Group of National Experts on Vocational Education and Training

Integrated use of occupational and personal skills for lifelong vocational education in Korea

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EXECUTIVE SUMMARY

The purpose of this study is: i) to review the relevant trends associated with post-secondary VET in Korea, focusing on formal education; ii) to examine what kinds of efforts from the Korean government are being conducted to facilitate soft skills formation in formal, non-formal and informal education; and iii) to propose educational policies to strike a balance between soft skill development and hard skill development.

From resource-based perspective, priority has been put on striking a balance between hard and soft skills development in building a skill strategy of post-secondary VET. Hard skills refer to technical and analytical competencies and know-how allows the worker to perform the mechanical aspects of a job. In contrast, soft skills are abilities for adaptive and positive behaviour that enable individuals to deal effectively with the challenges of life. This research considers the scope of post-secondary VET as Lifelong Vocational Education including formal education (e.g. higher education), and non-formal and informal education, and explores how both hard skills and soft skills take place in Korea with empirical data.

Suggested policy implications are as follows: first, the Korean government needs to invest more budget to non-formal and informal education; second, it is necessary to downsize the number of colleges and universities, or transfer their role to a local base of lifelong education institutes, to meet the demands of adult population regarding skill formation; third, curriculums in non-formal education need to be divided into small units, so that learners can obtain certified qualification; fourth, it is necessary to make more efforts to develop soft skills to build social capital for the future.
1. Background: why focus on lifelong vocational education?

1. In the knowledge-based society of the twenty-first century, the term Lifelong Vocational Education (LVE) has become an important emerging issue in OECD countries emphasising lifelong learning and vocational skills development as the major strategies for national competitiveness. Even though the term of Lifelong Vocational Education is the combination of contradicting perspectives - vocational education stresses increasing the productiveness of labour while lifelong education emphasises the improvement of human life quality and equity. These two different viewpoints have converged to complement each other in order to improve work quality itself, workers’ values on job, and promote sustainable development and quality of life.

2. The concept of lifelong learning embraces all learning activities undertaken throughout life, with the purpose of improving knowledge, skill, and attitude. Lifelong education also covers formal, non-formal and informal patterns of learning so that individuals can enhance their quality of life consciously and continuously (Dave, 1976). Another term representing lifelong learning, “recurrent education” as proposed by the OECD, is related to any form of education in both vocational and general. Even though the concept covers all life of individual, the meaning of recurrent education focuses more on post-secondary education by helping adults learn new knowledge and skills based on the needs of labour market (OECD, 1973).

3. The policies of post-secondary vocational education and training (VET), thus, generally overlap with LVE, and emphasise skill formation in tertiary education, vocational training, and workplace training. Most of them are related to skill strategy issues such as what knowledge, skills and competencies are needed, how skills are acquired, and how the demand and supply of skills can be matched together. In fact, the Lifelong Education Law in Korea promulgated in 1999 differentiates itself from the Initial Education Law and Secondary Education Law and promotes cooperation with the Higher Education Law and Labour Law in order to foster skill formation.

4. This research considers the scope of post-secondary VET as Lifelong Vocational Education including formal education (e.g. higher education) and non-formal and informal education. Moreover, this research uses the term skill as a broad concept that includes knowledge (know-why), narrow concept of skills (know-how). According to Kim (1993), learning literally means acquiring knowledge and/or skill. Thus learning encompasses two meanings: the acquisition of skill (know-how) which implies the physical ability to produce some action, and the acquisition of knowledge (know-why) which implies the ability to articulate a conceptual understanding of an experience.

5. CEDEFOP (2006) classifies skills into four typologies (Table 1.1) and explains both conceptual skills and operational skills having occupational dimensions and personal dimensions for their purposes. Occupational dimensions represents hard skills containing specific and explicit knowledge and some action gained from repeated exercise, while personal skills, the so-called soft skills, are context-dependent and obtained from abstract and tacit knowledge with concrete experience and one’s own reflection.

### Table 1.1 Typology of skills

<table>
<thead>
<tr>
<th></th>
<th>Context-independent</th>
<th>Context-dependent</th>
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</thead>
<tbody>
<tr>
<td><strong>Hard skills</strong></td>
<td></td>
<td><strong>Soft Skills</strong></td>
</tr>
<tr>
<td><strong>Conceptual skills</strong></td>
<td>Occupational skills</td>
<td></td>
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<td></td>
<td>Cognitive skills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Information, Knowledge)</td>
<td></td>
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<tr>
<td><strong>Operational skills</strong></td>
<td>Functional skill</td>
<td></td>
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<tr>
<td></td>
<td>(Technical skill)</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** CEDEFOP (2006, p. 60), revised.
6. From resource-based perspective, there is an increasing focus on striking balance between hard and soft skills development in building a skill strategy in post-secondary VET. Hard skills refer to the technical and analytical competencies and know-how which allow the worker to perform the mechanical aspects of a job. In contrast, soft skills are abilities for adaptive and positive behavior that enable individuals to deal effectively with the challenges of life. In particular, social skills, one of the soft skills, help people make informed decisions, solve problems, think critically and creatively, communicate effectively, and build healthy relationships (World Health Organization, 2003). Moreover, these personal skills are related to the creation of exploratory and tacit knowledge in the workplace and lead to second-order learning (i.e. meta-skills) that can help people and organisations they are affiliated to achieve innovations. Due to these characteristics, the soft skills are regarded as generic, transferable, core, or key skills, that can be applied across varied organisational and employment contexts. They are also key capabilities that help to improve competitiveness at the individual, social and national level.

2. Statement of problems and research framework

7. Recently, the Korean government is faced with the challenge of maintaining competitiveness after an economy crisis. Overinvestment in formal education and underinvestment in non-formal education is severe; structural youth unemployment and wide-spread skills gap (mismatch) between supply and demand are persistent. The relevant issues are as follows:

- The first issue relates to the overinvestment in formal education and underinvestment in non-formal education, which has led to over education and high unemployment for young people. Even though Korea emphasises the development of human resource as a critical impetus for growth and welfare, all national interests concentrate on only formal education (i.e. higher education) rather than non-formal education such as adult education. The academic degree tends to be used only as a way to evaluate someone’s ability and thereby overeducated young people increase with low employment rate. In other words, overinvestment for formal education takes place while underinvestment for non-formal education occurs (see Figure 2.1). For example, 83.8% of high school graduates enrolled in college or university in 2010, while only five out of ten undergraduate students found a job after graduation. In addition only 0.1% of the education budget is allotted for non-formal education.

- The second issue relates to the mismatch between skill supply from school and skill demand of workplace. The rapid expansion of higher education resulted in high expectations of young graduates to obtain decent jobs and thus has led to a lack of skill supply particularly in SMEs (small and medium enterprises) and micro-businesses (Ministry of Employment and Labour, 2010).
Moreover, as employment has shifted from manufacturing to new technology industry and service industries amid drastic changes in global competition, the required skills in the industry has to be shifted from a structure of “low-level and single-dimensional skill” to a structure of “high-level and multi-dimensional skill.”

- The third issue relates to demographic changes due to Korea’s low birth rate and the transition to fast aging society. With rapid economic growth, Korea’s fertility rate has declined even faster. School age cohorts are quickly dwindling by low birth rate, and there appears to be an oversupply of education service. As a result, higher education institutions become facing the difficulty to select new students and the need to restructuring their functions to lifelong vocational institutes.
  
  On the other hand, the workforce continues to age rapidly. The baby boom generation in Korea, who were born in the late 1950s and early 1960s, is getting older and nearing retirement age. Developing the skills of older workers is necessary and the lifelong vocational education policy which can deal with these issues needs to be established.

8. The purpose of this study is threefold: i) to review the relevant trends in post-secondary VET in Korea, focusing on formal education; ii) to examine the kinds of efforts being undertaken by the Korea government to facilitate soft skills formation in formal, non-formal and informal education; and iii) to recommend educational policies that strike a balance between soft skill development and hard skill development.

9. With this purpose, Figure 2.2 shows the research framework of this study. This study regards the types of skills that government can develop as occupational skills (hard skills) and personal skills (soft skills). It shows different ways of implementing skill formations by promoting different styles of learning. For example, operational skills that focus on analytical and technical competencies provide stable and specific knowledge as well as ability that people can utilise what they already knew more efficiently. Personal skills relate to invisible and immeasurable abilities that promote transformational thinking and help people search for new and effective ways of thinking in self-directed and value-driven attitudes. Operational skills development often takes a top-down knowledge flow, unlike personal skills development which takes a bottom-up approach through communication systems. Personal skills may be recognised as the supportive and contextual practices that increase motivation at the work place and indirectly influence hard skills development. Moreover, it may be easy for experienced people such as old workers to obtain or develop those kinds of skills. Thus, two different types of skills are necessary in skill formation strategy
and the relationship between the two skills needs to be loosely coupled. The two skills need to responsive but relatively independent from each other.

Figure 2.2 Research framework of skill formations

Formal, non-formal, and informal LVE system

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10. In previous Lifelong Vocational Education research, the terms including formal education, non-formal education, and informal education were popularly used to categorise LVE modes (Belle, 1982; OECD, 2010a; 2010b). Figure 2.3 represent the three education modes and the characteristics of each mode (Belle, 1982). Formal education reflects hierarchical ordering, compulsory attendance, admission requirements, standardised curricula, and certifications. Non-formal education indicates that the activity must be separated from public schooling but be intended and systematic and also be able to help participants achieve some specific learning goals. It does not depend as formal education does, on standardised certificates and covers education institutes or programs for adults. Finally, informal education reflects the unexpected and less structured learning individuals have with a variety of environmental influence and day to day experience (Belle, 1982, p. 163).

11. This paper uses this matrix as an observation tool to review skill strategy in Korean post-secondary VET. The intent of the matrix is to enable an expanded conception of skills formation resource at the national level, and their possible interaction. It may not be important to categorise each possible skill formation activity by use of the matrix, but help to employ it as a heuristic device which displays the interrelationship among different skills formation strategy. From the skill development perspective, this paper switches the educational characteristics to types of skills. In other words, formal educational characteristics could be regarded as occupational skills (hard skills), and informal and non-formal educational characteristics could be considered as personal skills (soft skills). In case of formal education mode, for example, the subjects of educational mode are junior colleges and universities, and occupational skills formation activities are structured in the degree systems. Personal skills formation activities of formal education modes may be real experience-based curriculum (e.g. competence-based curriculums), emerging trends some Korean universities implement, paralleling with PIAAC. Within the non-formal education mode, occupational skill formation activities includes certification systems such as the academic credit bank system or Bachelor’s Degree Examination for Self-Education, while soft skill formation activities are related to programs which facilitate learning in regional community. Moreover, within the informal education modes there are occupational skills formation activities in the workplace (e.g. training programmes, mentoring and coaching), whereas soft skills formation takes place in form of community based learning in the workplace and at the local and regional level. In the next section, occupational skills
formation and personal skills formation in formal education modes will be introduced followed by non-formal and informal education modes.

**Figure 2.3** The modes and characteristics of education

![Figure 2.3 The modes and characteristics of education](image)


3. Skill formation in post-secondary VET

3.1. Formal education system in post-secondary VET

12. To understand the Korean school system, Figure 3.1 introduces an overall structure of formal education in Korea. The Korean school system comprises six years of primary school, three years of middle school, and three years of high school. Since elementary school and middle school are compulsory, the students’ first decision affecting their future career path is made at the end of middle school when choosing between “general high schools” and “vocational high schools”. As of 2009, 22 students out of 100 middle school graduates go on to vocational high schools and 77 students enter general high schools (Korea Statistics Information Service, 2009). Interestingly, 17 students out of 22 vocational high school graduates (about 76%) were found to have enrolled in college (about 11 students to 2-3 years colleges, 6 student to 4 years university) and 68 general high school graduates enrolled in higher education (about 18 students to 2-3 years colleges, 55 student to 4 years university). Namely, 83.8% of high school graduates enrolled in higher education in 2009. This trend can be explained because Korean society is based on academic success, which means Korean people tend to consider academic degrees as a means to professional achievement in the labour market.

13. Higher education in Korea are divided into seven categories according to the type of institution; colleges and universities, industrial universities, universities of education, colleges of education, junior colleges, broadcast and correspondence universities, polytechnic colleges and other institutions (including theological colleges and seminaries). Korea’s traditional schools for vocational higher education include junior colleges, industrial universities, and polytechnic universities.
14. As of 2009, there were 177 universities established in Korea, and there were 1,984,043 students enrolled in four-year undergraduate courses. Additionally, there were 146 junior colleges with 760,929 students enrolled in two to three year courses. As presented in Figure 3.1, 2-3 year college degrees include polytechnic university and industrial university. Traditionally, polytechnic universities, junior colleges, and industrial universities have been classified as “vocational education” institutions of higher educational level and there are 12 industrial universities where the number of students is about 5.7% of total students, and 35 polytechnic universities with 15,340 students.

15. Higher education in Korea started to rapidly expand since the 1980s, driven by an increase in the number of private universities in order to meet the needs of high school students who wanted higher education. While the number of students has increased since 1980, the number of faculty did not increase which has led to low quality of education and weak competitiveness of higher education. According to World Bank (2009), World-class University has generally less than ten students to one faculty. In Korea, the ratio ranges from 30 to 60 students to one faculty in Korean universities and junior colleges (Ministers of Education, Science and Technology, 2009).

16. In addition, it is expected that students entering to higher education will sharply decrease in several years due to Korea’s declining birth rate, which will force higher education to undergo restructuring. Currently, 323 colleges (including both 4 years and 2-3 years colleges) exist in Korea with a capacity of around 58,000 students. This number of colleges might be slightly less than the total number of high school graduates and it is expected that the number of high school graduates will exceed the number of college capacity after 2015. Recently, the Ministry of Education, Science and Technology announces the list of failing universities in their finance and plans to cut the state subsidies unless they improve in the next year. It is the first step to reconstruct the number of college and universities and might be accelerating further.

17. There is another challenge of post-secondary formal education in Korea. Although the transition rate from high school to higher education has increased rapidly (83/8%, see. Figure 3.2) and a larger number of people receive higher education degrees, the transition from higher education to workplace is
quite low compared to other OECD countries. As OECD statistics show (Table 3.1), the ratio of employment to the youth population (15-24) is only 22.9%, which implicates many people getting a higher education degree have difficulty finding a job. Moreover, this indicates that formal education programs in post-secondary education are not fulfilling their role in skills formation. It also presents the severity of “academic degree syndrome” in Korea; in that Korean people regard higher education degrees as preconditions to finding a job. This has led to changes in university curriculum, going from occupational skills-based (*i.e.* domain-specific knowledge development) to transferable competence-based one (*i.e.* personal skills development).

**Figure 3.2 Entrance rates of tertiary education / ratio of employment to population for youth**

![Figure 3.2 Entrance rates of tertiary education / ratio of employment to population for youth](image)


**Table 3.1 Ratio of employment to youth population (15-24)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Korea</th>
<th>Japan</th>
<th>USA</th>
<th>Canada</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>22.9</td>
<td>33.9</td>
<td>46.9</td>
<td>55.3</td>
<td>52.1</td>
</tr>
<tr>
<td>1995</td>
<td>34.6</td>
<td>44.7</td>
<td>58.3</td>
<td>59.6</td>
<td>59</td>
</tr>
</tbody>
</table>

*Source: OECD Employment Outlook, 2010.*

18. The soft skills development in Korean formal education becomes a key issue, since it plays a role in connecting education and work. According to a research by the Korean Research Institute for Vocational Education and Training (KRIVET) (2006), 69.6 % of Korean companies (240 companies participated) indicated that soft skills such as communication skills, interpersonal skills, and problem solving skills, should be taught in college curriculums. The companies consider soft skills as fundamental life skills necessary for individual to function proficiently in organisations. By size of company, medium sized companies (300-500 employees) indicated the highest positive response rate (74.1%) followed by large
sized company (more than 1 000 employees, 73.3%). Moreover, more than 75% of both manufacturing and service industries indicated a need for soft skills education in college curriculums. From the results of this empirical study, it would seem that an academic degree alone are not a prerequisite to securing in a job, and that the formal education in post-secondary VET system needs to be interconnected with the non-formal and informal education to be in line with needs of labour market.

19. Soft skills are the principle of lifelong learning in nature, because they are related to core competences to deal effectively with the demands and challenges encountered in daily human life. Recently, Korean universities have been making an effort to put more value on soft skill formation in their programs, such as, implementing soft skill development programs such as leadership programs and analytical writing and communication program as part of meeting requirements for their liberal arts curriculums. It also includes operating independent-study major to improve self-direction based on creativity and critical thinking. In addition, the Korean Ministry of Education, Science and Technology (MEST) and KRIVET are collaborating to develop assessment tool to measure soft skills of college student. Its indicators consist of communication, resources, information and technology utilisation skills, higher-order thinking skills, global competency, interpersonal and cooperative skills, and self-management.

3.2. Non-formal education system in Korea

20. Although learning often takes place within formal settings, a great deal of valuable learning also takes place either deliberately or informally. OECD report (2010b) emphasises the importance of non-formal education as policy addenda and summarises it as follows. First, the outcomes of non-formal education contribute to development formal education. Since the purpose of non-formal education is to recognise invisible potentials of learners, it motivates spontaneous participation to education and help learners to establish self-directed learning goal with re-entering into formal education. Second, participants of non-formal education are mainly used to solve mismatch problem between learning and work because the purpose of participation in non-formal education is to provide the knowledge and skills learners need. Third, recognition of non-formal education can help to improve equity in learning opportunities. By providing a learner with an opportunity to return to formal learning, it can help to rebalance equity of learning opportunities between younger and older workers, and men and women.

21. Despite its importance, interest in non-formal education in Korea is quite low. According to MEST, only 0.1 % of the education budget is allotted for non-formal education (See Table 3.2.1). Given that Japan allotted 6.1%, U.K. distributed 29%, and U.S.A. assigned 23.4% of education budget as of 2003, it indicates that Korean society still overlook to the importance of skills formation that goes beyond the schooling system. Even if its importance is recognised, most of the expenses for non-formal learning may be paid by participants themselves. This phenomenon is also found in OECD Education at A Glance report.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Budget of MEST (A)</th>
<th>Lifelong Education Budget (B)</th>
<th>Ratio of Lifelong Budget (B/A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>349 702</td>
<td>202</td>
<td>0.06</td>
</tr>
<tr>
<td>2007</td>
<td>366 095</td>
<td>260</td>
<td>0.07</td>
</tr>
<tr>
<td>2008</td>
<td>420 733</td>
<td>305</td>
<td>0.07</td>
</tr>
<tr>
<td>2009</td>
<td>430 868</td>
<td>420</td>
<td>0.10</td>
</tr>
</tbody>
</table>

Figure 3.3 Participation in formal and/or non formation education (2007)


(OECD, 2010c). As shown in Figure 3.3, only 30% of the 25-64 year-old population participates in non-formal education and training. This is lower than the OECD average 40%.

22. On the other hand, in the case of Korea, the time used for attending non-formal education activities is the highest among OECD countries with an average of 132 hours. The correlation between the participation rate and mean hours of instruction per participant is slightly negative and it represents the participation opportunity for non-formal learning that is quite concentrated in specific groups, such as unemployed people and people who have a tertiary education degree. As such, intensive programs are conducted for them.

23. Although the statistics show that Korea has been placed in the initial stage of non-formal education, the statues have been well established to promote lifelong learning. According to Article 31 of the Constitution of the Republic of Korea, the government is responsible for promoting lifelong learning with equity and setting up legal provisions. Article 10 of the Education Act, which provides the basis for all educational policies in Korea, stipulates the contents related to promoting lifelong learning. The Lifelong Education Act, under the Education Act, also stipulates detailed guidelines such as organisations, duty, and education contents related to promoting lifelong learning.

24. Per the laws, Korean non-formal education system operates two independent occupational skills formation systems (certificate systems): Academic Credit Bank System (ACBS) and Bachelor’s Degree Examination for Self-Education system (BDSE). They provide adult students with access to continuing education and opportunities to upgrade their level of education. These two systems give more opportunities to high school graduate workers to access higher education.
25. Individual learners in ACBS can obtain and accumulate credits through six different channels; completion of ACBS accredited courses, attainment of certification, passing bachelor’s degree exam for self-education, possession or inherited of important intangible cultural properties, completion of college part-time courses, and attainment of required college credit. The degree conferred through ACBS is equivalent to a university or college degree under the Higher Education Act. Degree is conferred by the MEST or the president of the university and college. In order to acquire a degree, candidates must meet all following requirements: degree requirements, the standardised curriculum, and accreditation of educational program (National Institute for Lifelong Education, 2009).

26. In addition, nine majors are included under the BDSE which enable a self-taught learner to attain a bachelor’s degree by passing the required examinations. The degree is officially conferred by the MEST. It aims to facilitate self-directed learning, activities for lifelong learners by officially approving self-taught learning results through a 4-stage process of qualifying examinations. The processes of BDSE are shown in Figure 3.4. Currently, two public organisations are involved in the operation of the BDSE and the ACBS, respectively. The Korean National Open University is commissioned to manage the former and the Korean Educational Development Institute (KEDI) is commissioned to manage the latter.

![Figure 3.4 Bachelor's degree examination for self-education](image)


27. With regard in personal skills formation in the non-formal education sector, the Korean government has implemented “learning city project” since 2001. As of 2009, 78 out of 232 local autonomous entities (cities/countries/districts) were designated as “learning cities” to promote learning networks and partnerships. The learning city contributes to developing regional human resources by supporting learning facilities, facilitating collaboration through group gatherings (e.g. study circle), and transferring learning outcomes to the local region. As of 2007, USD 144 million has been invested to facilitate this project (NILE, 2009). The main activities of learning city basically include the following. First, there are many learning events promoted such as presentations, seminars, forums and learning festivals. In order to implement these learning activities, each learning city utilises existing facilities for
learning such as public administration offices, schools and private institutes. Second, most of learning activities aim to not only fulfill individual learning needs in form of leisure, cultural activities and individual hobby activities, but also promote new business development projects that are special and unique to a specific region. Residents identify potential regional competitiveness and try to commercialise them as special products or tourist attractions and initiate a new business (Choi, 2008). Third, learning activities among residents promote local partnerships with all parts of the local society at the individual, group, and organisational level. These programs are implemented under the goals of individual life and self actualisation, shared learning, community building, and regional development, to promote social cohesion and a sense of belonging in the community (NILE, 2008, p. 20).

The skills which could be developed through learning city activities are cooperation and integration. Through opportunities to demonstrate participants’ own professional skills, each individual can become a main contributor to community development; thereby learn self-efficiency and social-value as a member of society.

3.3. Informal learning in community

Informal learning takes place in various daily activities such as work, family or leisure. It is not organised or structured in terms of objectives, time or learning support, but it is unintentional and contingent on interactions and relationships with people. It is often referred to as “learning by experience” or simply as “experience”. The idea is that people, by virtue of their very existence, are constantly exposed to learning situations (CEDEFOP, 2008). Since a real situation of learning for adults is living in an ecosystem of learning that preserves all the context-dependent characteristics inherent in human understanding and communication, it is difficult to present empirical data or concrete examples to document informal learning.

According to an OECD report (2010b), there are important reasons to emphasise informal learning. First, it may have value in the formal lifelong learning system. As mentioned above, informal education may encourage people to return to formal learning. A KRIVET research (2005) showed that, some form of experience in informal learning can motivate people to enroll in courses to obtain a certified qualification. The research concluded that recognition of these outcomes motivates individuals to develop their capacity for self-study. Second, informal learning outcomes also have potential value for the labour market. If tacit knowledge, skills and competences become more visible through repeated experience, existing professional and domain-specific skills would be better placed to explore new knowledge and thereby promote creativity. Nonaka (1994) emphasises that tacit knowledge induced by dialog or collective reflection could convert to explicit knowledge which enables people to standardise hidden abstract skills. Articulating vague and invisible skills may be the ultimate aim of recognising informal learning, although many countries are still far from formalising the process to the extent of one’s informal knowledge.

Figure 3.5 represents the status of informal learning in Korea. Although informal learning could facilitate interaction with other people (Nonaka, 1994), most Korean people gain some insight through individual activities such as web searching, document reading, or watching TV. This survey results parallel with the findings of KRIVET’s research (2005); in that 51 % of respondents indicated that they mostly do not participate in learning community because they do not have enough time to learn something due to work obligations.

Given the importance of informal learning, the Korean government has begun facilitating the formation of small size gatherings, so-called “study circles” since 2001. By 2009, 3 341 study circles in local districts have been formed to discuss common topics and build social relationships. Some study circles have voluntary professionals who provide expertise in specific knowledge and skills development, but most of the study circles are formed based on commonalities to share interests. Study circles are
typically created by persons who want to discover a common interest or want to be specifically grouped with the goal of gaining knowledge related to their field. It is through the process of sharing information and experiences with the group that the members learn from each other, and have an opportunity to develop themselves personally and professionally. As of 2009, around USD 16 million is invested to support the study circles’ activities, approximately monthly support from USD 500 to USD 1000 per group (NILE, 2009).

33. Recently, informal learning in Korean colleges and universities has been embodied in the way of reforming curriculums to “competence-based education”. Rather than measure student achievement through traditional exams and standardised test, some universities try to increase opportunities for students to use knowledge more in class and measure student soft skill improvement through a multi-dimensional process of cognitive and practice-based assessment. According to KRIVET’s report (2010), 31 universities participated in the Korea Collegiate Essential Skills Assessment, recently developed by KRIVET which aims to measure the soft skills of college students (e.g. communication skill, analytical skill, self-management skills, interpersonal skills, etc.). It would seem that a more number of universities may have an interest in implementing competence-based education and the soft skills can become core educational contents in higher education.

4. Policy implication and future work

34. Taking into consideration Korea’s demographic changes driven by a low birth rate and aging society, it is expected that the portion of non-formal education will increase. Thus, VET needs to be shifted from formal higher education to non-formal education. However, only 0.1 % of the education budget is allotted for non-formal education and only 30% of population in ages of 24-65 years old is exposed to non-formal and informal education in Korea. If this situation continues, it may aggravate the long-term skill mismatch between education and work.

35. At the higher educational level, it is necessary to downsize the number of colleges and universities or transform them as lifelong education institutes at the local level in order to facilitate skill formation among adult workers. To restructure, most of the colleges except for academic universities need to find and develop their specific strengths considering the characteristics of the local market and specialise their role to meet the local industry’s needs. Moreover, soft skill-based curriculums which are promoting
36. A key issue for non-formal and informal education is how their learning outcomes could be verified and qualified so that they can help learners find a job in the labour market. As of 2010, the Korean qualification framework consists of national and private qualification systems and each system operates 684 and 1 422 certification respectively. Despite such quantitative operations, the recognition system has been criticised for being unsuccessful as a signal of competence the industries need and no functioning to produce the exchange goods between individuals and markets. In order for people to increase their employability through the system, from lifelong vocational education perspective, most of the curriculums in non-formal education need to be divided into small units, and they have to be recognised as the credit which can be accumulated into one’s own qualification profiles and finally recognised as exchangeable value. This helps not only that people easily accesses learning opportunity but also that companies easily recognise the outcome of learning. To do this, various unit-based curriculums have to be developed with a structured system (i.e. credit bank system) which can help individuals’ develop their own career paths.

37. One of the reasons adult learners cannot access learning opportunities in Korea is that learners are mostly responsible for paying for the costs themselves. According to OECD (2010c), the proportion of all private spending on tertiary education is 79.3%, which is quite high compared to other countries such as Canada (43.4%), Germany (15.3%), and United State (68.4%). Moreover, over 50% of non-formal learning participants rely on their own financial resources to pay for the costs (KRIVET, 2005). Given 30% of Korean population participates in non-formal education (OECD, 2010c), it indicates that Korean government still does not consider non-formal education as a spending their public budget sector and most of the adult learning depend on private expenditure.

38. Although the concern on personal skill development increases, the Korean VET system is still heavily geared towards occupational skill development. In order to develop knowledge and skill for VET, it would require measurable explicit knowledge and repeated disciplines but it is also necessary to generate tacit knowledge through sharing processes which meta-cognitive thinking occurs. As mentioned above, the term of skill includes both occupational skill and personal skill dimensions and requires keeping in balance between them. For example, skills to achieve moral standards, a virtue for caring and community value, could be crucial asset to expand scope of jobs. These skill-sets lead to not only creating new jobs such as aging persons and children caring but also facilitating healthy mindset for young workers to conduct social justices which can be competitiveness in modern society.
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