviour (5%) and attendance (5%). Students are provided with a "Skills Passport" after the graduation from the vocational school which gives the prospective employer or any academic institution a detailed profile of the student's achievement in the various occupational standards the students had covered during the three years of vocational schooling.

The Centre of Excellence is another initiative introduced by the MoE. It was launched to develop and design long-term and short-term training programmes for technical and commercial teachers as well as other clients from the private sector.

In addition to the TVET MoE schools, there are post-secondary vocational institutes that prepare youth to enter the workforce with practical skills related to specific trades and professions. Some of the main government institutions related to TVET in Bahrain include:

University of Bahrain: which is the main government university in the country. It offers education in arts, science, business, law, IT, engineering and education. In 2008, the Bahrain Teachers' College was established in line with the Kingdom's Education Reform initiatives as outlined in Vision 2030. The MoE and the National Institute of Education in Singapore worked on designing and developing various teachers' education programs in accordance with the needs of the Kingdom. The college offers the following programs with the support and funding of the MoE:

 Bachelor programs for Cycle 1 and Cycle 2 primary school teachers

- Full time Post Graduate Diploma in Education (specialized subjects teachers for intermediate and secondary schools)
- Professional Development courses for in-service teachers
- Educational Leadership Program for senior teachers and school principals

Although Bahrain Teachers' College does not offer any specialized pre-service TVET programs, vet TVET school teachers enrol in in-service short training courses in general educational skills and strategies e.g. planning, teaching methods, assessment, ICT, work ethics, etc. Passing these courses is a requirement for job promotion. These courses in the cadre system are built around basic competences required for each grade level ranging from grade 4 to grade 8. At the end of a 4-year program, grade 4 teachers will get the Certified Teacher 1 certificate. Likewise, grade 5 teachers get Certified Teacher 2 certificate, grade 6 teachers get Professional Teacher Certificate, grade 7 teachers get Senior Teacher certificate and grade 8 teachers get Consultant Teacher certificate. Other courses are also provided by the Directorate of Training in the MoE (Ministry of Education, 2012).

Bahrain Polytechnic: is a new institute which came in line with 2030 Economic Vision. It addresses the need for a skilled Bahraini labour force and aims to produce graduates who are ready for work. Its programmes have been developed in consultation with business, industry and international educational institutes. It offers the following programs: Business, Engineering Technology, Engineering Technology, Information & Communications Technology, International Logistics Management, and Visual Design and Web Media.

Bahrain Training Institute offers vocational programmes in the area of business, arts, health and safety, information technology, travel and tourism, and engineering. First Diplomas, and National and Higher National Diplomas offered by the institute are accredited by BTEC.

National Institute for Industrial Training (NIIT) is a private sector institute which offers long training programmes in engineering including: electrical, electronic, mechanical, fabrication and wielding, and motor vehicle engineering.

It is important to mention that *Tamkeen* is also a key player in the TVET area. It is one of the initiatives to respond to the unemployment challenge in Bahrain. It is an independent authority which invests in Bahraini employability, social support and job creation. It has an



investment portfolio of \$175m and uses the fees collected by the Labour Market Regulatory Authority to assist new businesses in the Kingdom (Economic Development Board, 2013). Examples of the programmes run by Tamkeen include: Enterprise Support Fund, Support for Women, Talent Management Programme, Professional Certification Scheme, Thomson Reuters Global Islamic Finance Hub and many other projects. See Karolak (2012) for more details on recent initiatives undertaken in Bahrain to monitor and ensure the quality of higher educational institutions and problems of tertiary education in Bahrain.

## 5. Suggestions for improving TVET in Bahrain

Researching the area of TVET and establishing a coherent conceptual framework are key steps towards improving the quality of the system. Through reviewing the literature, it seems that there is a lack of updated national studies related to TVET in Bahrain. Some of the available national studies were carried out by Alseddigi and his colleagues. In one of their studies, Alseddiqi, Mishra and Abdulrasool (2010) presented a conference paper on "developing an assessment strategy for school to work transition module in Bahrain's TVET System". Another conference paper on the topic of "new school-based learning (SBL) to work-based learning (WBL) transition model and its practical implementation in the TVET system in Bahrain" was presented by Alseddigi, Mishra and Pislaru (2012). Recently, Alseddigi (2013) discussed the development of an employment skills training model for engineering education in Bahrain. More research is needed to understand TVET in Bahrain, to context, challenges, understand its strengths, opportunities and to find systematic ways to improve it.

At the international level, there are a number of reports authored by international organizations relevant to the purpose of this article. These reports are important as they provide suggestions for the improvement of TVET in Bahrain. For example, the European Training Foundation and The World Bank (2005) published a report on 'Reforming Technical Vocational Education and Training in the Middle East and North Africa: Experiences and Challenges'. The report summarised the key findings from detailed country reviews of Egypt, Jordan, Lebanon, and Tunisia. The report explored the role of TVET in the provision of quality and relevant learning opportunities in the region. In the United States, the Management and Training Corporation (2010) has published a useful report which provides a general basic principles and

strategies for an effective TVET program. Their policy recommendation to government officials includes insuring that TVET systems is aligned to current and future labour market demands, has policies and laws that support TVET, engage the business community, has reliable funding sources, has a tracking and effectiveness system, and ensures measuring sustainability. Rojewsky (2009) proposed a conceptual framework for technical and vocational education and training with the cooperation with the UNESCO and UNEVOC. His framework for TVET showed how different key factors can influence TVET system. These factors include: the new globalized economy, students learning, motivation and achievement, community and social expectations, philosophical standpoints, curriculum, teaching methods, instruction and assessment.

A synthesis of the key recommendations that have been provided in the three reports (European Training Foundation and The World Bank, 2005; Rojewsky, 2009; Management and Training Corporation, 2010) is presented next. These recommendations can help in providing general suggestions for improving the quality of TVET in Bahrain:

A clear and flexible framework: A clear and well defined framework is essential for the development of the quality of TVET in Bahrain. Providing this framework for all TVET stakeholders will be helpful in clarifying the purpose of the TVET, its philosophical bases and learning theories, its current activities, and its directions for the future. The development of this framework must be a shared process among the stakeholders; e.g. MoE, the private sector, academic and training institutions, and the learners. The framework should also be flexible and take into account the economic. social and cultural characteristics of the TVET context in Bahrain (Rojewski, 2009). Adopting a standardized framework for training – on a national or regional level - can help the TVET system in terms of reducing cost and time needed for training instructors and trainees. It can also help in making the training process more unified and equipping the trainees with better marketable skills and hopefully developing a workforce which is more globally competitive (Management and Training Corporation, 2010).

More involvement of the private sector: It is also important for to TVET institutions to broaden their participation as government agencies with other social partners in the design and implementation of TVET programs. This participation should have clear



operational responsibilities for the various partners. Involving the private sector in the TVET governance and in the decision-making process is essential for the success of TVET. For example, the private sector can work together with government officials in deciding the feasibility of public spending on TVET and finding ways for better investment, identification of the skills and competencies required in the labour market, and monitoring and evaluating the training process and its outcomes. The private sector can also play a key role in providing training opportunities for the TVET trainees (European Training Foundation and The World Bank, 2005).

More accountability and funding: accountability is important especially in monitoring the TVET results and not just focusing on the quantitative numbers of enrolment and graduation. Public spending on education and training is high in the region by international standards, TVET financing usually rely on traditional budget allocation from the government. The private sector can be a key player in providing financial support to sustain more diversification in TVET. This can be implemented through creating diversification funding mechanisms to create incentives for efficiency and relevance in TVET programs (see European Training Foundation and The World Bank, 2005). The QAA reviews and reports are a good step towards improving the accountability of TVET.

Better effectiveness: The effectiveness of TVET in any country is important for a successful economy. The educational and training system needs to be based on clear labour market information. Partnership between the TVET governed by the MoE and the private sector is essential for the improvement of the quality of TVET and to avoid the mismatch between the outcomes of its outcomes and the needs of the labour market. TVET quality is generally determined by the industry partners, as they can act as key drivers for the collaboration with the TVET administrations and organizations. It is important to link the training with a certification system in a joined framework for competencies. standards. National Oualification Framework, certification and of competencies (Management and Training Corporation, 2010).

Decentralization: TVET institutions should have more autonomy. High centralization can be an obstacle to the development and limit the capacity to change of TVET programs. For example, when the school administration and teachers can't take decisions on key issues such as curricula, financial and personal management their development will be slow and fluctuating (European Training Foundation and The World Bank, 2005).

Improving teaching and learning practices: There are many initiatives taking place in the region to improve the quality of TVET teaching and learning especially through curriculum development and using competency based approaches in TVET schools. However, these initiatives tend to be stand-alone types rather than being embedded in a wide scale reform programmes. TVET institutions have to develop curriculums that prepare the students to join the new economic competitive market. This market demands workers who are highly skilled, innovative, motivated, proficient in ICT, with excellent communication skills, with higher order thinking skills such as problems solving, critical thinking, decision making, timeliness, productivity, respect, work ethics, and team work. The workers should also be committed to life-long learning (Rojewski, 2009: Management Corporation, 2010). TVET teachers need to be trained in new teaching methods. They should move away from viewing students as passive learners and change their roles as providers of information to the role of facilitators and collaborate with the learners. Teachers need to give more attention to higher thinking skills such as problem solving instead of just relying on rote memorization and passive learning. Teaching methods should be more authentic and flexible focusing on work based learning, team work learning activities, and active learning. The assessment process currently used in TVET tends to emphasise on knowledge acquisition more than practical skills and work competencies. These traditional assessment approaches should be replaced with new authentic assessment ways that require the learners to demonstrate their understanding of knowledge and skills through actual performance in real settings. These new assessment tools can include workshop activities, portfolios, presentations, exhibitions, and experiments (European Training Foundation and The World Bank, 2005; Rojewski, 2009).

#### 6. Conclusion

Through the previous discussion on TVET in the Kingdom of Bahrain we saw that the country is small in terms of its area and resources, but it has great opportunities to achieve better prosperity and development. This success can be achieved if the country successfully manages to face and overcome the economic and educational challenges and reaches its potential. These challenges include: high population growth and density, high youth population, skill gaps in labour market, high expatriate workforce, changing industry requirements are not reflected in the educational system (The Allen Consulting Group. (2009).



It also evident that Bahrain is trying to diversify its economic resources and invest more in its human capital to have a better future. The Economic Development Board (2013) in Bahrain was launched in 2008 to achieve this target through the 2030 Economic Vision: "to support the growth and diversification of Bahrain's economy by developing a strategy that encourages inward investment and competitiveness in the global marketplace" (p.1). Education is considered as key in the 2030 vision. Although equity in providing learning opportunities for Bahraini students is currently not a problem, the quality and relevance of education is a major concern for the country. TVET is one of the important educational areas requiring reform and development because it's strongly linked with the economic challenges mentioned above such as, skill gaps in labour market, and the educational system that is fully adapting to the market needs. The MoE provided the infrastructure for TVET such as buildings, workshops, machines, teachers and curriculum. Hundreds of students graduate from TVET schools every year, but the challenge now is to merge those young graduates in the industrial and private sector. The QAA reports presented earlier diagnosed the challenges facing TVET schools in Bahrain. These challenges were mainly inadequate academic achievement, low proficiency in English, Arabic and vocational skills and insufficient opportunities for students' personal and higher thinking development. TVE schools were advised by the QAA to give more attention to the professional development of the teachers, have better communication with the labour market and training providers, and responding more to the job market needs and expectations.

Although there are many public and private institutions and organizations providing TVET and skills training for the Bahraini youth, these training programmes, with a few notable expectations, provide technical skills that seem to conflict with the labour market demands. In addition, these programs need to focus more on preparing the trainee for other aspects of work - workplace culture or entrepreneurial attitudes and skills for the self-employed. Therefore, Bahrain is re-examining the targets of its educational programmes, aiming to add more employment-oriented elements and attitudes to the overall curriculum and to special job-training programmes (International Labour Organization, 2010). The University of Bahrain, Bahrain Training Institute, Bahrain Teachers' College and other private training institutes can provide training and professional development for TVET teachers. They also can help in

conducting research on different aspects for improving the quality of TVET.

The article synthesised some suggestions for improving the quality of TVET in Bahrain. They are based on the recommendations of The European Training Foundation & the World Bank Report (2005) on reforming TVET in the Middle East and North Africa. It also draws on the principles of efficient TVET proposed by the Management and Training Corporation Institute (2010) in the United States and it uses some ideas from Rojewsky's (2009) TVET framework. The proposed suggestions are adapted to the Bahraini context and emphasise on the following elements of TVET: developing TVET framework, involvement of the private sector, improving accountably, diversification of funding, decentralisation, and improving effectiveness of teaching and learning.

These suggestions are open for discussion and further development. Hopefully, this work will trigger further studies by other researchers to investigate and study other TVET important areas such as curriculum, teaching methods, assessment and teacher training in more depth. Especially that there is an urgent need for a coherent research based framework for structuring and organizing the diverse initiatives proposed by the different stakeholders in Bahraini TVET, there are important issues which need more investigation and additional work such as: how the **OAA** recommendations for TVET improvement being followed up by the MoE, the professional development of TVET instructors and teachers, the evaluations of TVET initiatives especially the GSVEC program. Research is vital in finding the gaps and weaknesses and building upon strengths and opportunities.

#### References

Alseddiqi, M. (2013). The development of an employment skills training model for engineering education courses. In L. Chova, A. Martínez, & I. Torres (Eds.), Proceedings of the 5th International Conference on Education and New Learning Technologies (Volume 1 - pp. 1597-1603). Barcelona, Spain.

Alseddiqi, M., Mishra, R. and Abdulrasool, S. (2010). Improving teaching and learning effectiveness in engineering education. *The International Journal of Learning*, 17 (9), pp. 11-26.

Alseddiqi, M., Mishra, R. and Pislaru, C. (2012). The new school-based learning (SBL) to work-based learning (WBL) transition module: A practical implementation in the technical and vocational education (TVE) system in Bahrain. In A. Ball, R. Mishra, F. Gu & R. Rao (Eds.),



- Proceedings of the 25th International Congress on Condition Monitoring and Diagnostic Engineering, (pp.1-9). Huddersfield, United Kingdom.
- Bahrain Institute for Political Development.(2002). *The Constitution of Bahrain*. Bahrain: Bahrain Institute for Political Development. Retrieved from [http://www.bipd.gov.bh/images/dostoor/dostoor.pdf] in in [5 February 2014].
- Central Informatics Organization. (2010). *Bahrain in figures* 2007-2008. Bahrain: Central Informatics Organization. Retrieved from [http://www.cio.gov.bh/cio\_ara/English/Publications/Bahrain%20in%20Figure/BIF2007\_2008.pdf] in [16 May 2013].
- Economic Development Board. (2013). Bahrain: Education and training. Bahrain: Economic Development Board. Retrieved from [http://www.bahrain.com/DocumentsLibrary/EDB%20-%20Education%20and%20Training%20-%20March%202013.pdf] in [16 May 2013].
- International Bureau of Education. (2011). World data on education 2010/11. Switzerland: UNESCO. Retrieved from[http://www.ibe.unesco.org/fileadmin/user\_upload/Publications/WDE/2010/pdf-versions/Bahrain.pdf in [16 May 2013].
- International Labour Organization. (2010). *Decent work pilot programme 2010-2013*: Kingdom of Bahrain. Switzerland: International Labour Organization. Retrieved from http://www.ilo.org/public/english/bureau/program/dwcp/download/bahrain.pdf] in [16 May 2013].
- Karolak, M. (2012). Bahrain's tertiary education reform: a step towards sustainable economic development. Revue des mondes musulmans et de la Méditerranée, (131), p. 163-181.
- Labour Market Regulatory Authority. (2011). *Bahrain labour* market newsletter, 4(16). Retrieved from [http://blmi.lmra.bh/2011/12/newsletter\_en.pdf] in [16 May 2013].
- Management and Training Corporation. (2010). *Principles and Strategies of a Successful TVET Program*. Georgetown, TX: MTC Institute. Retrieved from [http://www.mtctrains.com/public/uploads/1/2011/11/Int ernational\_TVET\_2010.pdf] in [5 February 2014].

- McKinsey & Company. (2007). GCC education breakout: Preparing GCC youth with skills to meet job market needs. Paper presented at the GCC Education Leaders Conference, November 28-29. Riyadh, Saudi Arabia.
- Ministry of Education. (2008). The development of education: National report of the Kingdom of Bahrain: Inclusive education the way of the future. Paper presented at the International Conference on Education (ICE), 25-28 November 2008. Switzerland, Geneva.
- Ministry of Education. (2012). Questionnaire on norms and standards for quality of education. Bahrain: Ministry of Education.
- Quality Assurance Authority. (2013). School review unit reports. Bahrain: Quality Assurance Authority. Retrieved from [http://en.qaa.bh/reviewreports.aspx] in [5 February 2014].
- Rojewski, J. (2009). A Conceptual framework for technical and vocational education and training. In R. Maclean, & D. Wilson (Eds.), *International Handbook of Education for the Changing World of Work*. (pp. 19-39). Netherlands: Springer.
- The Allen Consulting Group. (2009). Future skills strategy for Bahrain (2009-2016): Skills gab research study. Bahrain: Tamkeen.
- The European Training Foundation & The World Bank .(2005). Reforming technical vocational and training in the Middle East and North Africa: Experiences and challenges. Luxembourg: Office for Official Publications of the European Communities. Retrieved from [http://www.etf.europa.eu/pubmgmt.nsf/(getattachment)/ 1ca4f509e4ea94a7c125718e005867f4/\$file/note6qsluq.p
- United Nations Development Programme. (2013). *Human development report 2013: The rise of the south, human progress in a diverse world.* New York: UNDP. Retrieved from [http://hdr.undp.org/en/] in [16 May 2013].

df] in [5 February 2014].

United Nations office in the Kingdom of Bahrain. (2010).

Human development achievements of the Kingdom of
Bahrain: A ten years review. Bahrain: UN office.
Retrieved from
[www.undp.org.bh/Files/BAHPlusTen/2010BahrainPlus
TenE%20.pdf] in [16 May 2013].