Curricula Approaches and Competence Development for Secondary Vocational Education Schools in Palestine

Abstract

This paper explores curricula approaches and competence development for secondary vocational education schools in Palestine. For successful implementation of new curricula approaches that use Competency-Based Approach (CBA), this paper argues that the government must first define the goal of the secondary vocational education to determine whether it is education based or employment oriented and then decide the curricula approach of how to develop the necessary competence. If the goal and the objectives of secondary vocational education is educational, adopting and implementing the new curriculum that applies CBA will not be without issues such as teachers' ignorance of whether the new curriculum is for development of semiskilled employees or craftsmen. Applying CBA may result in neglecting the traditional curriculum that provides students with academic and the social science. A holistic approach that balances between the traditional curriculum and the CBA is required for secondary vocational education to distinguish it from vocational training learning objectives. Qualitative methods of in-depth and expert interviews were used to collect and analyse data. Tulkarm Secondary Vocational School was the case study for this research paper.

Keywords: curriculum development, competency, competency-based approach, the holistic approach, technical and vocational education and training.

1 Introduction

Curricula approaches and competence development for secondary vocational education schools in Palestine was one of the main goals of the Technical and Vocational Education and Training (TVET) system reform in Palestine. In 1998, the Ministry of Education and Higher Education (MoE&HE) started creating the National Technical and Vocational Education and Training (TVET) Strategy for the reform. The overall objective of the National TVET Strategy is to create a knowledgeable, competent, motivated, entrepreneurial, adaptable, creative and innovative workforce in Palestine to contribute to poverty reduction as well as social and economic development (UNESCO 2012). A part of this reform was the curriculum and the learning methodologies development for secondary vocational education schools emphasising integrating social and individual development and Life Long Learning including critical thinking, problem solving, teamwork, entrepreneurship, social and life skills (PNA, MoE&HE, & MoL 2010). The government developed new curriculum based on Competency-Based Approach (CBA) as a learning methodology for the secondary vocational education schools that includes the 11th and 12th grades. For two years, secondary vocational schools for some majors adopted and started teaching the new curriculum with the new learning

methodologies. The new curriculum aimed at preparing learners more effectively for real workplaces, which means that the acquisition of competencies takes into account the requirements of companies and industry that are affected by the modern technology (Deißinger & Hellwig 2011).

Adopting curricula and competence development approaches for secondary vocational education schools depends on the objectives of the secondary vocational education and the learning outcomes. As a result, attitudes by some teachers created tension in defining whether the new curriculum of implementing CBA is for obtaining semiskilled employment (vocational training graduates) as opposed to skilled and craftsman employment (vocational education graduates) as every kind requires different curriculum, modules, learning objectives, timelines, skills, competency, employment in the market and different target group. The difference resulted in neglecting the traditional curriculum. When students graduate, they will lack education in areas such as languages, leadership skills and social skills. This will affect students' opportunity to enter a university to pursue higher academic qualifications. This contravenes the objectives of the vocational education, which is educational and providing the market with skilled labour work (PNA, MoE&HE, & MoL 2010), to include certain educational and social competencies. It negates the 5 dimensions of teaching and learning the competency (LeDeist & Winterton 2005). Accordingly, some teachers suggested a holistic approach, which makes a balance between the traditional curriculum and the new curriculum. It adopts CBA as a learning approach to enable the students to gain the theoretical, practical, personal and social competency to meet the needs of the market (McGrath 2007), to include addressing social contextual issues and not just learning outcomes for vocational education and training. That is, it serves the learner or community needs and goals. Palestinian teachers insist that the secondary vocational education graduates should have both practical skills competency and social skills to be able to meet the needs of the market of social, personal and academic skills and continue their higher education at the university as well.

There is an increasing need of the holistic approach to consider the students whole-of-person to train rather than discrete packages and modules (McGrath 2007). The holistic approach to Vocational Education Training (VET) within the region ensures a focus on meeting social and economic objectives and promotes effective collaboration to achieve these goals (Allison, Gorringe & Lacey 2006). It's also clarified that the competence is a package of knowledge, attitude, skills and relevant experience, which is required to be successful in a particular job (Guerrero & Ríos 2012). The holistic approach was introduced into the definition of competence in the caring professions, integrating knowledge, understanding, values and skills that 'reside within the person who is the practitioner' (LeDeist & Winterton 2005).

This paper argues that the government has to be clear about the secondary vocational education's objectives for a successful implementation of the new curriculum approach and competence development, to be able to achieve the new curriculum goals and outcomes and as a result to be able to achieve the secondary vocational education objectives that are different from the vocational training objectives, which is providing the market with skilled labour

market and also achieving certain academic qualifications that enable students to continue their higher education in the universities. The objectives of the secondary vocational education can be achieved by adopting the holistic approach in the teaching and learning process. When the objectives are clear for the government and for all the stakeholders, then other factors such as timeline, teachers' qualifications, number of modules and type of competency should be taken into consideration to avoid any challenge and failure while implementing the new curriculum.

2 Conceptual framework

2.1 Training Approach

A holistic approach is a whole-of-person approach to training rather than discrete packages and modules (McGrath 2007). The need to provide a holistic approach to the student in training requires addressing social contextual issues and not just learning outcomes. A focus on the holistic outcomes from VET whereby important outcomes referred to included more qualitative constructs such as self-esteem, confidence and a sense of achievement. In an 'holistic approach', vocational education may therefore be seen as a vehicle for the achievement of a broad range of goals, while government goals of vocational education may be primarily economic, driven by industry (through Training Packages), and skills focused. It is characterised by the concern for the growth and full development of the whole person where what is learned reflects the values and goals of the learner (McGrath 2007). (LeDeist & Winterton 2005) introduce the holistic approach to competence in the caring professions, integrating knowledge, understanding, values and skills that 'reside within the person who is the practitioner'. A holistic framework is useful in identifying the combination of competencies that are necessary for particular occupations and to promote labour mobility (LeDeist & Winterton 2005).

2.2 Competency Based Approach

Competency Based Approach (CBA) or Competency-Based Education and Training (CBET) is an approach of Vocational Education Training (VET), in which skills, knowledge and attitudes are specified in order to define, steer and help to achieve competence standards, mostly within a kind of national qualifications framework (Hellwig & Deißinger 2011). Objectives of CBET include preparing learners more effectively for real workplaces, which means that the acquisition of competencies takes into account the requirements of companies and industry. Furthermore, CBET should enable employees not only to increase their knowledge and skills at the workplace but also to gain nationally recognised certificates for workplace-based learning (Hellwig & Deißinger 2011).

CBE is an educational structure that is characterized as competency or outcome-based can be identified by various manifestations of functioning end points: educational objectives, outcomes statements, competency frameworks, task analyses, employability skills list,

performance and grading checklists (Curry & Dochetry 2017), It aims to improve performance at the workplace.

Competency Based Approach (CBA) is an approach which started in the 1990s and has been introduced and applied in almost all countries of the world. It is applied to almost all levels of educational systems and extends into all sectors of a national economy. It's the capability of a person to choose and use (apply) an integrated combination of knowledge, skills and attitudes to realize a task or work function in a certain context (GIZ 2013).

The competence comprises five dimensions:1) Cognitive competence, including underpinning theory and concepts, as well as informal tacit knowledge gained experientially; 2) Functional competencies (skills or know-how), defined as what 'a person who works in a given occupational area should be able to do and able to demonstrate'; 3) Personal competency (behavioural competencies, 'know how to behave'), defined as a 'relatively enduring characteristic of a person causally related to effective or superior performance in a job'; 4) Ethical competencies, defined as 'the possession of appropriate personal and professional values and the ability to make sound judgements based upon these in work-related situations'; 5) Meta-competencies, to include the ability to cope with uncertainty, as well as with learning and reflection (LeDeist & Winterton 2005).

Accordingly, teachers should know that competence has different dimensions, including theoretical, practical and social dimensions, and that all the dimensions should be learnt as they all are important. Learning one dimension or two for the competence doesn't result in efficiency at the workplace, and this makes the difference for the holistic approach. If the secondary vocational education schools apply CBA in the new curriculum and consider CBA as a holistic approach for the students, then secondary vocational schools objectives and outcomes will be met; namely, educational objectives and qualified skilled labour force that meet the needs of the market. Further, this will meet the objectives of curriculum approaches and competence development as set by the Palestinian government, which is curriculum development methods, approaches of modern teaching and learning emphasizing integrating social and individual development to meet the needs and the demands of labour market and the levels of up-to-date technologies (PNA, MoE&HE & MoL 2010).

Before developing and using the curriculum that implements CBA, the government and all stakeholders have to be clear about the goal, learning objectives, mission, and purpose of the curriculum that uses CBA (Rivenbark & Jacobson 2014). This includes addressing questions such as whether the purpose is education or employment, and then designing the curriculum accordingly (Harris & Deissinger 2003; Gessler 2014) as well as being clear on how to reach these goals. As discussed and introduced by (Brockmann, Clarke, Méhaut, & Winch 2008), the government and all the stakeholders should define the meaning of "competence" (Mulder, Weigel & Collins 2006) as a key distinction between a knowledge-based model and a skills-based model. Defining "competence" will enable the new curriculum to support its objectives.

3 TVET Reform and Curriculum Development

Since 1948, the education system in Palestine had been controlled by the Israeli occupation policies. This was due to the war, conflict, uprisings and the Israeli occupation polices of depriving Palestine and the Palestinian people of the ability to establish international relations or cooperation to support the education sector. This has affected the educational system in terms of curriculum, facilities, goals and outcomes. The banning of textbooks, educational material and extracurricular activities, in addition to low salaries and social cultural development (prohibited by the Israeli Authorities), have affected social, economic and human resources development (AbuDuhou 1996). This educational deprivation resulted in the failure to meet the requirements, needs and aspirations of the Palestinian society such as contribution to the development of society; seeking of knowledge and creativity; and positive interaction with the requirements of scientific, technological and applied field developments (UNESCO 2012).

The Palestinian National Authority (PNA) was formed in 1994. In 1996, Palestine achieved autonomy. As a result, the PNA took control of the education system represented in the Ministry of Education and Higher Education (MoE&HE). In 1995-1996, under the National Strategy, the MoE&HE started reforms. One was the Technical Vocational Education and Training (TVET) system reform. The TVET reform included building new schools, restoration of old schools, appointing new human resources of teachers, experts and new curriculum, and recognizing new modern and advanced educational techniques, material resources, and regulations. The aim was to improve the quality of the vocational education outputs (competent graduates) to meet the needs of the Palestinian market and the private sector by connecting the educational needs with social and economic needs.

In 1998, the MoE&HE started creating the National Technical Vocational Education and Training (TVET) Strategy for TVET system reform. As part of this reform, the Palestinian National Authority (PNA) Ministry of Education and Higher Education (MoE&HE) was engaged in TVET system reform including curriculum development and learning methodologies. The government developed a new curriculum based on Competency-Based Approach (CBA) as a learning methodology for the secondary vocational education schools that includes the 11th and 12th grades. For two years, secondary vocational schools for some majors adopted and started teaching the new curriculum with the new learning methodologies. The new curriculum aimed at preparing learners more effectively for real workplaces, which means that the acquisition of competencies takes into account the requirements of companies and industry that are affected by globalization and the modern technology. The stakeholders of the national TVET strategy incorporated new learning methodologies based on the "Competency-Based Learning (CBL) and Modules" system. This system is intended to enable the students to obtain the practical professional skills that meet the private sector demand. This approach aims to teach the students concrete skills rather than abstract learning.

3.1 Objectives of Learning and Implementing CBA

There are 5 levels of TVET system in Palestine: level 1 (semiskilled), which is the graduates of the vocational training institutes; level 2 and 3 (skilled and craftsman), which are the graduates of secondary vocational schools of 11th and 12th grade; and level 4 and 5 (technician and expert) which are graduates of the vocational colleges and the technical universities. Every level has different learning and teaching objectives as clarified in the figure below. The difference in the learning objectives requires different curriculum approaches and competence development. The focus of this paper is on secondary vocational education which is level 2&3 (graduates of secondary vocational schools of 11th & 12th grades). The below explanations and analysis will be about all majors that are being taught at the secondary vocational schools, it will focus and give examples from the electricity major.

Based on the new curriculum, attitudes by some teachers created tension in defining whether the new curriculum of implementing CBA is for obtaining semiskilled employment level 2&3 (training education graduates) as opposed to skilled and craftsman employment level 1 (vocational education graduates), as every kind requires different curriculum, modules, learning objectives, skills, competency, qualifications, employment in the market and different target group as well. The difference resulted in neglecting the traditional curriculum so that when students graduate they will lack education in areas such as languages, leadership skills and social skills. As a result, this will affect the student's qualifications to enter the university to continue higher academics contravening the objectives of the vocational education, which is educational and providing the market with a skilled labour market with higher academic and practical skills who are the graduates of level 1 - semiskilled graduates.

The curriculum of some majors was adopted for one year and then was changed again. Teachers in the schools in the electricity major, for example, disagreed about the new curriculum. Some of the teachers considered it positive in that it provided the students with competencies needed in the market. Others considered it negative in that it turned the vocational education schools into vocational training centres (and thereby, in their opinion, negating the value of the secondary vocational education and its objectives because it concentrated on practical lessons more than the theoretical ones). Some teachers believed that there is no difference between the objectives of the vocational education and the objectives of the vocational training.

Teachers considered that CBA is important to reduce unemployment for graduates of vocational secondary schools by giving them the opportunity to gain specific competence through the modules designed in the curriculum. They also believed that CBA also helps students to master competence because it teaches particular part of the general subject. For example, there are many vocational school graduates of the major electricity. There are graduates who can't find work in the market, while at the same time, there is no single student whose major is only, for example, about extension of electric wires. Only using CBA can provide the market with its need of this specificity of the electricity major, and, from their point of view, this will provide students with more work opportunities at the market. Teachers

say that companies demand students with specific competence rather than students of a general major with no competence. This is also applicable for most of the majors that are taught in the vocational secondary school.

However, there is also a challenge in changing the curriculum. Namely, teachers may not be qualified and equipped with the up-to-date skills and knowledge needed to teach the curriculum.

According to an interview with teacher specialized in electrical subject:

"The problem is from the MoE&HE administration. The public administration of the TVET in the MoE&HE doesn't give priority and doesn't make enough efforts for offering training for the teachers on the updating and new curriculum. The teacher should be updated and provided with advanced training to be able to teach the new curriculum."

Teachers were not satisfied with the curriculum change. They find it difficult to teach when they lack the necessary skills and knowledge required to teach the new curriculum. The change in the teacher's role requires them to not only deliver lectures but also to engage as a facilitator. In Palestine, the role of the teacher is to give the lesson and then to leave the class. With CBA curriculum, the role of the teacher, inside the classroom or on the work sites, takes on the identity of facilitator. Thus, navigating the potential tensions between traditional roles and CBA roles may contradict the culture in Palestine (Beimans 2004). The success of a learning situation depends on a large extent on the skillful intervention of a professional person, the teacher who will deliver teaching the learning methodologies(Stabback 2016).

There are pitfalls in using the CBA. These include feelings of insecurity - to include feelings of "powerlessness," "frustration," and "dissatisfaction" – by teachers. Given this reality, teachers must be trained in underlying principles, which includes understanding procedures necessary for an effective implementation (Watson 1991; Biemans, Nieuwenhuis, Poell, Mulder, & Wesselink 2005) question if one system, whether competence-based or not, can realistically serve all stakeholders in the practice.

The broader education policy that is followed by the MoE&HE does not match the needs of the secondary vocational school students. In particular, practical classes, originally 24 classes a week, were reduced to 16 classes -one class is 40 minutes long-. The difference was increased with academic classes. Yet the aim of the vocational education (for level 2 and 3) is to provide the market with skilful and professional workers. Instead, this policy appears designed to give vocational education students the opportunity to compete to enter university, rather than into the labour market at level 2 and 3.

As one teacher stated:

"This curriculum has affected the efficiency and the practical skills of the students. The practical classes are now less than the academic classes and this doesn't match

the objectives of the secondary vocational education, which is to qualify students for the labour market, not for the academic studies in the universities."

The new learning methodologies within the new curriculum were received with many challenges to be applied because 1) teachers themselves were not qualified to teach the new curriculum with the new learning methodologies that included advanced skills and knowledge; 2) the lack of the infrastructure in the school; and 3) the lack of cooperation and formal public private partnership agreements. Before implementing CBA, it is important to realize the scope of the project and the resources needed (Dilmore, Moore, & Bjor, 2011). In Palestine, the lack of resources, incentives and qualifications for teachers and other actors, and lack of condusive environments are challenges that must be addressed in implementing CBA.

Obtaining and comparing exams of the high school "Tawjihi"- The General Secondary Education Certificate Examination in Palestine. It is the last stage of school education before going to a university or to a college- with the skills in the curriculum based on CBA will present novel challenges. One of the module's elements in the last stage is the post-assessment (Laveria 1977). This component indicates whether the student has successfully met the objective. Once the student meets the objective, the student is ready to pursue the next one. Conversely, a student not successfully meeting the objective must have additional instruction. The post assessment maybe identical or similar to the pre-assessment. In Palestine its very difficult to ask students to undergo examination and perform the post assessment phase since "Tawjihi" exam is unified all over Palestine. There is no specified way to ask vocational school students to undergo examination. In this case, students who used CBA are requested only to take the exam in the academic part of the curriculum.

Curriculum developers need to answer many fundamental questions, about which knowledge, skills, competencies and values should we include in our curriculum. Achieving qualitative learning and educational outputs depend on the learning methodologies that are used in the curriculum and then the ability of the curriculum to meet the needs of the market. Key indicators of curriculum success include the quality of the learning achieved by students, and how effectively students use that learning for their personal, social, physical, cognitive, moral, psychological and emotional development. The quality of the curriculum depends on the learning and teaching approaches that are used and decide the quality of the educational output (Stabback 2016).

4 Conclusion and Outlook

As part of TVET system reform, a new curriculum for secondary vocational education schools was developed to use the new learning and teaching methodology to develop student competencies. That is, CBA. Adopting CBA curriculum in Palestine aimed to provide students with competencies that work effectively for real workplaces and meet the needs of the market that are changing and increasing because of technology. However, after two years,

teachers rejected the new curriculum that adopts CBA as a learning methodology for secondary vocational education schools in Palestine. Attitudes by some teachers created tension in defining whether the new curriculum of implementing CBA is for obtaining semiskilled employment (vocational training graduates) as opposed to skilled and craftsman employment (vocational education graduates). Each requires different curriculum, modules, learning objectives, timelines, skills, competency, employment in the market, facilities and resources at the school and the relationship with the private sector as well.

To implement the new curriculum based on CBA 1) the government should be clear about the objectives of the curriculum - which is designed for vocational education schools versus that which is designed for the vocational training - because the learning objectives of the vocational education and the vocational training are different; 2) teacher qualifications; 3) schools facilities and resources; and 4) the timeline to apply the modules and teach the competence.

It is important to realize the scope of the project and the resources needed before developing the curricula and using the CBA for the vocational education. The CBA in the vocational education should provide competencies that enable its students to enter higher academic institution such as universities and colleges. In other words, the curriculum approach and competency development for the secondary vocational education should be a holistic approach, to include academic skills, social skills and practical skills. As a result, teaching and learning outcomes will meet the objectives of the secondary vocational education and the needs of the market when it provides the market with skilled labour force while at the same time enabling students to be qualified to continue their higher education.

Weighing the advantages and disadvantages of the CBA approach, it is timely and reasonable to consider another approach which is more holistic and comprehensive, efficient and effective for the future. The author recommends the adoption of the Work-process based Curriculum Development method and Dual Training System, the success proven and dominant TVET system in the European countries, particularly Germany.

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CITATION:

Samara, M. (2018): Curricula Approaches and Competence Development for Secondary Vocational Education Schools in Palestine. In: TVET@Asia, issue 11, 1-12. Online: http://www.tvet-online.asia/issue11/samara_tvet11.pdf (retrieved 30.06.2018).

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SAMARA (2018) www.tvet-online.asia Issue 11 12