

BUILDING NEXT-GENERATION SCHOOLS WITH 21ST CENTURY SKILLS (LEARNING) AND EDUCATION SUSTAINABLE DEVELOPMENT (RECONSTRUCTING JAPANESE TEACHER EDUCATION SYSTEM)

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ABSTRACT

The Japanese government has actively promoted Education for Sustainable Development (ESD) that UNESCO advocates and is going to fully implement the school reform that aims to enhance next generation's 21st century skills by the year of the Olympic in Tokyo, 2020. So far, Japanese schools focused on basic skills. However, the presenter believes that next generation's schools need to be reconstructed with 21st century learning and ESD as their base. Now the Ministry of Education, Culture, Sports, Science and Technology (MEXT) is taking actions to fix the comprehensive conditions for the educational reform. Especially MEXT focuses on the reform of the comprehensive system of training, employment, and development of teachers. The basic directions of the system reform is as follows: to hold "the Teacher Professional Development Consortium" by the association between education boards of the prefecture and universities; to develop the index of teacher professional development based on the fundamental principles by MEXT; to improve the curriculum of teacher training or development; and to assess the ability and quality that teachers need to hold. Since 2010, the Shizuoka University has promoted the systematic reform that integrated teacher education and in-service education. Such reform corresponds to the era of globalization. The basic concept, if I state briefly, is to nurture and support the teachers who can teach 21st century learning in their classrooms. To achieve this concept, the Faculty of Education, Shizuoka University, of which primary purpose is to train future teachers, is going to open the Elementary Learning Development major in April of 2016, as a part of the organizational reform of teacher training. In the program, students will deal with contemporary educational problems and use interdisciplinary methods. In order to support teacher professional development and their research, School of Education established the Research and Education Center for the Learning Sciences (RECLS) in April of 2013 and the Center for Promoting Higher-Quality Teacher Education (PHTE) in April of 2014. In addition, it established Advanced Professional Development in School Education in 2009 and Cooperative Doctoral Course in Subject Development in 2012. Teachers in next generation schools should hold the practical abilities to organize their classes based on theories and methods of interdisciplinary and comprehensive learning. The Shizuoka University will promote such a reform and research teacher training, if possible, in association with the universities in Indonesia, ASEAN, and Asia.

KEYWORD:

21st century learning (skills), ESD, teacher professional development, next-generation school

I. GLOBALIZATION AND SOCIAL DEMAND FOR EDUCATION

According to Basic Act on Education (2006)¹ in Japan, "Education shall aim for the full development of personality and strive to nurture the citizens, sound in mind and body, who are imbued with the qualities necessary for those who form a peaceful and democratic state and society." The principal object of education has been the full development of the whole individual. We call this idea 'education as fundamental human right'. Educators (education) strive to nurture the citizens imbued with the qualities necessary for those who form a peaceful and democratic state and society.

In addition, currently, it seems to be a mission for education to respond to additional demands of a globalizing world. Educators have to raise children's awareness of the environment, peace, cultural and social diversity, and increased competitiveness. Education prepares each individual to cope and live in harmony with 'innovation of science & technology' and to become 'human resource for global world'.

Therefore, higher education and teacher education system all over the world, including Japan, have to reform, create, and develop systems that prepare each individual to work in a borderless economy and live in a global society.

In other words, our educational institutions need to produce global citizens. Above thinking, ESD(Education for Sustainable Development) can be the leading concept of education system changes in a 21st century.

Relating to this, global competitive tests called PISA (Programme for International Student Assessment)² and PIAAC (The Program for the International Assessment of Adult Competencies) by OECD (Organization for Economic Co-operation and Development) are used around the world. PISA has tested the knowledge and skills of 15 years old students in 2000, 2003, 2006, 2009, 2012, and 2015 (In Dec. 2016 its result will be published). AHELO³ (Assessment of Higher Education Learning Outcomes) is a feasibility study in 2008-2012. PIACC⁴ (2011.8-2012.2) has tested global competencies of adults between 15 and 65. But these competencies should be used in themselves for ‘the reduction of economic disparities’ and ‘establishing convivial society’ around the world.

World Trends 1: Change (Reform) of Education

Now we are facing to two world trends of education. The first trend is the 21st century competencies⁵ with which students need to fully participate in a globalized and knowledge-based society. The second one is ESD by which student think globally and act locally for their full participation for ‘reduction of economic disparities’ and ‘establishing convivial society’.

For these reasons, we have to reconstruct the institutional system of higher education⁶ and teacher education⁷. Particularly, reconstructing teacher education system is the world trends of educational reform, which consist of three task forces⁸.

- (1) Transform and elevate the teaching profession to improve the education for our students
- (2) Enforce School Management and School Leadership for School Reform
- (3) Empower students, parents, teachers, and school leaders

I propose that the fundamental concept of this reform is ‘professional autonomy and accountability’ which we should call ‘a design of intelligent accountability system’⁹.

In 2015, Abe Cabinet started regional revitalization policy, which aimed to ‘overcome population decline and to vitalize local economy’ in

Japan. Regarding this point, the national education policy plan was published on 25 January 2016 to revitalize local school and community, which we call, ‘Hase plan’ (Hase is the MEXT minister’s name).

World Trends 2: UNESCO , and ESD

Since its creation in 1945, UNESCO’s mission has been to contribute to the building of peace, poverty eradication, lasting development, and intercultural dialogue, with education as one of its principal activities to achieve this aim. The Organization is committed to a holistic and humanistic vision of quality education worldwide, the realization of everyone’s right to education, and the belief that education plays a fundamental role in human, social, and economic development.

UNESCO’s educational objectives are to support the achievement of Education for All (EFA); to provide global and regional leadership in education; to strengthen education systems worldwide from early childhood to the adult years; and, to respond to contemporary global challenges through education.

As the only United Nations agency with a mandate to cover all aspects of education, UNESCO’s work encompasses educational development from pre-school through to higher education, including technical and vocational education and training, non-formal education and literacy.

The Organization focuses on increasing equity and access, improving quality, and ensuring that education develops knowledge and skills in areas such as sustainable development, HIV and AIDS, human rights, and gender equality. UNESCO works with governments and a wide range of partners to make education systems more effective through policy change.

It coordinates the Education for All movement, tracks education trends and raises the profile of educational needs on global development agendas. (<http://en.unesco.org/themes/education-21st-century>)

At the end of 10 years of work, 10 key findings and trends have emerged that will guide ESD into the future (UNESCO, 2014)¹⁰.

First, ESD is an enabler for sustainable development, that is to say, 1) education systems are addressing sustainability issues, and 2) sustainable development agendas and education agendas are converging.

Second, it is important to make stakeholders involved into ESD, which means that 3) political leadership has been proven instrumental, 4) multi-stakeholder partnerships are particularly effective, and 5) local commitments are growing.

Third, ESD is galvanizing pedagogical innovation, which indicates that 6) whole-institution approaches help to practice ESD, and 7) ESD facilitates interactive, learner-driven pedagogies.

Last, ESD has spread across all levels and areas of education, which signifies that 8) ESD is being integrated into formal education, 9) non-formal and informal ESD is increasing, and 10) technical and vocational education and training advances sustainable development.

UNESCO World Conference on ESD was held in Japan in 2014 on the occasion of the end of the UN Decade of ESD. The High-Level segment and plenary was held in Aichi-Nagoya on 10-12 November, 2014. About one thousand participants, including high-level officials from Japan and overseas, attended this international meeting. Upon reviewing the implementation of the UN Decade of ESD at the Conference, attendees also discussed ESD activities beyond 2014.

Based on the next goals that were set forth at the Conference, a follow-up meeting gathering relevant domestic parties was held on 13 November 2014.

On 12 November 2014, Aichi-Nagoya Declaration on Education for Sustainable Development¹¹, was published at this conference as a follow-up to the Decade of ESD and a concrete contribution to the post-2015 agenda. The report summarized 'Global Action Programme (GAP) on ESD post-2015' (described later).

In addition, UNESCO World Conference on ESD was held in Japan in 2014 on the occasion of the end of the UN Decade of ESD. The conference was preceded by the Stakeholder Meetings in Okayama. There were 200 high school students and teachers from Japan and overseas at World Conference on Associated Schools (6-8 November 2014), Youth Forum (7 November 2014), and Conference on the Centers for ESD (4-7 November 2014).

The Joint Declaration of UNESCO ASPnet International ESD Events for Students and

Teachers Platform for Students¹² (November 7, 2014) published five conclusions as follows:

1. to cooperate with each other, to make full use of the opportunities that exist for learning about sustainability, and to disseminate information on ESD;
2. to encourage ESD where it is not yet taught in schools in responsible actions in specific ways;
3. to promote mutual understanding and inspiration;
4. to be conscious of the important role that education plays; and,
5. to be conscious of all the above-mentioned and to make every effort in developing clear personal objectives.

Global Action Programme (GAP) on ESD: the post-2015

Global Action Programme (GAP)¹³ on ESD in post-2015 has two objectives as follows:

1. to reorient education and learning so that everyone can have the opportunity to acquire the knowledge, skills, values and attitudes that empower them to contribute to sustainable development and make a difference; and,
2. to strengthen education and learning in all agendas, programs, and activities that promote sustainable development.

And the GAP focuses on five priority action as follows:

1. advancing policy (Mainstreaming);
2. integrating sustainability practices into education and training environments (whole-institution approaches);
3. increasing the capacity of educators and trainers; (teacher's pre/in-service training);
4. empowering and mobilizing youth; and,
5. encouraging local communities and municipal authorities to develop community-based ESD programs.

II. TRANSFORMATION JAPANESE TEACHER EDUCATION SYSTEM

As mentioned above, in the contexts of the global economy, ICT, and knowledge-based society, now all of us need to be imbued with the 21st century competencies and ESD.

In Japan, according to the 2012 report of Chu-kyo-shin¹⁴, teacher education system should be transformed and reorganized for upgrading a master level.

Specifically, its report proposed 1) the necessity of teachers' support for students' new learning in all kinds of schools, 2) an image of 'teacher as continuous learner' and 3) the collaboration and cooperation between the board of education and the Universities in comprehensive consideration of teacher development support system.

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Now the Ministry of Education, Culture, Sports, Science and Technology (MEXT) is taking actions to fix the comprehensive conditions for the educational reform. Especially MEXT focuses on the reform of the comprehensive system of training, employment, and development of teachers. Chu-Kyou-Shin(dec.2015) propose the basic directions of the system reform as follows: to hold "the Teacher Professional Development Consortium" by the association between education boards of the prefecture and universities; to develop the index of teacher professional development based on the fundamental principles by MEXT; to improve the curriculum of teacher training or development; and to examine the ability and quality that teachers need to hold. This report used 'Teacher Professional Development' instead of the term 'Teacher Education', in order to mean 'comprehensive system of training, employment, and development of teachers'.

History of Japanese Teacher Education

Teacher education by a college or junior college graduate or equivalent (higher education) started in 1949 in Japan instead of Normal School (Secondary Institution) before. In 2008, 582 out of 729 universities (79.8%), 423 out of 597 graduate schools (70.9%), and 277 out of 385 junior colleges (71.9%) had teacher training

courses. More than 70% of institutions of higher education have teacher training courses.

In 1966, Tokyo Gakugei University set the first master course for teacher education in Japan. Then master courses of 44 all State Universities (college 11, faculty 33) were equipped in 1996.

In 1978, Hyogo University of Education, Naruto University of Education and Joetsu University of Education were established as a new type of universities of education, which mainly aimed to re-educate in-service teachers in master courses.

In 1989, new licensure system started, which consists of Specialized Certificate (master level), Primary license (Bachelor level) and Secondary license (associate degree level). But Specialized Certificate holders (2010) were only 3.7% in elementary schools, 6.5% in junior high schools, and 22.2% in senior high schools. Teacher education in many advanced nations developed into the master course level during the 1980s, which is a popular standard now.

Since Teaching Profession Graduate School System started in 2008, 25 schools has been established (present up to 2013 year. 18 new schools will be established in April, 2016 and all state universities holding faculty of education for teacher education will have its school course).

In 2009, Teacher License Renewal System started, under which teacher license holders have to renew their licensures every 10 years.

III. VISION AND PROSPECTS OF FACULTY OF EDUCATION

Shizuoka University as National University was established in the new education system at 1949 after world War II. In 2004, all national universities had been integrated into 'Incorporation of National Universities'. Now there are 86 such schools in Japan in 2013. In 2012-2013, re-definitions of the mission (teacher preparation and so on) were with MEXT.

Generally speaking, faculty of education as national university corporation is expected to be a university department for the purpose of teacher training (Basic mission), to establish a model which upgrade teacher education, and to play the crucial role in collaboration and cooperation between the board of education and the Universities in Shizuoka prefecture.

Vision of Shizuoka University

Faculty of Education, Shizuoka University as national university corporation has the right of decision making about the basic directions of reform for the new mission, which was called ‘Act locally, nationally, & globally and change Shizuoka University’ and then, ‘Change the local, national & global societies’.

The main specific actions are as follows.

- (1) Locally (in Shizuoka Prefecture and Tokai area): reconstructing pre-service and in-service high-quality education system.
- (2) Nationally: collaborating with other teaching professional schools on high-quality teacher education and development of human resources aiming at the university teacher at the graduate course (in future as ‘Ed.D.’ present only ‘Ph.D.’).
- (3) Globally: facilitating research function for high-quality teacher education by collaborating with Asian Universities.

We will have to establish task forces on important priority issues encompassing the undergraduate course, master level (academic course and professional course), and doctoral course, which will lead to the integration and reorganization our faculty and graduate school of education for aforementioned mission and actions¹⁶.

New Mission Statement of Faculty of Education

The Faculty of Education and Graduate School of Education Shizuoka University (which has offered Professional Degree Program in Advanced Professional Development since 2009) decided the main missions: to promote higher-quality teacher education as the community-based faculty and graduate school in Shizuoka, and to study teaching profession as a base of teacher’s college in the country and throughout Asia. Our systematic organization from undergraduate to doctoral courses enables us to set and realize such missions. In particular, we pursue the following goals from the viewpoint of ‘act locally, nationally, and globally (and change Shizuoka University)’ (*see chart1*):

- 1) (a) To increase the quality of pre-service teacher education by improving teacher training curricula, and

- (b) To promote in-service education by providing the environment for continuous learning, in cooperation with the affiliated schools and those involved in Shizuoka Prefecture. [Locally]

- 2) To increase the quality of teacher education in general and nurture people who will play a central role in the future teacher education and in the partnership with domestic professional degree programs and doctoral courses in teacher’s college. [Nationally]
- 3) To study teaching profession for supporting future teacher education in partnership with teacher’s college throughout Asia and other countries. [Globally]

Reorganizing elementary school teacher education

Our new mission states that we take the main responsibility for teacher education in Shizuoka Prefecture, focusing on high-quality training to pre-service elementary school teachers by practically organized curricula on subjects and teaching. But currently, we have just offered courses for an elementary school license for Subject Education majors, which are originally based on secondary education and Developmental Education separately, and have no mechanism for research and education in elementary school.

On the other hand, the teacher training section in Chu-kyo-shin pointed out “the ability is needed to implement classes where students learn subject content actively and collaboratively and are taught from interdisciplinary perspectives...” (What school teachers should be in the future, 2014.11).

The 2014 report of in Chu-kyo-shin proposes that “the Course of Study in compulsory education should be just a standard from now on”, emphasizing students’ active and collaborative learning in order to find and solve problems on their own, as a way of learning the subject content. Though we established the Research and Education Center for the Learning Sciences (RECLS) in our graduate school to develop 21st century skills, we do not have any system for sharing its findings at the faculty level. In addition, our faculty has a subject-based organization, not one focusing on building competence and skills in an interdisciplinary fashion, and has no mechanism for education research on integrated and cross-subject curricula.

[Chart 1] An Overview of the Direction of Reform Based on Our New Mission Statement (Nov. 21, 2013)

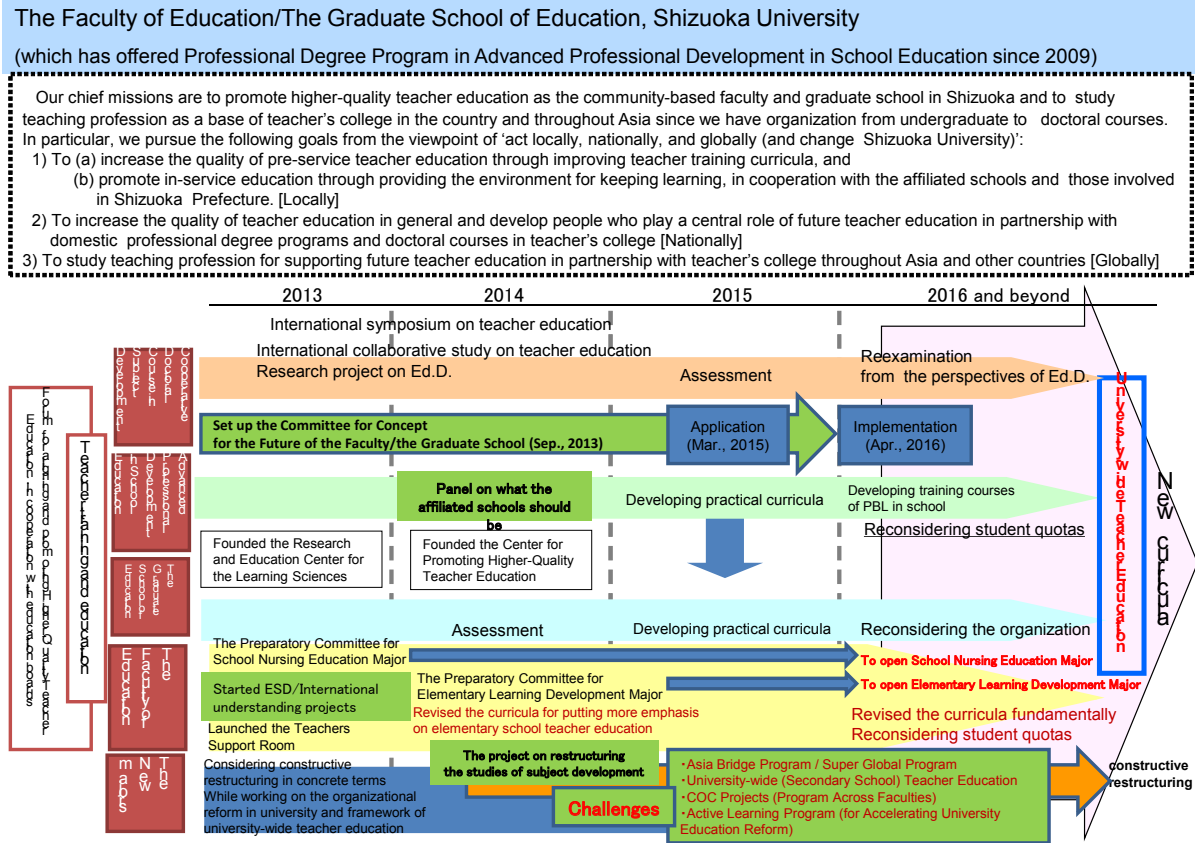


Figure 1. An Overview of the Direction of Reform based on Our new Mission Statement (Nov. 21, 2013)

For this reason, we started (are planning to set) the Elementary Learning Development major (ELDM) as follows (see chart2).

- (1) Aiming at building innovative subject development for elementary school with the help of learning sciences in cooperation with existing members of our faculty as the basis for elementary school teacher education.
- (2) Training elementary school teachers who can organize the classes based on the 21st century skills and interdisciplinary perspectives as their strengths.

We are going to reconstruct and rearrange the courses for elementary education(“Elementary Learning Development Course”) by core members of the major and support staff from the existing majors:i.e, one organization category of the teaching profession, Developmental Education, another category of each subject.

The characteristics of the curricula are on the base of elementary education (required), interdisciplinary learning and learning sciences. We offer courses that train teachers who can develop and implement teaching based on 21st century skills and solid academic abilities.

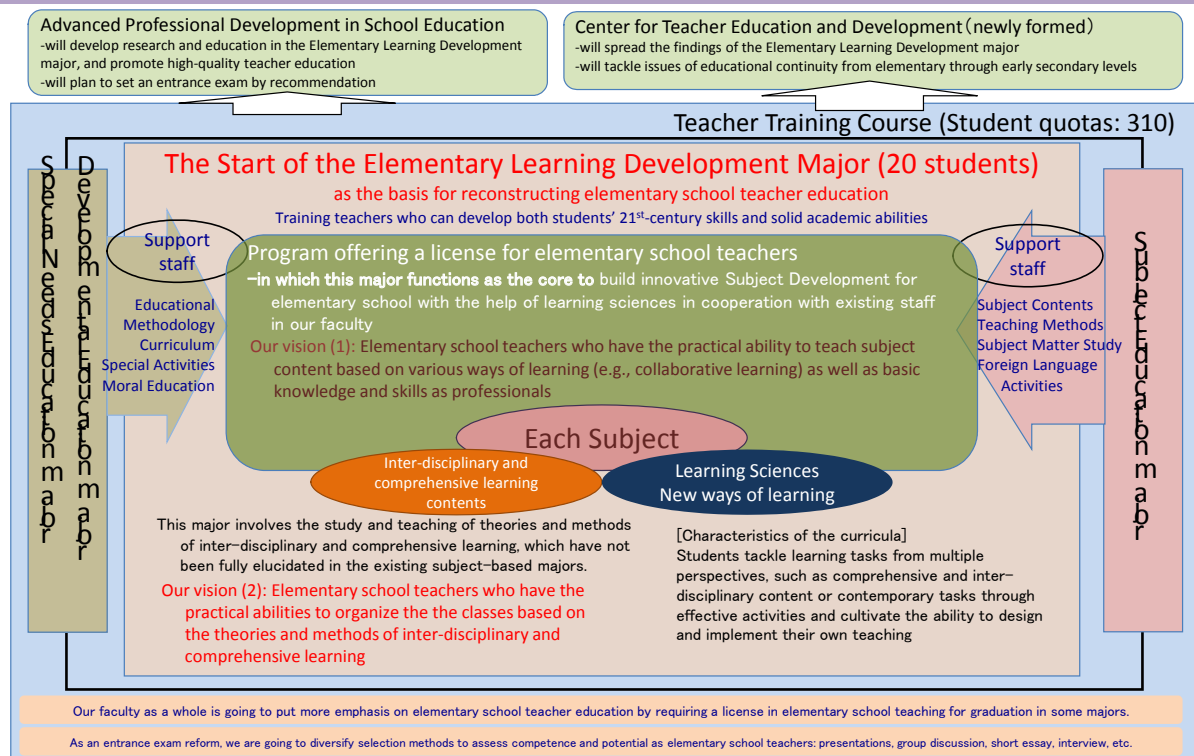
The mission of the new major is to train elementary school teachers who have the practical abilities to teach subject content based on various ways of learning as well as basic knowledge and skills as professionals, and to train elementary school teachers who have the practical abilities to organize classes based on theories and methods of interdisciplinary and comprehensive learning.

Our faculty as a whole is going to put more emphasis on elementary school teacher education by requiring a license in elementary school teaching for graduation in some majors. As an entrance exam reform, we are going to diversify selection methods to assess competence and potential as elementary school teachers: presentations, group discussion, short essay, and interview, etc.

Setting up common core “contemporary tasks in education” courses

We need to deal with contemporary tasks in education, such as bullying, violent behavior, truancy, special needs education, utilizing ICT tools, assuring solid academic abilities, and developing 21st century skills.

【Chart 2】 About the 2016 reorganization: Infrastructure development for the third midterm plan
Enhancing the role of teacher education in response to the new mission



The 2016 reorganization plan as infrastructure development for the third midterm is dealing with contemporary tasks in education as follows (*see chart 3*).

1. Social and regional expectations for solving contemporary problems by new ways of learning
2. Leading schools with a team in which each member offers a variety of advantages regarding the issues
3. Lack of structured curricula for contemporary tasks

We are going to set up common core “contemporary tasks in education” courses. In addition to the required courses, they provide other advantages in the licensing of a teaching specialty, and other advantages in the licensing of a teaching specialty. We are going to manage the courses in cooperation with faculty from different majors which use problem-based learning or activity-based learning. For example, one category of courses, which are going to be offered in 2016, are supporting the development of children, i.e. on dealing with problematic behaviors, on special needs education and on school volunteer work,

etc. Another category of courses are adapting to contemporary issues, i.e. on utilizing and teaching ICT, on dietary and consumer education, on career education and lifelong learning, on ESD & international understanding and on learning sciences, etc.

We try to set up other courses based on advice from boards of education and those involved in social and regional issues, and will be certified as part of the “Meister system” by the faculty. Each major will work together on related issues.

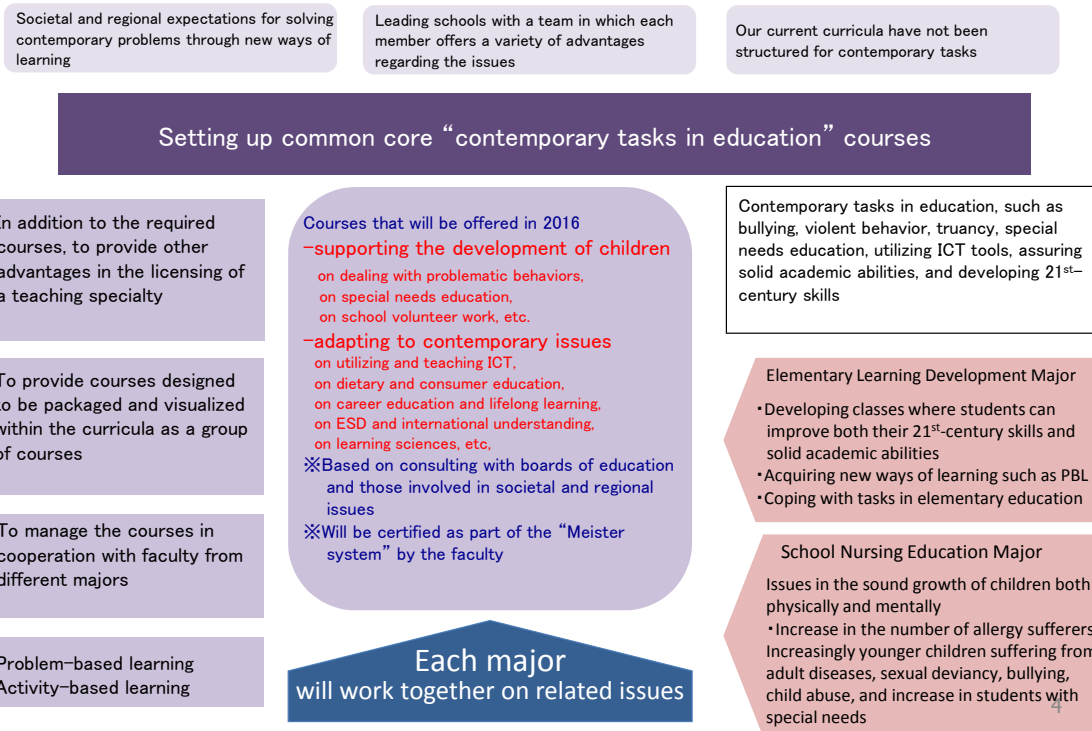
Reorganizing total teacher education : next more challenge

The 2016 plan as infrastructure development for the third midterm plan is dealing with transforming and reconstructing our faculty of education (*see chart 4*).

Our first vision is that elementary school teachers who have the practical ability to teach subject content based on various ways of learning (e.g., collaborative learning) as well as basic knowledge and skills as professionals. For this reason, this new ELDm involves the study and teaching of theories and methods of interdisciplinary and comprehensive learning,

[Chart 3] About the 2016 reorganization: Infrastructure development for the third midterm plan

Dealing with contemporary tasks in education



which have not been fully elucidated in the existing subject-based majors. We need collaborate Each Subject Majors with Developmental Education major and Special Needs Education major ,which result in making not only interdisciplinary and comprehensive learning contents, but also learning sciences and new ways of learning. On the one hand, the support staffs of Each Subject Majors involve in subject contents, teaching methods and subject matter study. On the other, the support staffs of Developmental Education major and Special Needs Education major involve in educational methodology, curriculum and instruction, special activities and moral education.

We look forward to the wash-back effect of reconstructing secondary education and coping with educational continuity from elementary through early secondary levels,

1. Advanced Professional Development in School Education will develop research and education in the ELDm , and promote high-quality teacher education.
2. Faculty of Education will plan to set an entrance examination by recommendation.
3. Center for Teacher Education and Development (newly formed) will spread the findings of the ELDm.

4. All institution will tackle issues of educational continuity from elementary through early secondary levels.
5. As the basis for reconstructing elementary school teacher education, faculty of education should train teachers who can develop both students’ 21st century skills and solid academic abilities.

CLOSING REMARKS

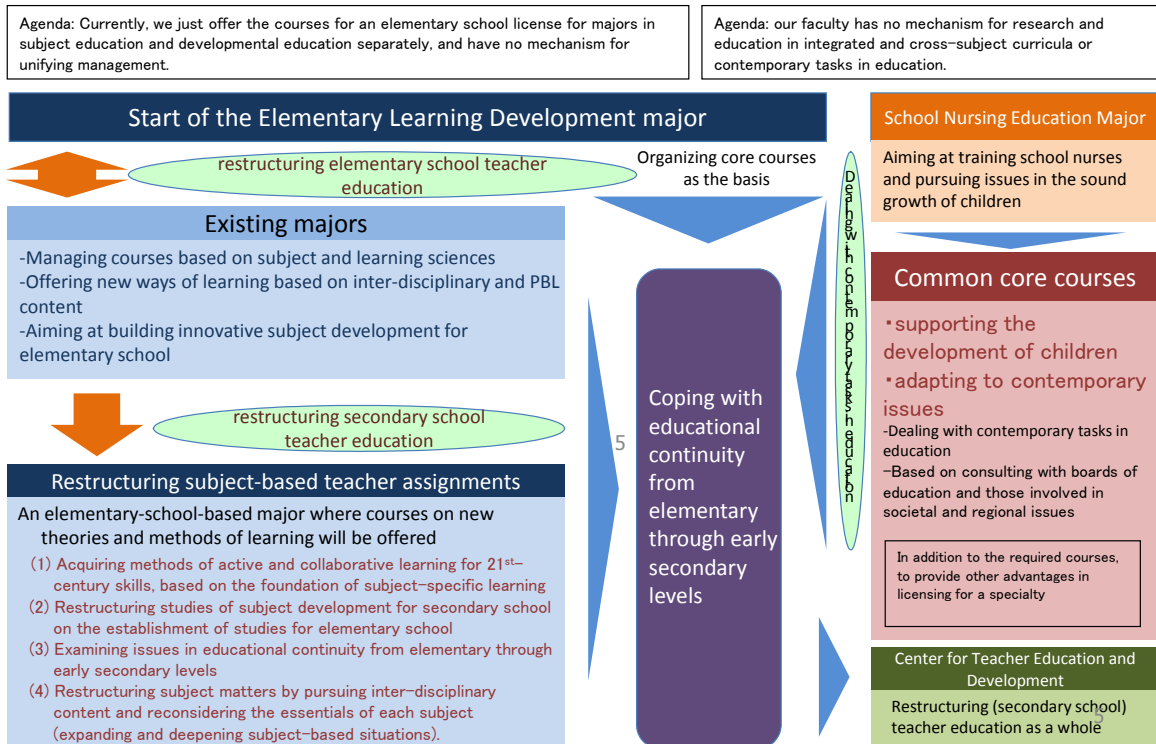
We hope to exchange information about Teacher Education in East Asia and Korea, China and Japan, and we would love to exchange students and university staffs with those countries and regions from now on.

NOTE

1. About the comparison of the revised (2006) and original (1947) versions of the Basic Act on Education, see MEXT(not dated) http://www.mext.go.jp/b_menu/kihon/data/07080117.htm
2. See OECD 2014:PISA 2012 Results in Focus: What 15-year-olds know and 42 what they can do with what they know . <http://www.oecd.org/pisa/keyfindings/pisa-2012->

【Chart 4】 About the 2016 reorganization: Infrastructure development for the third midterm plan

Coping with educational continuity from elementary through early secondary levels



results-overview.pdf.

About PISA Products , see <http://www.oecd.org/pisa/pisaproducts/>.

3. See OECD:2012(Volume 1) ,and OECD:2013(Volume 2).
4. About PIAAC , see <http://www.oecd.org/site/piaac/>.
5. See Griffin, P., McGaw, B, Care, E.; 2012.
6. About higher education in Indonesia, see Varghese:2009,Susanto:2009 ,and Susanti:2011, Umezawa:2014, etc. About higher education in Japan, see NIER:2011(b).
7. See SIREP:2010.
8. Jointly Organized International Conference on Teacher Education by Indonesia University of Education, and Shizuoka University Japan, Bandung, 23-24 December 2013, “Professional Education for Teachers in Asia-Pacific Region:The Insights into New Paradigm”
9. About intelligent accountability, see Fullan,M.:2010.
10. See UNESCO
11. 文部科学省：2014 『あいち・なごや宣

言』 (文部科学省仮訳) http://www.esd-jpnatcom.jp/conference/result/pdf/Aichi-Nagoya_Declaration_ja.pdf.

See in english, http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/ERI/pdf/Aichi-Nagoya_Declaration_EN.pdf

12. 「ユネスコスクール世界大会Student(高校生)フォーラム共同宣言」 2014.11.7 採択

http://www.esd-jpnatcom.jp/conference/result/pdf/Aichi-Nagoya_Declaration_student_ja.pdf. See in english, http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/ED/pdf/esd2014/ASPnet_events_outcome_declaration_EN.pdf

13. Global Action Programme on Education for Sustainable Development, in UNESCO:2014(a),Roadmap for Implementing the Global Action Programme on Education for Sustainable Development pp.32-38.

<http://unesdoc.unesco.org/images/0023/002305/230514e.pdf>

文部科学省・環境省仮訳「持続可能な

開発のための教育（ESD）に関する
グローバル・アクション・プログラム
ム」

http://www.mext.go.jp/component/a_menu/other/micro_detail/___icsFiles/afieldfile/2015/02/17/1355078_07.pdf

14. Chyu-kyo-shin is the Central Education Council settled in MEXT(Ministry of Education, Culture, Sports, Science and Technology). See Chyu-kyo-shin : 2012.中央教育審議会『2012年教職生活の全体を通じた教員の資質能力の総合的な向上方策について（答申）』http://www.mext.go.jp/b_menu/shingi/chukyo/chukyo0/toushin/1325092.htm

15. see NIER:2011, “Teacher Training and Certificate System” 2011. <http://www.nier.go.jp/English/educationjapan/pdf/201103TTCS.pdf>

Faculty of Education Shizuoka University held “Japan-US Educational Reform Exchange Symposium about Teacher Education and the Board of Education” hosted by Shizuoka University in March 10th,11th ,13th and 15th of 2014 as two guest lecturers : Prof. Barbara L. Bales, Ph.D. (Chair, Department of Curriculum and Instruction, and Director, Center for New and Professional Educators) at University of Wisconsin – Milwaukee(UWM), and Dr. Jon R. Bales(Executive Director, Wisconsin Association of School District Administrators<WASDA>). 静岡大学教育学部2013年度「教員養成の高度化・国際化プロジェクト」編『教師教育・教育委員会に関する日米教育改革シンポジウム～Consider Our Educational Reform from the Viewpoint of Local Districts, Nations and Globalism～報告書（documentation）』2014年9月。

REFERENCE

Ahza, Adil Basuki.:2008, Education Reforms in Indonesian Higher Education. Asia-Link Symposium:Moving towards New Approaches to EU-Indonesian Cooperation in Higher Education 2008.10.31 (http://www.ehef-jakarta.org/web/images/docs/als_programme_draft.pdf)

Directorate General of Higher Education Ministry of National Education Republic of Indonesia:2003, Higher Education Long Term Strategy 2003-2010 2003.

Fullan,M.:2010, All Systems Go: The Change Imperative for Whole System Reform, California: Corwin Press,2010.).

Griffin, P., McGaw, B, Care, E. (ed.): 2012, Assessment and Teaching of 21st Century Skills, Springer, 2012. 日本語版 (Japanese version) は、三宅なほみ (監訳), P.グリフィン 他編『21世紀型スキル: 学びと評価の新たなかたち』北大路書房 2014.

Gunawan,J.:2008, University Governance in Indonesia Based on the Bill of Education Legal Entity.2008, http://www.rihed.seameo.org/ugseminar/PG_Indon.pdf.

Ministry of National Education (reorganized Ministry of Education and Culture [MoEC] at 2011.), Act of the Republic of Indonesia Nunber20, Year 2003 on National Education System, http://planipolis.iiep.unesco.org/upload/Indonesia/Indonesia_Education_Act.pdf (now not seeing).

MEXT: not dated: Comparison of the revised (2006) and original (1947) versions of the Basic Act on Education, http://www.mext.go.jp/b_menu/kihon/data/07080117.htm.

Nagaki,Koyama.:2008, Educational Administration in Japan and the Role of Local Governments. Papers on the Local Governance System and its Implementation in Selected Fields in Japan No.9, http://www3.grips.ac.jp/~coslog/activity/01/04/file/Bunyabetsu-9_en.pdf

National Institute for Educational Policy Research (NIER):2011(a), “Teacher Training and Certificate System”, 2011, <http://www.nier.go.jp/English/educationjapan/pdf/201103TTCS.pdf>. About Education in Japan, referring NIER: <http://www.nier.go.jp/English/EducationInJapan/>. About Educational Administration in Japan, referring: <http://www.nier.go.jp/English/EducationInJapan/>

National Institute for Educational Policy Research (NIER):2011(b), “Higher Education in Japan”, 2011, www.nier.go.jp/.../educationjapan/pdf/201109HE.pdf.

- 成田喜一郎 (Narita Kiichiro):2013,ESDカリキュラム及び授業デザインの理論と方法—カリキュラム開発の方法を探究する—,『東京学芸大学教職大学院年報』第2集,2013,pp.1-15.
- OECD: 2012, Assessment of Higher Education Learning Outcomes Feasibility Study Report Volume 1 – Design and Implementation, <http://www.oecd.org/education/skills-beyond-school/AHELOFSReportVolume1.pdf>.
- OECD: 2013, Feasibility Study Report, AHELO volume 2 : data analysis and national experiences, <http://www.oecd.org/education/skills-beyond-school/AHELOFSReportVolume2.pdf>.
- OECD: 2014, PISA 2012 Results in Focus: What 15-year-olds know and 42 what they can do with what they know, <http://www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf>.
- Okayama University : 2015, 『シンポジウム 学校教育におけるESDの学習評価のありかた 報告書』(平成26年文部科学省「日本／ユネスコパートナーシップ事業」2015.3.
- Shizuoka University: 2014.3 (a) , 『ESD・ユネスコスクール研修会報告書』(2014.2.18開催) 静岡大学教育学部2013年度「ESD・国際化推進ワーキンググループ」編,2014年3月.
- Shizuoka University: 2014.3 (b) , 『ESD(持続可能な開発のための教育)・国際化推進ワーキンググループ報告書』静岡大学教育学部2013年度「ESD・国際化推進ワーキンググループ」編,2014年3月.
- Shizuoka University: 2014.9, 『教師教育・教育委員会に関する日米教育改革シンポジウム～Consider Our Educational Reform from the Viewpoint of Local Districts, Nations and Globalism～報告書 (documentation)』静岡大学教育学部2013年度「教員養成の高度化・国際化プロジェクト」編,2014年9月.
- Shizuoka University: 2015.3 (a) , 『ESD(持続可能な開発のための教育)・国際化推進ワーキンググループ報告書』静岡大学教育学部2014年度「ESD・国際化推進ワーキンググループ」編,2015年3月.
- Shizuoka University: 2015.3 (a) , ESD FORUM (documentation); Promoting Sustainable Development through University and School Education : Good Practices Yogyakarta ,Indonesia,5-7 March 2015. ESD team, Faculty of Education, Shizuoka University.
- Satryo,S.B.:2002, Higher Education Reform in Indonesia. 2002, [http://www.tfhe.net/resources/satryo soemantri brodjonegoro2.htm](http://www.tfhe.net/resources/satryo%20soemantri%20brodjonegoro2.htm).
- SIREP (SEAMEO INNOTECH Regional Education Project) :2010, Teaching Competency Standards in Southeast Asian Countries :Eleven Country Audit, http://www.seameo.org/_files/SEAMEO_Teaching_Compency_Standards-WTD.pdf.
- Stiglitz, Joseph E.:2002, Globalization and Its Discontents Allen Lane 2002.
- Stiglitz, Joseph E.2006, Making Globalization Work Norton & Company 2006.
- Susanti,Dewi.:2011, Privatisation and marketisation of higher education in Indonesia: the challenge for equal access and academic values , Higher Education Volume 61, Number 2, pp.209-218.
- Susanto, Sahid and Nizam,M.:2009, Gadjah Mada University , Indonesia, in Varghese:2009, pp.52-80.
- 梅澤 収 (Umezawa, Osamu) :2014, インドネシアにおける大学改革と新自由主義 , 細井克彦他(編)『新自由主義大学改革—国際機関と各国の動向—』pp.119 -139, 東信堂 2014年3月.
- UNESCO:2014(a), UN Decade of Education for Sustainable Development (2005-2014) FINAL REPORT. <http://unesdoc.unesco.org/images/0023/002301/230171e.pdf>.
- UNESCO:2014(b), Roadmap for Implementing the Global Action Programme on Education for Sustainable Development. <http://unesdoc.unesco.org/images/0023/002305/230514e.pdf>.
- UNESCO-UIS(UNESCO Institute for Statistics) :2010, Global Education Digest 2010 ;Comparing education statistics around the world 2010.
- UPI (Indonesia University of Education):2013,

- Redesigning Professional Education for Teachers. Academic Senate Regulation Indonesia University of Education. (Translated from its original title, Re-Desain Pendidikan Profesional Guru.2010.)
- U.S. Department of Education : 2013, A Blueprint for RESPECT, April , 2013. 'RESPECT' is the abbreviation for Recognizing Educational Success, Professional Excellence and Collaborative Teaching. www2.ed.gov/.../respect/blueprint-for-respect.pdf
- Varghese, N.V.(ed.) :2009, Higher education reforms. Institutional restructuring in Asia : New trends in higher education. <http://unesdoc.unesco.org/images/0018/001865/186517e.pdf>.
- Varghese, N.V.:2009, Institutional restructuring of higher education in Asia: an overview, in Varghese, N.V.(ed.) :2009, pp.23-51.
- World Bank:2010(a), Higher Education in Developing Countries ;Peril and Promise, 2000.
- World Bank:2010(b), Indonesia: Higher Education Financing, Human Development East Asia and Pacific,2010(b).
- World Bank:2010(c). Indonesia: Higher Education Financing (Policy Brief) 2010(c).
- World Bank:2007, "Investing in Indonesia's Education : Allocation, Equity, and a Efficiency of Public expenditures" 2007.