THE INDONESIAN NATIONAL COMPETENCY STANDARDS IN TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING: AN EVALUATION OF POLICY IMPLEMENTATION IN INDONESIA

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ABSTRACT: To develop the Technical and Vocational Education (TVET) system in Indonesia, competency standards have been borrowed globally and implemented, as part of the national agenda for skills recognition and skills qualifications. Little research exists regarding the effectiveness of the implementation of the Indonesian version of competency standards, named Indonesian National Competency Standards (SKKNI) in Indonesian TVET institutions.

This study consisted of empirical surveys based on comprehensive questionnaires, followed by individual and group semi-structured interviews, as well as the analyses of relevant documents. The study involved participants from two types of institutions in Indonesian TVET which were managed by two different ministries and implementers from relevant institutions. The first type was Vocational Training Centres (BLK) of the Ministry of Manpower (MoM) which assumed the leadership of the development of the policy of SKKNI. The second type was Vocational Senior Secondary Schools (SMK) of the Ministry of Education and Culture (MoEC) which was the main regulator and the provider of education and training in education institutions nationally.

Findings revealed that the policy of SKKNI was poorly established, the resources for implementation of SKKNI was limited (financial, curricular and training workshops), there was a tension and rivalry between two ministries and lack of coordination and cooperation for implementation, he commitment of implementers was generally insufficient, however participants from a small number of TVET institutions implementing the SKKNI showed a high commitment for implementation, the support from external stakeholders (industry and the public) was insufficient, teachers' disposition significantly contributed as a predictor for teachers' performance in implementing two aspects of SKKNI (certification aspects and curricular aspects) and certified teachers showed better disposition and performance in implementing SKKNI.

Key words: Indonesian National Competency Standards, SKKNI, Policy implementation

INTRODUCTION

According to the 2003 Act of National Education System, the basic mission of Vocational Senior Secondary Education (SMK) is preparing students for a specific job (Undang-Undang, 2003). However, relevant studies have identified that the unemployment rate of SMK graduates is higher than the graduates from SMA (BPS, 2010, 2013; Chen, 2009; Suryadarma, Suryahadi, & Sumarto, 2007). As a result the relevance of SMKs have attracted public concern, and the government has been dealing with this challenge for decades (Kemendikbud, 2007, 2011, 2012; Kurnia, Dittrich, & Murniati, 2014; Supriadi, 2002). Efforts have been put in place to improve the relevance of SMK to the jobs market. These efforts have been focussed on improving teacher quality, building workshop facilities and developing curriculum relevant to industry demands (Kemendikbud, 2007, 2011, 2012; Kurnia et al., 2014). However, the relevance of SMK to the job market is still problematic. One of the emerging models in improving the relevance of Technical and Vocational Education and Training (TVET) globally is the introduction of competency standards in its systems (ILO, 2006, 2009; Stanwick, 2009).

In Indonesia, the idea of competency standards was linked to the earlier proposal of *Paspor Keterampilan* (Skills Passport) that was proposed in 1997 in the document of *Keterampilan Menjelang 2020 untuk Era Global* (Skills toward 2020 for a Global Era) by the Ministry of Education and Culture (MoEC) (Supriadi, 2002). Nevertheless, this proposal was never established or implemented due the economic and political crisis at the end of the 1990s.

Six years later, a similar agenda of developing the Skills Passport emerged again but with a different name 'national competency standards' when the 2003 Manpower Act was promulgated. In contrast, the resurfacing of the initiative to develop competency standards was led by the MoM not by the MoEC (the first ministry that proposed the agenda of the Skills Passport). The Ministerial Regulation about the Procedure of the Development of the SKKNI addresses two main aspects: the first is SKKNI as a framework for certification of profession (also known as certification of competency) and the second is SKKNI as a framework for competency based education and training - CBET (Peraturan, 2012). The 2003 Manpower Act also stipulated the establishment of an implementation agency in the area of SKKNI as a institution responsible for certification of profession (Peraturan, 2007). In August 2004 the Indonesian Government put into effect Presidential Regulation number 23 about the Indonesian Professional Certification Authority (BNSP) (Peraturan, 2004).

Despite the strong legal standing of the BNSP, which was responsible directly to the Indonesian President, a report by BNSP noted that the performance of the certification aspect of SKKNI was far from satisfactory. The report showed that after ten years since the promulgation, the certification activities had 19,052 certified assessors across the country, 115 certified master assessors (qualified as a trainer of assessor), and 41 certified lead assessors (qualified as a trainer of assessor and as a chief of certification process) with the total number of certificates of SKKNI awarded to 2,086,688. This number was low compared to the government target of five million certification awards in 2014 (BNSP, 2014a).

In its basic mission for preparing students for a specific job, SMK deals with the unequal distribution of the number of teachers and time allocation for core vocational subjects (the *Produktif* subjects) compared to the two other subject groups, and the poor quality of training workshops (Kemendikbud, 2012; Wastandar, 2012).

In contrast to SMK, BLK which is directly under the auspices of the MoM, has stronger regulations to guide implementation of the two aspects of SKKNI (certification aspects and

curriculum aspects). The Government Regulation No 31 (2006) mandates BLK to implement SKKNI as a resource for CBET and certification of competency as the framework to develop students' competency (Peraturan, 2006). However, reports reveal that the implementation of the CBET and certification of competency in BLK has so far been unsuccessful. Little is known about the factors relating to the failure of the delivery of SKKNI in BLK which is under the management of the ministry regulating the policy (the MoM).

The government regulation stated that the development of competency standards in SKKNI adopted the RMCS of the ILO Regional office in Bangkok Thailand (ILO, 2006). This adoption therefore, locating the Indonesian SKKNI as part of the regional and global context of the policy. The following section links up the development of SKKNI in its international environment.

The policy of the SKKNI has been in place for more than a decade. Regulations for implementation have been developed, implementing agencies have been established and programs related to the curriculum and the certification aspects of the policy have been carried out. Despite those efforts little is known about its effectiveness because it is very difficult to find reports of how the policy has performed and subsequently what the outcomes of the policy were.

LITERATURE REVIEW

Global interest in National Competency Standards (NCS) and also National Qualifications Frameworks (NQF) arose because of a number of political and economic factors. The assumption that employers are in the best position to identify training needs is reflected in the primary role of the private sector in neo-liberal economies (Allais, 2003; Young, 2005). Most of the development of NCS is led by the private sector rather than unions or governments (Young, 2009). The second political context of the development of NCS/NQF is shown by the initial motive of certifying unqualified school leavers (Young, 2005). Previously, the unqualified workforce only had opportunities for employment in manual jobs. The third political function of the development of NQF is providing a political instrument to control employers (Young, 2009). The gap between the training sector and the workplace is a persistent problem. NCS/NQF, therefore, swaps the control from educational provider to employers in determining workforce employability (Allais, 2007; Young, 2003).

Much research into NCS/NQF reveals that policy borrowing has extended the global adoption of NCS (Allais, 2010; Chakroun, 2010; Ernsberger, 2012). The most borrowed model of policy for NQF comes from three countries of England, Scotland and New Zealand where NQFs have been in place since the 1980s (Young, 2005). Nowadays, more than 138 countries have implemented, or are adopting NQF into their national policy (Michael Young & Stephanie Matseleng Allais, 2013). Allais categorises the adoption of NQF in five stages which include: (1) officially established through policy/regulation and the framework works for the objective of NQF; (2) a country that in the process of development and implementation of NQF; (3) a country that is exploring the model of NQF suits with the national context; (4) for a country that is considering to adopt NQF and (5) a country that has established or is establishing a competency-based or competency framework with different levels and areas (Allais, 2010).

In Indonesia, the concept of SKKNI grew from *Paspor Keterampilan* (Skill Passport) that was proposed in 1997 in the document *Keterampilan Menjelang 2020 untuk Era Global* (Skills toward 2020 for Global Era) by the Ministry of Education and Culture (MoEC). The proposal of the Skills Passport covered four levels of competencies that included international standards, regional standards, national standards and general skills as a passport to work in home and

small industries with the emphasis of improving livelihoods in rural and remote areas (Supriadi, 2002, p. 453). Nevertheless, this proposal did not eventuate due to the Indonesian economic and political crisis at the end of 1990s.

The Indonesian government established a special agency responsible for the implementation of certification of competency under the SKKNI framework. The establishment of a National Authority for Certification of Profession (BNSP) was mandated by the 2003 Manpower Act as stated in Article 18 Paragraph 4. According to a report published in 2014, the BNSP established 113 professional certification bodies (LSPs) in 2013 and increased these to 133 in 2014 and is expected to reach 300 LSP in 2015 (BNSP, 2014b). From the same report, there were 1715 assessment centres (TUKs), 7881 assessors and 1,954,858 certificates of competency granted in the period from 2006 to 2013 (Kemenakertrans, 2013).

The study by Allais identified underlying issues in the implementation of NCS/NQF. The first identified topic was the eminent relationship between competency standards and the qualification framework. In Botswana: "Qualifications consisting of parts which could be separately awarded, and which were defined through learning outcomes or competencies" (Allais, 2010, p. 39). In Sri Lanka, "there is a seven-level National Vocational Qualification Framework which so far has competency standards for 45 qualifications, based on 63 skills standards". In the first issue, the problematic implementation of competency standards as a foundation of qualification was revealed. For example, in Botswana the development of competency standards was reported as slow and "most training providers do not offer courses based on the newly developed standards" (Allais, 2010, p. 40). A similar problem was reported in South Africa where "most of the outcomes-based qualification and unit standards (another term for competency standards) have never been used".

In achieving the purpose of this study, the implementation of the SKKNI was evaluated under the lens of Van Meter and Van Horn implementation model. In analysing implementation process, the Van Meter and Van Horn model on the other hand is considered as more simple by proposing six broad variables which include standards and objectives, resources, inter-organisation communication, characteristics of the implementing agencies, economic, social and political conditions (external factors), and disposition of implementers (Hill & Hupe, 2002; Horn & Meter, 1977). In developing their theoretical framework, Van Meter and Van Horn describe themselves as having been 'guided by three bodies of literature' (1975: 453). The first is organization theory, and particularly work on organizational change, the second is studies of the impact of public policy and particularly of the impact of judicial decisions and some studies of inter-governmental relations (Horn & Meter, 1977; Meter & Horn, 1975).

The Van Meter and Van Horn model of implementation analysis is extensively utilise (Hill & Hupe, 2002; O'Toole, 1986). To name some of them are the study of Rampedi in evaluating the implementation of vocational education in South Africa (Zeelen, Rampedi, & Jong, 2011), the studi of Harris in evaluating the sport development program in the UK (Harris, 2013), the study of Webster (2005) for education policy in the USA, the study of Alex Marsh and Bruce Walker (2006) for housing policy in the UK, Skille (2008) for sport policy in Norway, and the study of Baharom in evaluating the implementation of human resources development in Malaysian public universities (Baharom, 2008).

METHOD OF THE STUDY

The current study consists of quantitative and qualitative components, which provide distinctive approaches in

the educational policy study. As both components are combined in answering to the research questions, the research design can be classified as mixed methods. Creswell and Clark (2011) describe mixed methods research as a mixing procedure for collecting and analysing quantitative and qualitative research in a single study in order to understand research problems. The benefit of mixed methods can provide opportunities for analysing the multidimensional realities by a variety of data resources and data collection techniques (Johnson & Onwuegbuzie, 2004). However, mixed methods research not only combines two different strands of research, it also involves merging, integrating, linking, embedding or mixing quantitative and qualitative data (Creswell, Clark, Gutmann, & Hanson, 2003).

The quantitative data was collected using questionnaires with teachers at Vocational Training Centres (BLKs) and Vocational Senior Secondary Schools (SMKs). The qualitative data for this study was collected using semi-structured interviews with senior officials in the various institutions (BLK, SMK, MoEC, MoM, TUK, LSP, BKSP and BNSP) as well as teachers. Interviews were also conducted with the national authorities of the SKKNI in the MoM, the BNSP and a resource person in the MoEC.

The analysis of the data gathered from the survey method focused on descriptive aspects of samples (descriptive analysis), comparative analyses among the relevant variables, exploratory factor analysis and correlation between teachers' disposition and teachers' performance. The quantitative data analysis for this study included (1) descriptive analysis, (2) exploratory factor analysis and (3) regression analysis. The four areas of quantitative analysis were facilitated by IBM SPSS Statistics (2013, Version 20). The analysis of the qualitative data applied thematic analysis using the five factors in the implementation process

developed by Van Meter and Van Horn and the six conditions of effective implementation conceptualised by Sabatier and Mazmanian as the coding references.

RESULTS
The macro indicators of implementation performance

At the macro level, the implementation of the SKKNI in two types of TVET institutions in Yogyakarta province was found to be ineffective. After more than ten years since the promulgation of the policy of SKKNI, only five per cent of TVET institutions have established TUKs, all were in SMKs and none in BLKs. The establishment of a TUK in the TVET sector is regarded as a key indicator of SKKNI policy implementation. There were TUKs in four courses (curriculum clusters of competencies) out of the 45 courses offered in SMK (8.89%). Young and Allais (2013) identify that the success of certification of competency is dependent on the availability of assessment centres and assessors. The limited number of TUKs in TVET institutions in the province indicates that the implementation of SKKNI at institutional level was ineffective.

The second macro indicator for the effectiveness of the implementation was measured by the participation rate of teachers and students in the certification of competency process under SKKNI. After a period of more than ten years since implementation, the number of certified teachers and students was small compared to the total numbers of teachers and students enrolled. The percentage of teachers certified in their area of competency was 37.63% and the percentage of students involved in certification of competency was less than one per cent.

The micro indicator of implementation performance

The effectiveness of the policy at the micro level was measured by assessing teachers' performance in implementing

two aspects of SKKNI in their teaching activities. The results from statistical analysis of the questionnaire show that teachers of BLK and SMK had at some level implemented the certification aspects and the curriculum aspects of SKKNI in their teaching activities. Teachers' performance in implementing the certification and curriculum aspects of SKKNI in their teaching activities (the micro level) seemed insufficient to facilitate implementation at the institutional (macro) level, for example by establishing TUKs or sending students for certification. Teachers' performance in implementing SKKNI in the classroom may influence students' competency, however, without establishing TUKs and the absence of professional development/training courses for teachers, success in implementing the policy is unlikely. Successful implementation of policy requires adequate financial resources, training workshop facilities, and a commitment by teachers/principal/staff to organise these activities and other managerial support.

CONCLUSION

The results of the analysis conclude that after more than a decade after the promulgation of the policy of SKKNI, the implementation was ineffective. Accordingly, Indonesian TVET sectors so far did not receive significant benefit of the promises of the global policy of competency standards not to mention the impact of the policy to the society. The complex problems in the six factors of implementation processes hindered the adoption of SKKNI into the TVET sector as an instrument for improving its relevance to job market.

The absence of comprehensive study underpinned the policy- making process denoted that the government tended to simply imitating the global trend without serious commitment and effort to learn how the policy works in other countries. The recent hasty initiative to accelerate the implementation of SKKNI in reaction to the regional free flow of

skilled labour under the agreement entitled the Association of South East Asian Nations (ASEAN) Economic Community which comes into effect in 2015 is obviously showing the frivolous action of the government.

The findings of the current study suggest that a borrowed policy from developed countries or an international agency will not be effective implemented without fulfilling the key implementation factors, sufficient understanding about the local context and the uniqueness of policy environment. The analysis of the policy of SKKNI implementation process provides an overarching perspective on how a local policy environment affects the ineffectiveness of a borrowed policy.

Policy implications and recommendations

Given the findings outlined above, three policy recommendations are proposed. Firstly, from the results reported the conclusion can be drawn that the implementation of SKKNI was ineffective because of a poorly formulated policy, inconsistencies in the policy, sectorial ego and inter-ministerial rivalry, fragmented authority and management of TVET. The policy of SKKNI needs to be reorganised to harmonise with three other inter-connected policies (certification of competency; competency based education and training and the newly regulated Indonesian Qualification Framework). The reorganisation of the four policies may imply the development of a prescriptive Law that will harmonise the conflict of interest among the ministries involved and ensure adequate resources are available for successful implementation.

Secondly, the policy of SKKNI as an integral part of the four inter-connected policies requires review using research evidence to address the unique and wide diversity in social-cultural-economic-political in Indonesia. The re-established policy could incorporate short and long term strategies for implementation which

clearly define institutional relationships with authorities in development of curriculum for training packages, certification of competency and also qualification framework. Thirdly, as in Australia, which somewhat successfully integrated the management of TVET into TAFE and the Philippines into the TESDA, integration of the management of Indonesian TVET from 13 ministries into a simple management structure is recommended.

Limitations of the study

The main limitation of this study concerns the attitude of stakeholders from industry regarding the policy of SKKNI. The current investigation did not evaluate the comprehension of the policy, intensity of support and commitment from industry. The second limitation was that the participants in this study came from policy stakeholders of one Indonesian province and it is unclear whether they were representative of all 34 provinces in Indonesia. The third limitation was the fact that in Indonesia at least 13 ministries and private companies run BLK and SMK. This current study, however, only researched the implementation of the SKKNI in BLK and SMK, which were run by MoM and MoEC.

Recommendations for future study

With regards to the research findings and the limitations of the study, the following future research is recommended. Firstly, in this study, only stakeholders from two ministries of MoM and MoEC participated. In fact 13 ministries manage TVET institutions in Indonesia. A future investigation should include participants from the other implementing ministries to obtain a more comprehensive picture and a better understanding about their internal policy environment. Secondly, further research should be conducted to investigate views of industry in relation to the implementation of SKKNI. Third, further research should be conducted to investigate the implementation of the

policy of SKKNI in the broader geographical areas of Indonesia that represent great educational and cultural diversities and unique policy environment.

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