OECD/Japan Seminar

Education 2030: 21st Century Competencies

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Key Competencies reflected in Korean National Curriculum

- **X** Key Competency
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 - 核心 力量

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The backgrounds of the initiation of the key competency-reflected approach in Korean National Curriculum

The general backgrounds of curriculum revision in Korea

- Social changes
- Progress among academic disciplines
- Child development
- Contexts of Korean education around 2010
 - predicted and diagnosed the mega-trends in the future society
 - according to the megatrends, actively discussed the future directions of education
 - the notion of competency appeared and received wide attention in such discussions

Examples of mega-trends in the future society

- in the sector of Society and Culture
 - Demographic change, Reorganization of international order according to the deepening globalization trend, Bipolarization and socio-economical inequality
- in the sector of Science and Technology
 - Advancement of ICT and Convergence-type Technology
- in the sector of Economy
 - Changes in the structure of labor market, Knowledge-based economy
- in the sector of Environment
 - Environment and climate change, Crisis of Energy, Health
- in the sector of Politics
 - increase in safety risk, national unification of Korea

- According to the prediction of megatrends in the future society...
 - (1) we carried out a close diagnosis of the future national and social needs and tried to initiate changes into the curriculum system
 - ** Based on the diagnosis of national and social needs in the future society, we set the cross-curricular themes that must be dealt with in all the facets of school education.
 - (2) We drew the key competencies for Korean students who have to live in the 21st century and reflected them into the school curriculum.
 - * In this presentation
 - I would like to focus on (2) and explain how we decided those key competencies and in what ways we reflected them into our recent national curriculum(2015 revised national curriculum).

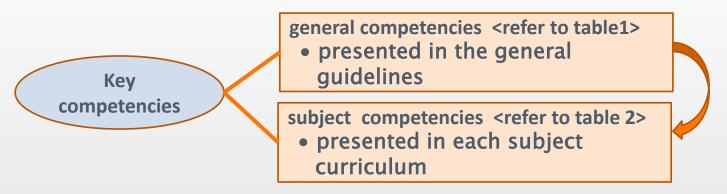
2. The process of extracting key competencies for Korean students

- The beginning of the discussion regarding competency in education
- In 2007, KICE launched a research project and it stimulated full-fledged discussions on key competencies by drawing out definitions, criteria and primary domains.
- Since then, there have been numerous studies on key competencies (refer to the table of next slide!)
- Major themes in the studies on key competencies
 - (1) What kinds of competencies do Korean students have to equip for future life?
 - (2) How can we reflect those competencies into our national and school curriculum system?
 - (3) How can schools implement the competency-reflected curriculum through instruction and assessment?
- In the process of 2015 curriculum revision, we have come up with some tentative plans regarding (1) and (2).
 Now we are engaging in devising and preparing more detailed measures regarding (3)

<Table1> The studies on key competencies for Korean students Studies Key competencies proposed Hyunjin Yoon et al. (2007). A study on The competence of controlling conflicts. The competence of problem solving. The communicative competence. The developing key competencies in the competence of information processing. The citizen ethics. The creative competence. The multi-cultural appreciation primary/secondary school curriculum for the competence. The competence of self-centered learning. The competence of enjoying life. future Koreans [KICE] Kwangwoo Lee et al.(2008). A study on developing key competencies in the Creativity, Problem solving, communication skill, information processing, interpersonal relations, self-management, primary/secondary school curriculum for the basic learning skills(literacy), citizenship, understanding of international relationship, vacational development future Koreans(II) [KICE] Kwangwoo Lee et al. 2009). Redesigning Personal competencies Self-management, basic learning skill, competency for career development elementary and secondary school curriculum Communication skill, citizenship, understanding of international core | Social competencies developing future Koreans' relationship, interpersonal relations competencies. [KICE] Creativity, problem solving skill, information processing Competencies for learning Moral competency, self-identity, self-awareness, self-respect, openness, Keunho Lee et al. (2012). Design of the Competencies regarding personalities caring ability, ethics, etc. competencies-based national curriculum for Intellectual competencies Creative thinking, learning skills, etc. the future society. [KICE] Social competencies Abilities for social life, task performing abilities, etc. Keunho Lee et al. (2013). Improvement plan * Based on the research carried out by Keunho Lee et al(2012), this study explored how to align the curriculum, of the subject curriculum based on the key teaching-learning methods and educational assessment competencies. [KICE] ·Kwangwoo Lee et al. (2014). A study on the Self-management competency, community spirit competency, communication competency, creative and convergent guidelines subject curricular thinking competency, esthetical sensitivity competency, knowledge-information process competency development. [KICE-Ministry of Education] Kyeongja Kim et al. (2014). Study for developing the revision draft of the Self-management competency, community spirit competency, communication competency, creative and convergent general guidelines in Korean national thinking competency, esthetical sensitivity competency, knowledge-information process competency curriculum. [Ministry of Education]

2015 revised national curriculum(general|Self-management competency, community spirit competency, communication competency, creative and convergent

- The studies carried out by Kwangwoo Lee et al. (2009) and Keunho Lee et al. (2012)
 - categorized key competencies
 - Kwangwoo Lee et al. (2009): personal, social and learning competencies.
 - Keunho Lee et al. (2012) Competencies regarding personality, intellectual competencies and social competencies.
- However, Kwangwoo Lee et al.(2014) and Kyeongja Kim et al.(2014) do not categorize key competencies.
 - because it is a really difficult task to demarcate competencies according to a certain categorizing system
 - That is why 2015 revised national curriculum present 6 general competencies without categorizing them.
- Key Competencies in 2015 revised national curriculum.



<Table 2> Subject competencies

Table 2 Subject					
subject	Subject competencies				
Korean Language	critical-creative thinking competency, data-information utilizing competency, communication competency, community-relationship, enjoyment of culture, self-reflection.				
Moral Study	self respect and management ability, moral-relational competency, moral sentiment, community spirit, ethical reflection and practice				
Social Studies	creative thinking competency, critical thinking competency, problem solving and decision making ability, communication and collaborative working ability, information utilization competency				
History	Ability to understand historical facts, ability of analyzing and interpreting historical materials, communication competency through historical information, ability of decision making and problem solving through historical experience, identity and mutual respect				
Mathematics	problem solving, reasoning, communication, creativity and conversion, information process, attitude and practice				
Science	scientific thinking competency, scientific investigation competency, scientific problem solving ability, scientific communication competency, scientific participation and life long learning ability				
Practical	· practical problem solving ability, independent living ability, ability of making good interpersonal relationships				
Arts(Technology and	· technical and technological problem solving ability, ability of designing technical and technological system, ability of				
Home Economics)	utilizing technology				
Physical Education	Ability of maintaining good health, ability of strengthening human body, ability of game performance, ability of making bodily expressions				
Music	Emotional capacity on music, creative and convergent thinking competency through music, communication competency through music, ability of building a cultural community, self-management competency, knowledge-information processing competency				
Fine Arts	Emotional capacity on Arts, visual communication, creative and convergent thinking competency, ability to understand Arts and culture, self-initiated learning on Arts				
English	Communication competency in English, Self-management, Community spirit, knowledge-information processing competency				

3. Competencies reflected in 2015 revised national curriculum

- 1) How to reflect competencies into curriculum and how to locate them into the documentation system of national curriculum
 - Where do we have to present competencies in the documentation system of our national curriculum?
 - general competencies : in the 'direction of curriculum organization' of the general guidelines.
 - subject competencies : in the 'characteristics of the subject' of the subject curriculum.
 - How much do we emphasize competencies in the curriculum?
 - We presented the lists and basic meanings of both general competencies and subject competencies in the curriculum document.
 - However we do not provide the sub-components of each competency, because competency can not be clearly distinguished from other competencies and the more detailed prescription of competency can harm school autonomy in implementing such competency.

General competencies presented in the general guidelines of the national curriculum

In order to actualize 'the vision for the educated person' of this curriculum, schools should try to develop key competencies as following through the entire process of school education including subject matters.

- •<u>self management competency</u>, with which one can live self-initiated life through establishing self identity and confidence by way of cultivating basic knowledge, skills and attitudes.
- · <u>knowledge-information process competency</u>, with which one can solve problems by processing and utilizing knowledge and information from various fields
- ·creative and convergent thinking competency, with which one can create something new by converging knowledge, skills and experiences from many different areas
- ·esthetical sensitivity competency, with which one can find meanings and values of life by coming to sympathetically understand various viewpoints of world and culture
- •communication competency, with which one can express efficiently one's own thoughts and emotions, and resolve conflicts with others
- •community spirit competency, with which one can have values and attitudes required as a member of regional, national and international community, and solve the problems of community

..... Students can develop their competencies such as critical-creative thinking competency, data-information utilizing competency, communication competency, community-relationship, enjoyment of culture and self-reflection through the learning of Korean Language.

<u>Critical-creative thinking</u> competency_that Korean Language seeks after refers to the ability with which one can interpret and assess various materials, discourses and texts in a self-reliant point of view and make a new and unique meaning. <u>Data-information utilizing</u> competency refers to the ability with which one can collect, analyze and assess a required data, and utilizing the results, make decisions or solve problems. <u>Communication</u> competency refers to the ability with which one can express oneself and understand others by making the best use of vocal language, written language, sign, media and the like. <u>Community-relationship</u>... <u>Enjoyment of culture</u> means that... <u>Self-reflection</u> refers to the ability.....

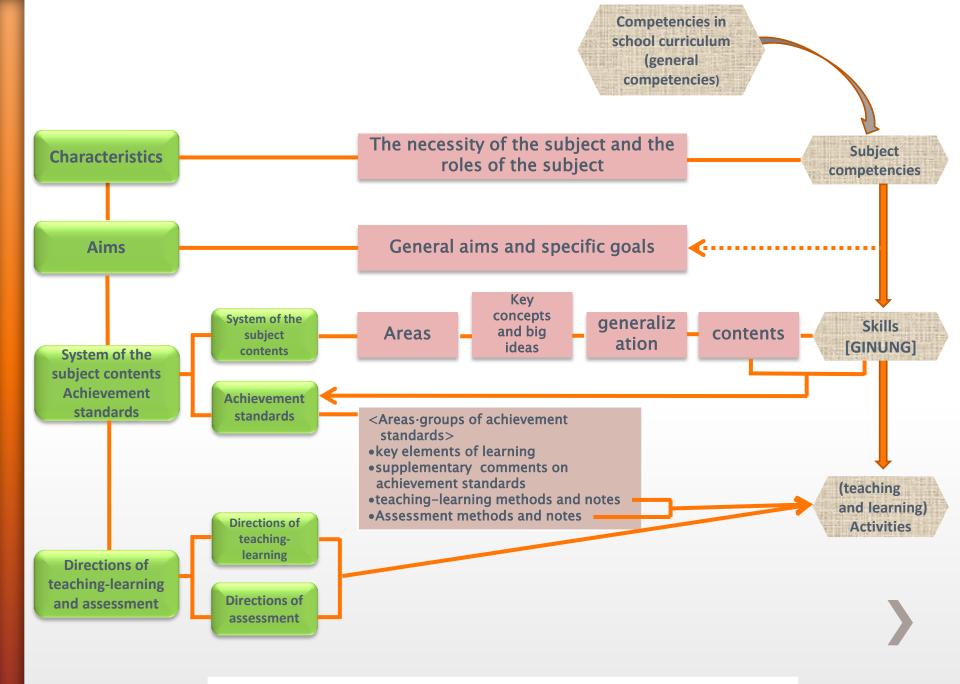
2) Competencies reflected in the subject curriculum document

The Frame of subject curriculum document

- 1. Characteristics (of the subject)
- 2. Aims and goals (of the subject)
- 3. System of the subject contents and achievement standards
 - A. System of the subject contents

Areas	006	Key concepts and	Generalized	Contents elements according	Skills
	eas	big ideas	knowledge	to the grade (cluster) level	Skiiis

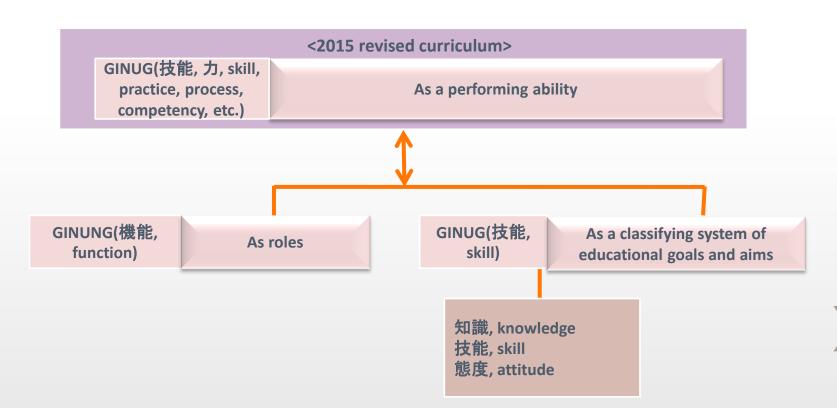
- **B.** Achievement standards
 - (1) Areas(or groups of achievement standards)
 - 1 achievement standard 1
 - 2 achievement standard 2
 - (3) achievement standard 3 etc.
 - (a) key elements of learning
 - (b) supplementary comments of achievement standards
 - (c) teaching-learning methods and notes
 - (d) assessment methods and notes
- 4. Directions of teaching-learning methods and assessment
 - A. directions of teaching-learning
 - B. directions of assessment

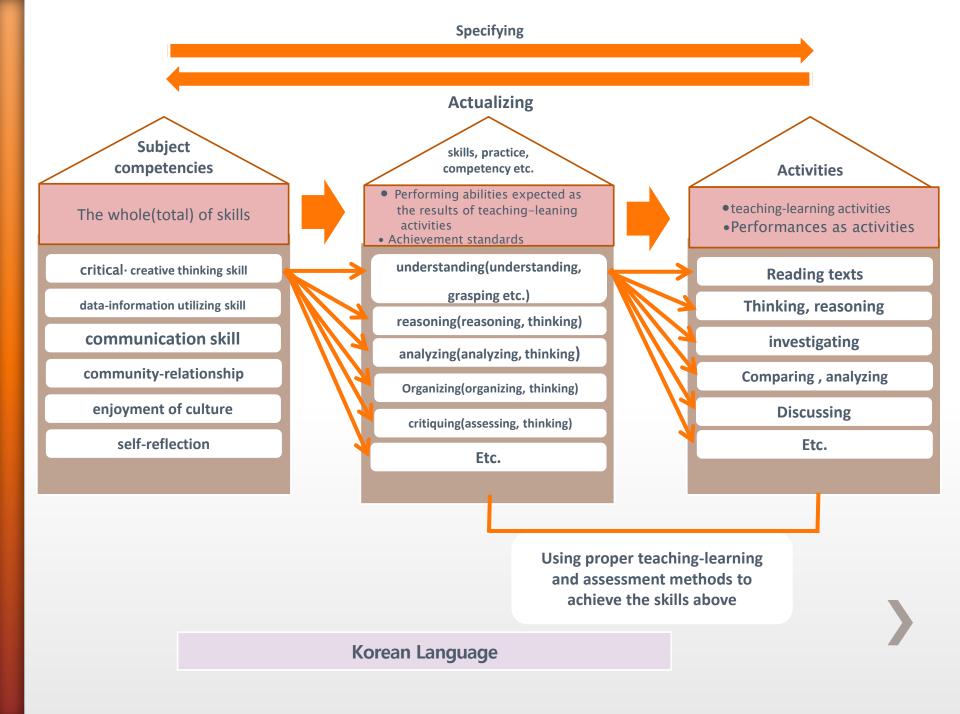


[diagram1] flow chart of competencies in 2015 revised subject curriculum

- Competencies reflected in2015 revised subject curriculum
 - (1) Apart from general competencies, each subject presents subject specific competencies, the so called 'subject competencies'.
 - (2) Each subject identifies and draws certain skills that students must have after learning the subject
 - (3) Teachers must devise and practice various activities to develop those skills.
 - (4) Each subject can reflect the subject competencies into the 'Aims and goals' of the subject, when it is needed.
 - (5) Achievement standards are developed and stated mainly through combining 'contents according to the grade levels' with 'skills'
 - ※ In 2015 revised curriculum, we try to give more emphasis on the performance part of the achievement standards, and expect this measure can help teachers clearly recognize what competencies they should deal with and how they can develop those competencies for students.
 - (6) In each area or a group of achievement standards, the subject curriculum developers must indicate the specific directions of teaching-learning and assessment methods to help teachers plan and implement various useful activities.

- ∘ 'Skills[GINUNG, 技能]' in 2015 revised curriculum
 - 'skills' are regarded as a pathway to realize key competencies.
 - Skills refer to what students can do after learning the subject'. That is to say, skills are something that students can do and are expected to do with the subject contents(knowledge).
 - Skills must reflect the unique inquiry skills and the ways of thinking of the very subject.
 - Such skills must be differentiated from the functions as roles and the knowledge-skills as a classifying system of educational goals and aims.

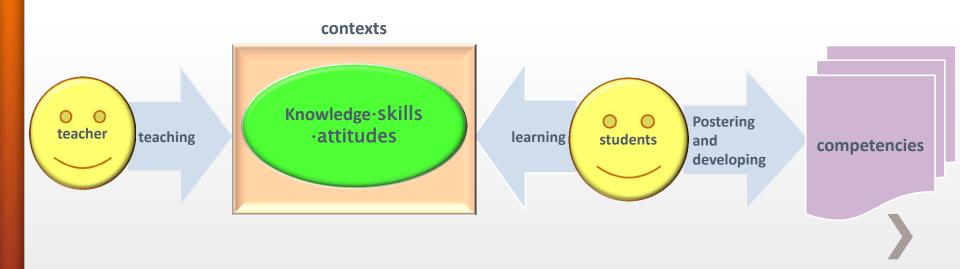




4. Conclusion

1) Understanding or misunderstanding of competencies

- a misunderstanding: seeing competencies as something to be able to directly teach
- a proper understanding: seeing competencies as something to be raised and developed as the results of various and appropriate educational activities.
 - teaching and learning
 - * subject matter: subject knowledge, subject system, subject structure
 - * competency refers to something achieved through teaching and leaning different types of knowledge in a more experiential way.
- competencies are not a substitute of knowledge but can be achieved only through the knowledge with a different emphasis and ways of learning.



^{*} catching a fish ⇒ teaching how to catch a fish ⇒ taking to the sea

- 2) Grounds of drawing competencies
 - people tend to request to provide the logical grounds of competencies
 - However deciding and setting competencies is not a matter of logical selection but a matter of consent and agreement of the members of the society and nation.

3) Tasks afterward

- 2015 revised national curriculum was publicly notified sep. 23rd this year and will be applied to 1–2 graders of the primary school in 2017, to 3–4 graders of the primary school and the first graders of the middle school and the high school in 2018.
- We have to prepare for the full implementation
 of 2015 revised national curriculum by devising various activities
 and applying proper methods of teaching, learning and
 assessing subject competencies
- At the same time, we have to communicate and cooperate well with teachers on how to implement competencies-reflected curriculum through instructions at schools.