

A cross cultural study between key competencies and zest for living

著者	ARIMOTO Masahiro, Yen Fu KUO
journal or publication title	Annual Report Graduate School of Education, Tohoku University
volume	68
number	1
page range	231-241
year	2019-12-26
URL	http://hdl.handle.net/10097/00126998

A cross cultural study between key competencies and zest for living

Masahiro ARIMOTO *

Yen Fu KUO **

As the effects of globalization spread increasingly, the educational system from different countries had become more and more similar. Though the process of information transfer and comparison from international assessments, such as Programme for International Student Assessment (PISA), the educational essence tended to be integrated and influenced each other. In this trends, the “competency”, which are represented for one kind of core structure emphasis on individual development promoted by Organization for Economic Co-operation and Development (OECD). The concept of competency increasingly embedded into the educational aims from each countries. Obviously the types of teaching and learning are changing as the curriculum structure transfer to “competency-based” and in this study we take the curriculum guideline from Taiwan and British Columbia (Canada) for examples to explain how “competency-based” influenced deeply to this countries.

On the other hand, we should not use the “one-way” perspective to analysis the phenomenon that the power from outside to influence the local educational mechanism. In other words, the factors promote educational reform not only from globalization but including the element that have existed in local cultural context. In this part, we used “zest for living”, which was stand for one of the critical educational value in Japan, to describe the process how the ministry of education in Japan applied the competency concept to integrated with existing value to promote educational reform.

Keywords : competencies, zest for living, education reform.

1. Introduction

With the development of internationalization and the advancement of information technology, the education system of different countries has undergone dramatic changes. Among them, the concept of competencies led by OECD began to spread among countries in modern times. The

* Professor, Graduate School of Education, Tohoku University

** PhD student, Department of Education, National Taiwan Normal University / Special Research Student, Graduate School of Education, Tohoku University

competencies-oriented education model has changed the curriculum development and teaching design in the education system of each country. In particular, the concept of competencies emphasizes the balanced development of students. The so-called balanced development is not only limited to the individual level, but also emphasizes the interaction with the society and the cooperation of others. And further develop care for the environment.

In this article, we will briefly introduce the origin of the concept of competencies, and then introduce how competencies affects the change of education in various countries. Let us take the example of Taiwan and Canada to explore the direction of curriculum development. How are these two regions? Designed on the basis of the concept of competencies. Finally, we will also introduce how the Japanese side balances globalization with localization.

2. What is Competencies?

The " key-competencies " refers to a person's ability to successfully meet the complex requirements and challenges in a specific situation, to successfully carry out life tasks, and to emphasize how individuals can succeed in thinking, choosing, and acting in a complex environment.

If we want to understand the concept of " key-competencies ", we must understand the DeSeCo Project proposed by the OECD.

The DeSeCo Project's conceptual framework for key-competencies classifies such competencies in three broad categories. First, individuals need to be able to use a wide range of tools for interacting effectively with the environment: both physical ones such as information technology and socio-cultural ones such as the use of language. They need to understand such

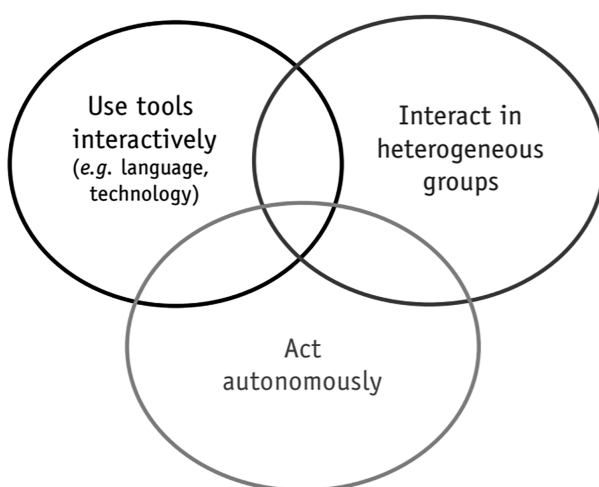


Figure 1. The original conceptual model produced by the DeSeCo project (Rosemary, 2018)

tools well enough to adapt them for their own purposes—to use tools interactively. Second, in an increasingly interdependent world, individuals need to be able to engage with others, and since they will encounter people from a range of backgrounds, it is important that they are able to interact in heterogeneous groups. Third, individuals need to be able to take responsibility for managing their own lives, situate their lives in the broader social context and act autonomously.

3. Competencies applied in teaching

There are three key points about the concept of key-competencies is applied in teaching. The first one is called “Learner-Centered Teaching”. Second, key-competencies teaching must focus on the differences between individuals. Third, the teaching of key-competencies concepts emphasizes that knowledge can be applied to real life.

Traditional education	key-competencies education
Teacher-centered	Learner-centered
Remember the content of the textbook and achieve the learning goals through continuous practice.	Integrate knowledge, skills, and attitudes to solve problems encountered in life.
Emphasize the value of each discipline	Emphasis on inter-disciplinary learning

Table 1. The comparison about Traditional education and key-competencies education (Wu & Chan, 2018)

Through the above table, we understand that competencies education is very different from traditional education. So far we have only talked about the scope of the idea, then we will introduce the actual application method.

4. The example of Taiwan

In response to the ever-changing social situation and the advent of the era of the knowledge economy, the education institution as a training talent must be transformed at any time according to changes. In the part of education policy, in the course of the new curriculum guidelines implemented in 2019, Taiwan mentioned that the goals of the school curriculum will be focused more on four directions: inspiring life potential, cultivating life competency, promoting career development, and cultivating civic responsibility. The above curriculum objectives will be developed in combined with Essential competencies .The competencies concept has different definitions based on different national conditions, organizations, and theories. In the context of 12-Basic-Education-Curricula, Essential competencies is divided into three major aspects. The main concepts include spontaneity, communication and interaction, and social participation. The goal of learning will not only stop at the level of knowledge and skills at the subject level, but also focus on the integration of life situations and take lifelong learning as the core value.

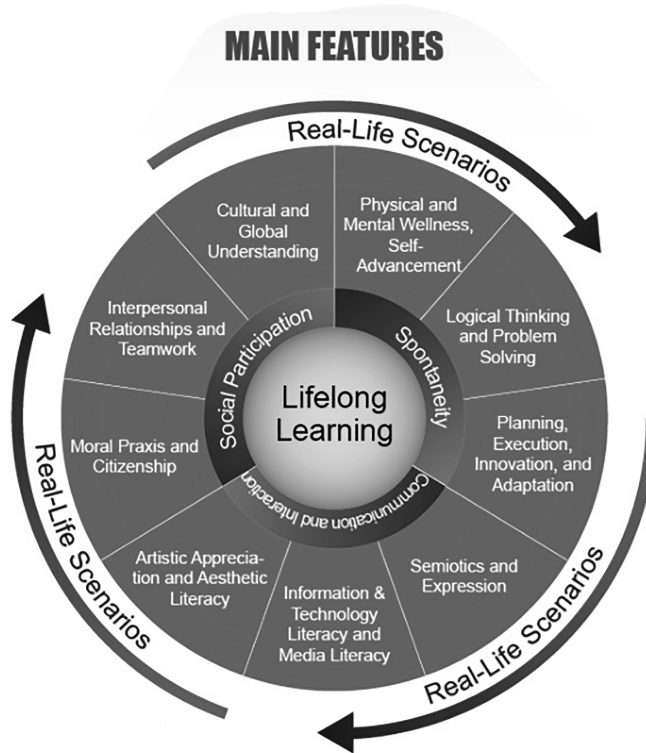


Figure 2. A Wheel-in-Action Diagram of Essential Competencies (NAER, 2017)

Dimension	Items	Content
Spontaneit	Physical and Mental Wellness, Self-Advancement	With the quality of physical and mental development, we have a proper view of human nature and self-view. At the same time, through the selection, analysis and application of new knowledge, we can effectively plan career development, explore the meaning of life, and constantly improve ourselves and pursue perfection.
	Logical Thinking and Problem Solving	It has systematic thinking and post-contemporary competencies of problem understanding, speculative analysis, and reasoning criticism, and can act and reflect to effectively deal with and solve life and life problems.
	Planning, Execution, Innovation, and Adaptation	Have the ability to plan and execute projects, and explore and develop diverse professional knowledge, enrich life experience, and exert innovative spirit to respond to social changes and enhance individual flexibility.
communication Interaction	Semiotics and Expression	Have the understanding and use of language, text, mathematics, body and art to express, communicate and interact with each other, in daily life and work.
	Information & Technology Literacy and Media Literacy	Have the ability to make good use of technology, information and various media, cultivate relevant ethics and media competencies, and analyze, think and criticize the relationship between people and technology, information and media.
	Artistic Appreciation and Aesthetic Literacy	With the ability to perceive, create and appreciate art, experience the beauty of art and culture, through the reflection of life aesthetics, enrich the aesthetic experience, cultivate the attitudes and abilities of appreciation, construction and sharing.

social participation	Moral Praxis and Citizenship	Have the competencies of moral practice, from personal ego to social citizen, step by step, develop social responsibility and citizenship, take the initiative to pay attention to public issues and actively participate in social activities, care for the natural ecology and sustainable development, and show the good, the good and the good Good character.
	Interpersonal Relationships and Teamwork	Have friendly interpersonal feelings and establish good interaction with others, and develop teamwork with people to communicate and coordinate, tolerate dissidents, social participation and service.
	Cultural and Global Understanding	Have the belief of self-cultural identity, respect and appreciate multiculturalism, actively care about global issues and international situations, and be able to adapt to the pulse of the times and the needs of society, and develop the understanding of international understanding, multicultural values and world peace.

Table 2. The conception of competencies for three dimension and nine item (MOE, 2014)

The key-competencies emphasizes the value and function of education. The three aspects of key-competencies and the connotation of the nine projects can also cover knowledge, ability, attitude, etc. The concept emphasizes the promotion of individual development and lifelong learning through competencies in the process of learning. The key-competencies is based on the ten basic abilities, but it can make up for the inadequacy of the ten basic abilities, the ambiguity of the coverage, and the lack of important life issues such as "moral practice and citizenship", "scientific information and media competencies" and " Art conservation and aesthetic competencies can also meet the needs of the present and future society.

The significance of key-competencies

- (1) "Key-competencies" refers to the knowledge, ability and attitude that a person should possess in order to adapt to the present life and future challenges.
- (2) Key-competencies covers a broader and richer educational connotation than the "basic ability" and "discipline knowledge" of the past syllabus.
- (3) The expression of key-competencies can highlight the subjectivity of learners. It does not use "discipline knowledge" as the only category of learning, emphasizing the characteristics of combining it with the situation and practicing it in life.
- (4) Key-competencies emphasizes the meaning of "lifelong learning" and focuses on the learning process, methods and strategies.

Key-competencies refers to the knowledge, ability and attitude that a person should possess in order to adapt to the present life and future challenges. Competencies is a ability to successfully respond to the needs of an individual or society, including the ability to use knowledge, cognition and skills, as well as attitudes, affections, values and motivations. The key-competencies connotation involves a successful life and a functioning society. Expectation.

" key-competencies " is more applicable to today's Taiwanese society than "capacity". "Key-

competencies" inherits the "basic ability", "core competence" and "discipline knowledge" of the past syllabus, but covers a broader and richer educational connotation. The expression of key-competencies can highlight the learner's subjectivity. It is no longer just the subject of knowledge as the only category of learning, but the care of learners can be integrated into the "life situation", emphasizing the qualities that can be practiced in life.

Competencies-oriented learning goals are widely discussed at home and abroad, but Taiwan is a region that later introduced the concept of competencies. So, what is the concept of competencies? How to plan for competencies courses? The issue of how to evaluate competencies indicators is still in the stage of exploration. Research on competencies has also become a hot academic topic.

In Taiwan, competencies-oriented education emphasizes students' ability to "Transfer of learning". The knowledge acquired by students is no longer oriented as a single discipline. In contrast, we hope individuals have the ability to integrate across fields and face unpredictable problems and challenges. As a result, teachers of different disciplines must collaborate in designing "inter-disciplinary courses." Interdisciplinary courses do not focus on knowledge learning, but allow students to discuss specific core issues through PBL. In this type of teaching method, students must learn group cooperation, information collection, communication and expression, self-improvement, etc. Thus, the learning goal is more focused on the ability to "learn to learn".

When competencies is seen as a learning goal, the content of the assessment tool must be examined. We must think deeply about the possibility of assessment for competencies-oriented teaching. In the past, discipline-oriented teaching situations, examination is the main method of assessment. The purpose is to examine students' mastery of subject knowledge. However, in the competencies-oriented teaching field, the scope of student learning is not limited to the knowledge level of textbooks. Attitudes and skills are more valued than ever before. At this time, the complexity of the assessment is much higher, and we may even begin to question the effect of traditional assessment.

In Taiwan, the concept of competencies has not yet been localized. The discourses about competencies are often placed in a vacuum context. In this case, the concept of competencies is often viewed as a result of globalization and it has nothing to do with Taiwan's local culture. The lack of whole contextual evaluation is often regarded as one of the reasons why Taiwan's education reform is difficult to succeed.

4. The example of British Columbia(Canada)

Core Competencies are at the centre of the curriculum redesign in BC. Core Competencies

are sets of intellectual, personal, and social and emotional proficiencies that all students need to develop in order to engage in deeper learning. The Core Competencies include thinking, communication, and social and personal competencies.

The Core Competencies are sets of intellectual, personal, and social and emotional proficiencies that all students need in order to engage in deep, lifelong learning. Along with competencies and numeracy foundations, they are central to British Columbia's K-12 curriculum and assessment system and directly support students in their growth as educated citizens.

Students develop Core Competencies when they are engaged in the “doing” – the Curricular Competencies – within a learning area. As such, they are an integral part of the curriculum. While they manifest themselves uniquely in each area of learning, the Core Competencies are often interconnected and are foundational to all learning.

Before students enter school, development of Core Competencies begins at home and then continues throughout their life. Students encounter opportunities to develop their competence in formal and informal settings. They move from demonstrating competence in relatively simple and highly supported situations, to demonstrating independence in more complex and varied contexts. Competency development does not end with school graduation but continues in personal, social, educational, and workplace contexts.



Figure 3. Students, teachers, and parents/guardians share responsibility for the ongoing development of Core Competencies. Each group has its own considerations. (Province of British Columbia, 2019)

Aspects	Contents
Communication	The Communication competency encompasses the knowledge, skills, processes and dispositions we associate with interactions with others. Through their communication, students acquire, develop and transform ideas and information, and make connections with others to share their ideas, express their individuality, further their learning, and get things done. The communication competency is fundamental to finding satisfaction, purpose and joy.
Thinking	The Thinking competency encompasses the knowledge, skills and processes we associate with intellectual development. It is through their competency as thinkers that students take subject-specific concepts and content and transform them into a new understanding. Thinking competence includes specific thinking skills as well as habits of mind, and metacognitive awareness. These are used to process information from a variety of sources, including thoughts and feelings that arise from the subconscious and unconscious mind and from embodied cognition, to create new understandings.
Personal and Social	The Personal and Social competency is the set of abilities that relate to students' identity in the world, both as individuals and as members of their community and society. Personal and social competency encompasses what students need to thrive as individuals, to understand and care about themselves and others, and to find and achieve their purposes in the world.

Table 3. The conception of competencies in BC (Province of British Columbia, 2019)

Competencies are embedded and evident within the learning standards. They come into play when students are engaged in “doing” in any area of learning. Together, the literacy and numeracy foundations, essential learning, and Core Competencies contribute to the development of educated citizens.

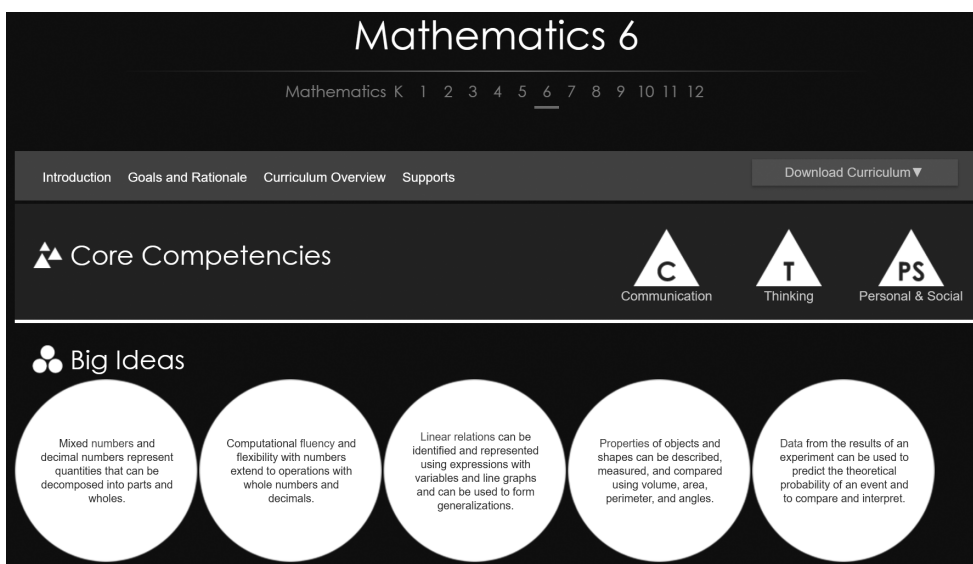


Figure 4. Core competencies for mathematic in BC (Province of British Columbia, 2019)

As shown in the above figure, in the official website of British Columbia, we can take the sixth grade math class as an example. The website details the objectives and principles of the course.

5. The example of Japanese

Finally, we will discuss the relationship between Japanese education and competency. We will talk about this topic in two parts. The first is to explore “the zest for life”(生きる力), which is the value of the Japanese curriculum guideline . The second one is to discuss how Japanese education was influenced by the OECD and then changed the original educational model.

First of all, the value of the Japanese curriculum guideline is “the zest for life”. The concept of the power of life is roughly divided into three parts. We can see the following figure and its definition.

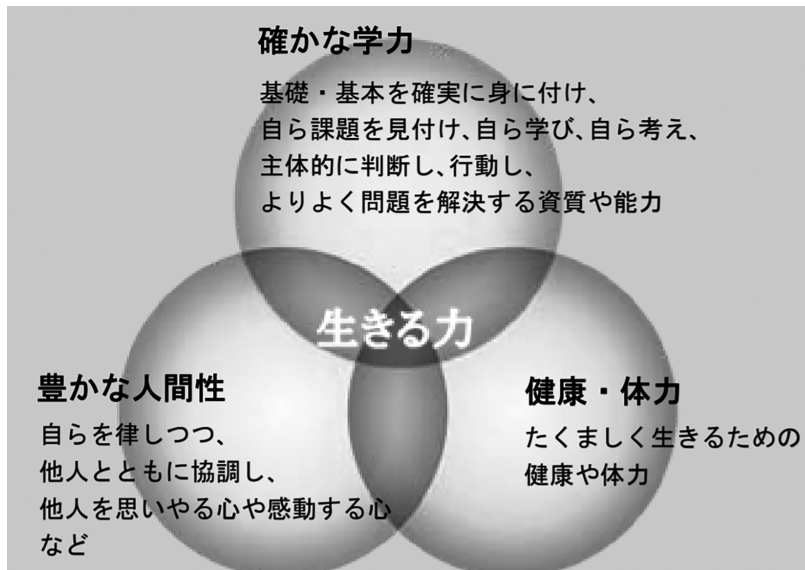


Figure 5. the conception of the “zest for life” (MEXT, 2014)

What we need for our children in the future is the qualities and abilities to find problems, learn by themselves, think for themselves, make decisions, act and solve problems better, regardless of how society changes. I thought that it was a rich humanity, such as a self-educating power, and a self-education, co-ordinating with others, caring for others, and being moved. It goes without saying that health and physical strength are essential for a healthy life. We consider these qualities and abilities to be called “the power to live” in the rapidly changing society, and thought that it is important to cultivate knowledge, virtue, and body in a balanced manner.

“The zest for life” represents a Japanese native value. It contains elements of intelligence, morality, physical strength, etc. These values are considered to be the basic qualities that a person must possess, so it is embedded in the Japanese education policy. With the development of the Japanese curriculum guideline, we can understand, in modern times, the Japanese government has begun to increase the flexibility of students' learning in order to reduce the learning pressure of students and avoid the occurrence of cramming education. Under the impetus of “the zest for life”, students are expected to balance the development of physical, mental, and abilities.

The operation of “The zest for life” affects the planning of the course content and the arrangement of the entire teaching design, including the time of students' education and the difficulty of textbooks, all of which have changed under the premise of “individual balanced development”. At the same time, the educational connotation of “The zest for life” is also related to “Yutori education”. However, such an educational model seems to indirectly lead to the worry of the decline in students' learning ability. This is what we will discuss next: “How the competency concept developed by the OECD is directed to the Japanese education system.”

When we want to discuss how Japan's education system is affected, we must first think about what is the medium. In this article, PISA represents a medium that represents a bridge between Japan and the world, through international assessment. The concept of “competencies” was also introduced to Japan, which in turn affected the occurrence of Japanese education reform.

6.conclusion

This article lists examples from Taiwan, British Columbia, and Japan to illustrate the popularization of competencies education. In fact, when entering the different regions, the concept of competencies also merges with local culture. In other words, we must pay attention to the concept of global geography.

Finally, we are not sure whether the concept of competencies is the common ability that all human beings need. Perhaps each era has different key capabilities that need to be cultivated.

Reference

- Arimoto, M., & Ishimori, H. (2013). Reconceptualizing assessment for learning from culturally embedded pedagogy to add further impetus to curriculum as a school-based initiative. *Annual Bulletin, Graduate School of Education*, 62(1) 303-324.
- Hipkins, R. (2018). How the key competencies were developed: The evidence base. New Zealand Council for Educational Research. Retrieved from: nzcer.org.nz/system/files/Paper%20Evidence%20base_final.pdf.
- MOE. (2014). The 12-years Basic Education Curriculum Guide. Retrieved from: <https://www.naer.edu.tw/>

ezfiles/0/1000/attach/87/pta_18543_581357_62438.pdf

- NAER. (2017). A Wheel-in-Action Diagram of Essential Competencies. Retrieved from: <https://www.naer.edu.tw/files/15-1000-14181,c1582-1.php>
- MEXT. (2014). Gakushū shidō yōryō(Curriculum guideline) . Retrieved from: http://www.mext.go.jp/a_menu/shotou/new-cs/index.htm
- Province of British Columbia. (2019). Core Competencies. Retrieved from: <https://curriculum.gov.bc.ca/competencies>
- Province of British Columbia. (2019). BC's Redesigned Curriculum. Retrieved from: https://curriculum.gov.bc.ca/sites/curriculum.gov.bc.ca/files/Curriculum_Brochure.pdf
- Shinkawa, M., & Arimoto, M. (2012). Research for Japanese-Like Competency and Assessment Through Challenges of Eager Schools for Sustainability after the Great Earthquake and Tsunami. *OIDA International Journal of Sustainable Development*, 3(9) 61-70.
- Wu, P.-C., & Chan, J.C. (2018). Reflecting on the Perspective Transformation of Competency-Based Education. *Journal of Educational Research and Development*, 14(2), 35-64.

Appendix

The curriculum design, in the new educational reform in Japan, is in the process of equipping with the international tendency. The elements of curriculum should include with three conceptions:

- Knowledge: “What” do we know?/ “How” do we know?
- Skill: How do we “use” the knowledge we learned?
- Character: people has individual personality to live in this world

The characters mentioned above are seen as three big points in the growth process of intelligence.

It is said that many things in Japan have the cultural and historical uniqueness, so it is difficult to approach cross-cultural issues.

The authors would like to save this detailed discussion for another time.

