

The OECD-Tohoku School project

(A case of educational change and innovation in Japan)

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Executive summary

The OECD-Tohoku School (OTS) project was launched following the triple catastrophe (earthquake, tsunami and nuclear disaster) hitting the Tohoku region of Japan in March 2011 as the follow up of a visit of the General Secretary of OECD in the country. Local educational authorities, schools and community leaders were contacted in the three prefectures of the affected region and they were invited to select pupils and local adult leaders to participate in a

project with the goal of demonstrating the attractiveness of the Tohoku region and show the progress of the recovery process during a major event in 2014 in Paris. An idea behind the initiative was that by participating in this ambitious program, based on collaborative, project-based pedagogy pupils will acquire advanced leadership skills and their engagement to promote recovery in the region will be strengthened.

Approximately one hundred students from junior and senior high schools operating in the prefectures of Iwate, Miyagi and Fukushima have been selected for participation. They met the first time in March 2012 in a four-day workshop where they took decisions on the themes to be presented at the 2014 Paris event and on the working methods to progress towards this goal. Nine local teams have been formed in the participating localities working as “*local schools*” organising meetings typically on weekends and working collectively on the preparation of the program elements assigned to them. Parallel to this, four teams with specific organisational tasks (*thematic teams*) have been established, with responsibilities for preparing the Paris event, for external and internal communication, for documenting the whole process and for fundraising and relations with business and community actors.

This study aims at analysing the outcomes of the OTS project as an emerging model of educational innovation born in an extraordinary context and to show its potential to both the international and the Japanese educational development and research community. The study presents the OTS project as an interesting case of *public sector innovation* implemented in the education sector in Japan. Its intention is to show that the OTS project is not only a new, original model of educational innovation but it is also a remarkable experiment to generate change processes in educational systems which are often characterised as immobile, overregulated and resisting to change, and where the majority of key institutional actors seems to be characterized by high level risk aversion and strong attachment to the stability of existing structures. It argues that the OTS initiative, which is still in an open process of evolution, might lead to a new pattern of effective change management in centralised and relatively inflexible educational systems and might, therefore, attract the attention of those who wish to improve the performance of such systems in any country.

The study has been effectuated on the invitation of Fukushima University (FU), the official national coordinator of the OTS project on the basis of a detailed research plan adopted by FU in May 2013 and on the basis of a two-week long field visit in August 2013 in Japan. The key hypothesis behind the study was that although the OTS project has aimed at contributing to the solution of specific problems in a particular region it has a broader relevance in other contexts both in Japan and elsewhere, and, although it has been operating with a limited number of participant actors and in only a few locations it has a significant up-scaling potential. A further hypothesis was that although the OTS project has not been aiming at the improvement teaching and learning in regular schools within the formal education system it has a significant potential to have a positive impact on the quality of teaching and learning also in the formal institutional sector. These hypotheses have been confirmed by the study. The OTS project has been described as a unique combination of a number of key features leading to the emergence of not only a new and original way of organising student learning but also to an interesting educational change model (the “*Tohoku change model*”).

The study describes the specific features of the OTS project and argues that the unique combination of these features have turned this project into an original, unique innovation model. It shows the roots of these features in the existing pedagogical approaches in Japan, situating the new model in the context of the current Japanese educational reality. Using the

outcomes of a questionnaire based survey, effectuated among teachers participating and not participating in the project, it explores the actual and the potential impact of the project on schools where pupils participating in the project learn.

Although the OTS project originally did not have the explicit intention to have a direct impact on regular schools and particularly not on classroom level teaching practices it became soon clear that if it achieves its explicit, direct goals (preparing and organising the 2014 Paris event through the active involvement of students) this will raise the question of the relevance of its pedagogical approach also for regular schools and classrooms. One of the key dilemmas of those leading the project has, therefore, been whether to encourage this type of broader and more ambitious “use” of the project or to remain restricted to the original project goals. In other words: the dilemma has been whether to think about the OTS project as the origin of an emerging “new education model” which might be relevant for the entire educational system in Japan or even beyond Japan or to continue to think about it as an specific initiative with the limited goals of supporting post-catastrophe recovery.

The key features of the change model represented by the OTS project are openness and “conceptual eclecticism” that have allowed the creation of a specific *innovation framework* or innovation platform. The goal of such platforms is not the application or the implementation of specific solutions but the creation of an *open space* where those facing common challenges and interested in finding solutions can bring in their ideas about possible solutions, they can confront their views, they can combine the partial solutions they have already found and they can try to apply them together.

A key aspect of the Tohoku change model is connecting learning with the external world, that is, the world outside schools, which is often more supportive of changes in pedagogy than schools where not only institutional traditions and routines play a stronger role in shaping pedagogical practices but also the burden of adaptation is more directly felt by teachers. The Tohoku case seems to show that the trade-off of bringing pedagogical innovations outside the school and bringing them back later, when they have already demonstrated their potential, can be made positive. The study formulates the following specific conclusions drawn from the implementation of the OTS project:

- an open “innovation framework” characterised by (1) the absence of a unique, coherent and well-focussed pedagogical concept, (2) dispersed leadership, (3) the encouragement of the internal diversity of local approaches and (4) the acceptance of a certain level of “strategic ambiguity” might significantly enhance change processes in education systems that are less open to changes but the inherent risks of this approach must be well understood by those leading the change
- changes applying a gradual approach, based on bottom-up processes, voluntary experimentation and strengthening the feeling of ownership among those who implement them might have more chance to survive than mandatory changes introduced frontally in a top-down manner in the entire education system
- changes targeting the peripheries of school practice (such as extracurricular activities) instead of targeting core activities (such as subject teaching in regular classroom practice) generate less resistance and they might have more chance to survive
- if changes are initiated at the periphery of school education and they are only loosely connected to the core activity of classroom level teaching and learning the risk of isolation from regular school life has to be compensated by a stronger involvement of key internal actors, especially school leaders

- changes involving external partners (such as community and business representatives and international partners) and encouraging the cooperation of teachers with them, as well as changes based on cross-sectoral cooperation have better chances to survive
- targeted financial support, the creation of flexible regulatory frameworks that allow trials with experimental solutions and explicit symbolic support are particularly effective ways for central authorities to foster innovations
- local innovations should be accompanied by continuous monitoring and evaluation which, on the one hand, provide feedback to those implementing the innovation and, on the other hand, allow the identification and dissemination of successful practices and outcomes¹
- most educational changes, especially the use of advanced methods of organising learning – which is necessary for the development of complex 21st century skills – require an intensive development of the teaching skills of teachers
- the effective development of advanced teaching skills requires the creation of appropriate learning environments for teachers that allow intensive knowledge sharing, including knowledge embedded into practice; as a consequence a key component of innovation processes is the creation of networks fostering knowledge sharing, horizontal learning and the emergence of professional learning communities²
- the successful management of changes requires the continuous building of professional knowledge on implementation and change management, especially in the fields of curriculum innovation and curriculum implementation; this knowledge has to be continuously channelled into the professional development of school leaders and educational administrators

¹ This element seems to be one of the weaknesses of the OTS project. The project would need more intelligent monitoring and evaluative reflection.

² The OTS project can be interpreted as the creation of a network that already operates as a professional learning community. The adult leaders (local leaders) and most active student leaders already constitute a strong community of practice and a community of common learning.

Introduction

The OECD-Tohoku School project (OTS project) is an emerging new model of educational innovation born in an extraordinary context and still being in a process of development. It is important that both the international educational development and research community and the Japanese educational policy community understand the nature of this unique innovation for several reasons. First there seems to be a growing consensus that innovation has become one of the most important, if not *the* most important source of improving quality and a major instrument to achieve key policy goals and solve problems in public services, including education (Koch et al., 2003; OECD, 2010). Second, improving public services, including education, is a particularly challenging task given the well-known difficulties of introducing and implementing changes or reforms in the public sector (Würzburg, 2010). This creates an urgent need to understand better the nature of change and innovation in this sector and to invent new forms of initiating, implementing and managing change processes that can reduce the risks of reform failures and can create a balance between the contradictory needs for adaptation and change, on the one hand, and security and stability, on the other.

The OTS project is not only a new, original model of educational innovation but it is also a remarkable experiment to generate change processes in an educational system which has often been described as immobile, overregulated and resisting to change, and where the majority of key institutional actors seems to be characterized by high level risk aversion and strong attachment to the stability of existing structures (Schoppa, 1991; Sugimoto; 2010).³ This initiative, still in an open process of evolution, might lead to a new pattern of effective change management in centralised and relatively inflexible educational systems and might, therefore, attract the attention of those who wish to improve the performance of such systems in any country.

This paper is the outcome of a two-week long study in Japan in August 2013 on the invitation of Fukushima University, the official national coordinator of the OTS project.⁴ The aim and the methodology of the study were presented in a detailed research plan⁵ in May 2013. In accordance with this, the aim of this paper is to explore the specificities of the OTS project as a major public sector innovation in the field of pedagogy, curriculum, school organization and community engagement, and to analyze it from the perspectives of possible scaling-up and dissemination but also to support the recognition of the outcomes of this original innovation both within Japan and internationally. The key hypotheses behind the research on which this paper is based have been the following: the OTS project,

- although it has aimed at contributing to the solution of specific problems in a particular region it has a broader relevance in other contexts both in Japan and elsewhere,

³ The recognition of these characteristics of the Japanese education system triggered a number of decentralisation and deregulation efforts during the last decade (Muta, 2006).

⁴ The longer first field visit of August 2013 was completed by a shorter second visit in February 2014 on the invitation of the Japanese national ministry of education (MEXT). This has been used to meet regional government officers in the three Tohoku regions and also to present the outcomes of this study to a larger audience of Japanese educational experts and stakeholders.

⁵ See „Education innovation in Japan. Curriculum innovation, school development and community involvement in education in Japan: exploring the potential of the OECD-Tohoku School Project”. A research plan submitted to the Fukushima University (2013.05.25). This plan has been elaborated in close consultation with Mrs. Miho Taguma, former OECD coordinator of the OTS project.

- although it has been operating with a very limited to number of participant actors and in only a few locations it has a significant up-scaling potential,
- although it has not been aiming at the improvement teaching and learning in regular schools of the formal education system it has a significant potential to have a positive impact on the quality of teaching and learning also in the formal institutional sector.

The main focus of this research has been to understand better the nature of this innovation and to explore its potential to support educational changes in Japan and possibly elsewhere. The methods used have been based on three major activities:

- intensive reading about the broader economic, political, social and cultural context, and the specific national educational policy context particularly relevant for the OTS project
- a two-week field visit to Japan⁶ consisting of
 - active participation at the four-day intensive workshop (“Summer School”) of the OTS project which allowed, among others
 - the direct observation of project activities, student-teacher interactions, and interactions with external community and business partners,
 - formal interviews and informal conversations with students and teachers involved in the project, interviews with government officers and external supporters (“empowerment partners”),
 - the observation of the reactions of high level decision makers to the progression of the project and the assessment of the level of political support the project enjoys,
 - active participation in a one-day seminar (entitled “*Making changes happen in education – Tohoku experience in comparison with other countries*”) analysing the policy environment of the project and its policy implications, making it possible also to give feedback to the key participants and to the leaders of the project from an international perspective,
 - a five-day long travel to the three prefectures of the Tohoku region (Iwate, Miyagi and Fukushima), including visits in schools and local communities and meetings with local participants,⁷
 - a series of interviews with key stakeholders (students and adult leaders of the project, local education board members, school principals, participating community and business partners),⁸
- A questionnaire survey in the participating schools on a small sample of teachers, both directly involved and not involved, in order to see the existing and potential impact of the project on participating schools.⁹

⁶ During the two-week long field visit the author of this report was accompanied and supported by Mr. Gaby Hostens, the leader of the OECD-Tohoku School “international research team”. In February 2014 the original two-week long field visit was completed by a second, one-week long stay in Japan. This made it possible additional data collection through, among others, interviews with educational officers of prefectural governments.

⁷ This has been complemented by a four-day long travel to the same prefectures and visits to the prefectural educational offices and visits to two towns (Onagawa and Ooduchi) in February 2014

⁸ For the list of persons interviewed and institutions visited see the “*Program: people met and organisations visited*” in Annex. The program has been set up by the staff of Fukushima University on the basis of consultations with the author of this report. We have to express our highest appreciation for the professional preparation of the field visit by the Fukushima University team, particularly by Mrs. Tamaki Ota. Similar appreciation has to be expressed for the preparation of the second visit to the staff of the international relations department of the Japanese ministry of education (MEXT), especially Ms. Kana Moriwaki.

⁹ The survey, based on a questionnaire compiled by the author of this report, has been implemented by the staff of Fukushima University, including the Japanese translation of the questionnaire, the collection of data among

It is important to stress that this is *not* an evaluation of the OTS project. The aim of this report is not evaluating its progression and its outcomes but, as already stressed, exploring its potential to support educational innovation in Japan and elsewhere. The report has two major target audiences. First, it is addressed to the community of education policy makers and education development specialists in Japan. Second, it addresses the international education development community with a potential interest in this original educational innovation and change model.¹⁰

In the first chapter following this introduction we present the most important contextual factors which have shaped the OTS project and which may determine its future potential impact. Following this we present the key features of the project, identifying those elements that might help the understanding of its nature with the aim of exploring its impact potential. In the next section we present the observed and potential impacts of the OTS project on schools, teachers and pupils and also some dilemmas related with its change potential. In the following section we provide a short analysis of the specific “change model” emerging from the OTS project. In the final section we explore some options for the future. The report is closed by an annex containing a selection of data from the questionnaire survey and also the list of persons met and institutions visited during the field visit.

The context

The OTS project, its implications and its potential cannot be properly understood without understanding the context in which it was born and it has been developing. It is, naturally, not possible to present here a detailed analysis of the broader economic, political, social and cultural and the specific educational Japanese context: only a few references are made to those features that seem to be the most relevant for our analysis.¹¹

The broader economic political, social and cultural context

As well known, the Japanese economy has been stagnating since the beginning of the nineties and this – often described as the “lost decades” – has been accompanied by major changes in the Japanese society leading to a situation perceived by most analysers as a deep social, cultural and institutional crisis and social anomy. The Japanese society is one of the most rapidly aging societies of the World. According to the current middle term education strategy of the government the “population is expected by 2060 to decline by 30% compared with 2010 to about 90 million, of whom 40% will be over the age of 65” and, as a consequence, “society as a whole will lose vigour” (MEXT, 2013). Besides the immediate implications of ageing the following crisis factors are the most frequently mentioned: growing feelings of insecurity (due, among others, to the dismantlement of the lifetime job system), deterioration of the social capital, the apparition of various social conflicts, violence and poverty and a growing perception of low level effectiveness of governments to solve problems, together

teachers and the creation of the data sheet for analysis. We have to express our highest appreciation also for the professional quality of this work.

¹⁰ For a more detailed description of the goals of the research and the targeted audience see the research proposal mentioned in *footnote 5*.

¹¹ We have been using as key sources to understand the context a wide range of literature. From this, for the broader economic, political, social and cultural context, see particularly Sugimoto (2010), Kingston (2013) and Pilling (2014). For the specific educational context, see particularly, Yoneyama (1999), Hood (2001), Jones (2011) and OECD (2012) as well as various internet resources such as the website of MEXT and also private web sources such as the website devoted to Japanese education edited by an American teacher, Jeff Hays, living and working in Japan (<http://factsanddetails.com/japan.php?catid=23&blogid=3&subcatid=150>).

with scandals of corruption and loss of confidence in public institutions (Kingston, 2013, Pilling, 2014). But this is also complemented by such emerging new phenomena as the strengthening of civil society, the growing activism of NGOs or greater transparency due to intensive media coverage of government activities. All these negative and positive features have often been referred to in our interviews with various participants of the OTS project.

Perhaps two further elements should be added, which seem to be particularly relevant for the OTS project and for our analysis. The first is related to *leadership* and *vision*. Reports on the post-catastrophe period have often mentioned the lack of appropriate leadership as a cause of difficulties of solving problems related with evacuation, distribution of aid or other urgent recovery tasks. Analyses of the causes of economic stagnation also often refer to the lack of quality leadership skills both at corporate and political level, blaming, among others the lack of appropriate leadership education. This might be connected with the similarly often mentioned weaknesses in skills related with entrepreneurship and innovation or such cultural factors as attitudes of risk-aversion or learning impeded by low level tolerance of failures and alternative options. But these blocking factors are counterbalanced by efforts to create drivers of change, such as, for example, policy experimentation through the creation of so called special regulatory zones which opens possibilities to try out new solutions also in the education sector (Takashi, 2009).

The other element worth being mentioned is related with the specific context of the natural disaster. As an article published a few days following the Tohoku disaster noted “Japan historians often note that major earthquakes in 1855, 1923, and 1995 coincided with, and perhaps caused, significant national turning points. This is the hope of those who think that Japan must set itself on a new trajectory to compete in the 21st century, and that disaster might be transformative.”¹² In this perspective the disaster context of the OTS project has a double face. On the one hand, this is the most terrible natural catastrophe leading to unprecedented damages and destruction. But, on the other hand, it also appears an opportunity and a possible source of new energies and dynamizing forces (Pilling, 2014). As another article, critically analysing the recovery process one year later noted, “It’s long been said that only a huge crisis would nudge Japan onto a more productive course.”¹³ The triple catastrophe of Tohoku has been, in fact, seen by many as an “opportunity window” or “catalyser” that could break the long cycle of non-action of the “lost decades” and trigger genuine changes.

This second aspect made its appearance very soon – as illustrated, among others, by the focus of the event where the idea of the OTS project was first publicly announced (see the next section on the history of the project). From the very beginning recovery efforts have been characterised by an approach stressing not only the importance of learning from the experience of catastrophe but also the need to use the extraordinary distress situation as an opportunity for change and renewal for the whole country (see box below). This has been expressed in the often used notion of “creative recovery” meaning that that recovery process should lead to a new type of economic growth and a new model of society and not merely the rebuilding of the afflicted areas to their original state.

¹² See the article entitled „Japan’s Cataclysm Can Also Be an Opportunity” by William Pesek on March 17, 2011 in Bloomberg (<http://www.bloomberg.com/news/2011-03-16/black-swan-earthquake-catches-geithner-naked-commentary-by-william-pesek.html>)

¹³ See the article entitled „Earthquake Disaster Brings Dysfunction Not Change in Japan” by William Pesek on March 2, 2011 in Bloomberg (<http://www.bloomberg.com/news/2012-03-02/earthquake-disaster-brings-dysfunction-not-change-in-japan.html>)

Seven principles of reconstruction

- ▶ to record the disaster for eternity, have the disaster scientifically analysed to draw lessons to be shared with the world
- ▶ to make community-focused reconstruction the foundation of efforts toward recovery
- ▶ to strive to develop Tohoku region's socioeconomic potential to lead Japan in the future
- ▶ to construct disaster resilient safe and secure communities and natural energy-powered region
- ▶ to simultaneously pursue reconstruction of the afflicted areas and revitalization of the nation
- ▶ to devote closer attention to support and recovery efforts for the areas affected by the nuclear accidents
- ▶ to pursue reconstruction with a spirit of solidarity and mutual understanding that permeates the entire nation

Source: "Towards Reconstruction-Hope beyond the Disaster" by the Reconstruction Design Council. Quoted by Suzuki – Kaneko (2013; 85)

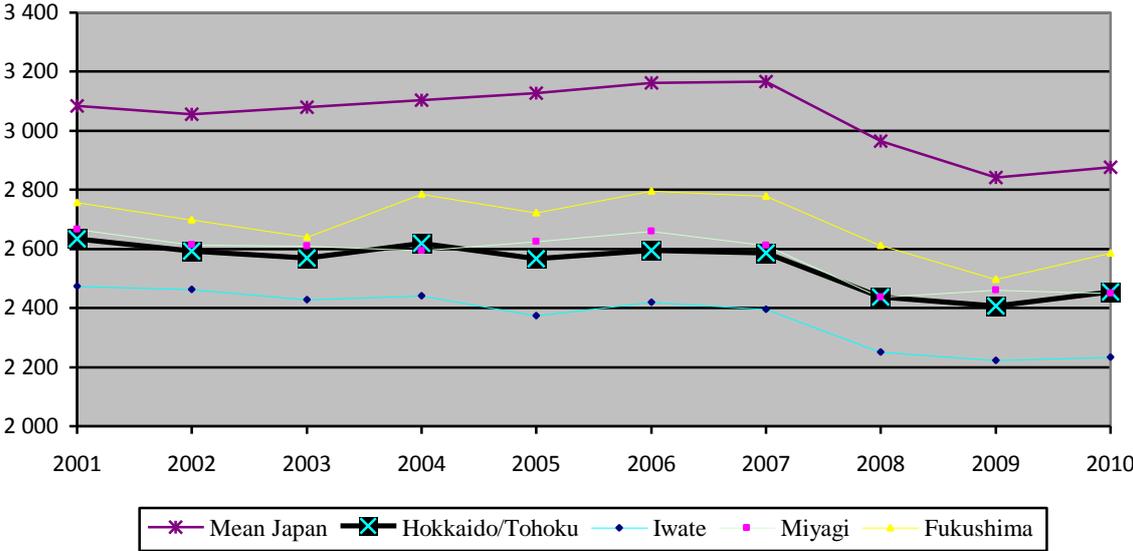
The social-political climate caused by the "lost decades" and the sense of crisis have been accompanied, especially since the late nineties, with an intensive search for ways leading out of the crisis. This has sometimes been described as efforts to "reinvent Japan". The natural catastrophe, in this context, has, in fact, become a catalyser. But the nature of changes or reforms is somehow "going into the unknown" and this is an extremely complex and difficult process because of what we referred to earlier as "lack of leadership" and what has been characterised by the often mentioned lack of clear common vision for the future. In this social, political and cultural context one cannot expect reforms and changes to follow a clear-cut, linear way. This is well illustrated by the words of one author, providing a deep analysis of the conditions of contemporary Japan, who described the possible future form of change in the following way: "In a messy, incremental, and fitful manner Japan will somehow manage to muddle through, cobbling together policies and adjustments on an ad hoc basis, and in so doing avert some of the worst case, doom-and-gloom scenarios that abound in contemporary Japan. Muddling through remains the most likely scenario and, given prevailing circumstances, not such a bad one" (Kingston, 2013; 263). This seems to reflect not only the specificities of the current political and social context but also the deeply rooted cultural traditions and concepts of legal and political action or power and authority in Japan.¹⁴

The picture of the broader economic political, social and cultural context would be too incomplete if no reference was made to the specificities of the region where the OTS project has emerged. The Tohoku region as a whole has been seen as one of the "less developed" territories of Japan, well reflected in its economic output in terms of per capita GDP (see *Figure 1*). While the mean yearly per capita GDP between 2001 and 2010 was 3046 thousand yen in Japan, the corresponding data for the region Hokkaido/Tohoku was only 2545 thousand yen (83%). Historically the north-eastern regions of Japan, like Tohoku, were the bases of military (samurai) regimes, while the south-western regions were the centres of commercial activities and have been seen as more open to the "modern" (western) world. The weight of traditional agricultural activities is still stronger in the north-eastern part of the

¹⁴ See the chapter entitled „Civil Society and Friendly Authoritarianism" in Sugimoto (2010)

country. The differences are reflected also in the cultural character of the Tohoku region. One of the typical features of this culture is the strength of the idea, shared among Tohoku intellectuals, that education plays a key role in “catching up” and in modernisation. Given the relative backwardness of the region the emergence of the idea that simply rebuilding what existed before the triple catastrophe would not be enough, but the situation should be used to accelerate development and to “jump” at a higher level was logical.

Figure 1.
 Per capita GDP in Japan, in the Tohoku/Hokkaido region and in the three Tohoku prefectures where the OTS project has been implemented (2001-2010; 1000 Yen)



Source: Cabinet Office, Government of Japan

The specific educational context

The specific educational context also seems to have two opposing faces. On the one hand, the Japanese education system has long been admired for its high performance, as shown particularly by the results of international student achievement measurements. In the recent adult literacy skills survey of the OECD (PIAAC), for example, Japan appeared as the country showing the *highest* level of literacy proficiency among the 16-65 year-old population (OECD, 2013). The fact that Japanese adults show an outstanding level of literacy skills is probably the best existing indicator of the actual high performance of the Japanese educational system. But, on the other hand, there are also some negative characteristics of Japanese education often described by features such as “overregulation”, “rote learning”, “examination hell”, detachment of learning in schools from real life, overstressing simple memorisation against developing complex problem-solving skills, teachers using one way methods of information transmission, the lack of individualised learning and the frequent suppression of creativity, and the negative attitudes of students towards schools or school refusals (“*tokokyohi*”), and the frequency of school violence or bullying (Yoneyama, 1999; Willis et al., 2008; Sugimoto, 2010; OECD, 2012a). It is important to stress, however, that all these “negative” features are referred to typically in connection with secondary, especially upper secondary education. Japan is one of those countries where the divide between primary and secondary education, as far as the pedagogical culture of schools is concerned, seems to be particularly strong.

Since the OTS project involves upper secondary level students these features are particularly relevant when examining the special educational context of this project. In fact, these and similar features were mentioned very often, sometimes in a very critical way, also by those students, teachers and social partners we interviewed during our field research in August 2013 in Japan and they were also reflected strongly in the group discussion organised in the framework of the seminar entitled “Making changes happen in education – Tohoku experience in comparison with other countries”.¹⁵

One of the remarkable strengths of the Japanese education system is a strong commitment to “educate children for life”, or, as often expressed: “education for zest for living” (*ikiru chikara*). This has been described in a report of the Central Council for Education in the middle of the nineties the following way: “*what our children will need in future, regardless of the way in which society changes, are the qualities and the ability to identify problem areas for themselves, to learn, think, make judgments and act independently and to be more adept at problem-solving. We also felt that they need to be imbued with a rich sense of humanity in the sense that while exercising self-control, they must be able to cooperate with others, have consideration for their needs and have a spirit that feels emotion. It also goes without saying that if they are to lead vigorous lives, a healthy body is an indispensable requirement. We decided to use the term zest for living to describe the qualities and abilities needed to live in a period of turbulent change and felt it is important to encourage the right balance between the separate factors underlying this term*” (MEXT, 1996). This commitment, which seems to be unchanged since it was first expressed, is a particularly important contextual feature from the perspective of the OTS project. The strong socialisation impact of “education for zest for living” could be directly observed during the 2011 catastrophe and this has had a major impact later on on the successful deployment of the OTS project.

The system feature that has been mentioned the most often in our interviews – which seems to have a determining influence on what happens in Japanese high schools and apparently is the main cause of the perseverance of educational practices impeding the effective development of “21st century skills” or skills needed in real life – was the pressure to prepare students for entrance examinations to higher educational levels. School activities are concentrated on supporting students to become successful in entrance examination typically based on multi-choice tests, emphasising “memorising and accumulating facts, and mastering procedures, rather than analytical thinking, creativity or the capacity for innovation” (OECD, 2012a; 200). With some exaggeration we could describe the Japanese education system as producing particularly effectively those 19th or 20th century skills that are not seen any more needed in the 21st century. This is sometimes been referred to as a “trap” (created paradoxically by the particularly high level effectiveness of the system) or a “vicious circle” (the more energy is used to compete for higher achievement at university entrance examination tests the stronger the need for this energy becomes).

According to some analyses one of the bottlenecks of improving economic competitiveness in Japan is related with skills formation. There is an apparent contradiction between the high performance of the Japanese education system in terms of student achievement measured by international tests and the observed dissatisfaction of employers with the actual skills of the labour force. According to data published in the 2012 skills strategy of the OECD the

¹⁵ The participants of the seminar were invited partly from among the adult participants of the OTS projects (“local leaders” and “empowerment partners”) partly from outside (ministry officers, NGO representatives, business partners, international experts etc.).

proportion of employers reporting recruitment difficulties was the highest (80%) in Japan (OECD, 2012b; 23). According to the data of Hays Global Skills Index Japan's talent mismatch is “one of the highest for any country”, therefore “Japan needs to recruit skilled staff from the international market who can operate on the global stage”¹⁶

There have been many attempts in Japan to reform education and the country seems to be one of those where there is a “reform pendulum” swinging between the “progressive” and the “conservative” sides. Some authors describe the situation of education reform in Japan as a case of “immobilism” or “paralysis” (Schoppa, 1991) while others stress the slow and incremental character of educational change in the country (Hood, 2001). Given the focus of our analysis of the OTS project the particular Japanese educational change model deserves a special attention. It seems to be clear that in the particular policy context of Japan, so vividly described by the quotation from Kingston above, the chance of reforms following a linear way (that is starting with a clear strategy concept adopted on the basis of a wide social consensus and implemented effectively by an administration being both strongly and unanimously committed to the clear reform goals and possessing all the necessary implementation skills and instruments) is rather low.

The governance model of the Japanese education system has often been described as a centralised one. For example a comparative analysis of the Japanese and the US education systems published at the beginning of the nineties still described the situation with these words: “Japanese schools operate in a centralized, nationally controlled school system; teachers throughout Japan must plan their instructional activities within the structure and guidelines prescribed by the Japanese Ministry of Education” (Sato – McLaughlin, 1992). A recent OECD publication noted, however, that “Japan has already seen a significant shift from one of the more centralised to one of the more decentralised education systems” (OECD, 2012a). In fact, as confirmed also by interviews conducted in the framework of this study with ministerial and regional/local level administrators the Japanese education system is governed in a much less centralized way than most external observers would think, with local administrators having quite large discretion to use specific solutions to specific local problems.¹⁷

What we described in the previous section as the specificities of the broader economic, political, social and cultural context is well reflected in the current education policy strategy of the Japanese government. This strategy (as it appears in the document entitled "The Second Basic Plan for the Promotion of Education") has been proposed by the Central Council for Education and it was formally adopted by the government on the 14th of June, 2013, a few weeks before our field study mission (MEXT, 2013). It provides an analysis of the current economic and social context and it defines four basic priorities (see the box below) with eight specific “success targets” and thirty concrete actions.

Four policy directions to avoid crisis in Japan
Second Basic Plan for the Promotion of Education

¹⁶ Hays is a leading global consultancy producing, among others, a global analysis of skills needs and publishing estimates about the skills needs of countries (see the Global Skills Index website here: <http://hays.com/media-centre/hays-global-skills-index-2013/index.htm> and the source of the quotation in the text here: http://www.hays.co.jp/en/press-releases/HAYS_080009)

¹⁷ This has also been confirmed by interviews conducted in the framework of this study with ministerial and regional/local level administrators.

1. Developing social competencies for survival – individual autonomy and collaboration in a diversified and rapidly changing society

- Promote policies aimed at nurturing top-class level in academics and normative consciousness (continual implementation of surveys on national academic levels and study conditions, review to include moral education in Courses of Study, promotion to increase weekend Saturday classes, review of Japan's 6-3-3-4 education system)

- Promote university reform to increase student's overall study hours.

- Examine the fundamental reform of university entrance standards including the practical use of curriculum achievement tests in high school.

- Promote policies to increase adult entrance into universities and or other educational institutions.

2. Developing human resources for a brighter future – fostering individuals who create change and new values, and who lead in each field of society

- Consider the inclusion of English in Courses of Study from elementary school.

- Establish “super global high schools” to nurture students who are internationally well-grounded.

- Establish a new structure involving collaboration between government and private sectors to increase the number of Japanese studying overseas.

3. Establishing learning safety nets –a wide range of learning opportunities accessible to everyone

- Promote measures to eliminate paid early childhood education.

- Review measures to reduce high school education costs, and consider scholarship benefits for low-income families.

- Complete building earthquake resistant structures for all national and public school facilities by FY2015.

4. Establishing vibrant communities based on strong bonds society which encourages nurturing people who then build society in a virtuous cycle

- Strengthen coordination and collaboration between schools and the community for all school districts.

- Expand the number of “community schools” up to 10% of all public elementary and junior high schools.

Source: MEXT (2013)

The education policy strategy of the government not only makes explicit references to the crisis situation described in the previous section and specifically to the Tohoku disaster but it presents these as the most important factors determining the goals and implementation lines. The priorities are determined by the goal of “avoiding crisis in Japan” and the lessons learnt from the catastrophe are directly used in the definition of the goals. The latter can be illustrated, for example, by references to goals and tasks related with specific new skills such as

- “think and act independently based on accurate assessment of circumstances and do not give up”,
- “restore future-oriented innovation and engage in society building”
- “environment conducive to secure learning of needed skills”
- “importance of links between people, communities and countries and of coexistence between humans and nature”.¹⁸

¹⁸ Quotations from the English hardcopy version of the strategy.

The analysis of this new government education policy statement shows that the strategy of the government in the education sector is fully aligned with the goals of the OTS project. This means that the policy environment in which the project is being conducted seems to be favourable to the project if there is an intention to exploit its potential for supporting educational renewal. The two major goals of the OTS project, that is (as we shall see in the next section), the development of new skills relevant for social and economic reconstruction and the development of social capital through intensive school-community cooperation seem to be in harmony with the goals of the government education sector strategy which implies that the project, in principle, has a high potential to support education reforms in Japan. In other words there seems to be a potential to use the new pedagogical approaches, practices and ideas produced by the project as key inputs for the current reform process. Furthermore, and this is what we think has to be underlined with the strongest emphasis, the *change model* it represents fits particularly well into the specific context of educational change in Japan.

The OTS project

In this section we give a short presentation of the OTS project and we try to provide an analysis of its nature from an educational innovation and change perspective. The aim of this chapter is less providing descriptive presentation than supporting analysis.¹⁹

History

The launching of the OTS project was a common initiative of the OECD and the Japanese Ministry of Education (MEXT), after the 2011 March earthquake, tsunami and nuclear disaster in the Tohoku region of Japan, following a visit of the general secretary of OECD in the country.²⁰ The idea of the project was publicly presented in Japan in November 2011 at a seminar organised by the National Institute for Educational Policy Research entitled “*The Great East Japan Earthquake and Schools - Innovations in School Administration and Educational Instruction*”.²¹ Local educational authorities, schools and community leaders were contacted in the three prefectures of the affected region and they were invited to select pupils and local adult leaders to participate in a project with the direct goal of preparing a “Tohoku Festival” in Paris in 2014 in order to demonstrate the attractiveness of the Tohoku region and to show the progress of the recovery process. . Although the direct project goal has been the organisation of this specific event those who initiated the project had much broader goals in mind, such as educating future leaders who might play, in the future, a key role in the long and complex process of regional recovery. The idea was that by participating in this ambitious program, based on collaborative, project-based pedagogy they will acquire advanced leadership skills and their engagement to promote recovery in the region will be strengthened.

Approximately one hundred students from junior and senior high schools operating in the prefectures of Iwate, Miyagi and Fukushima, most of them in a formal role of student leader, have been selected typically by those teachers who accepted to be adult leaders in the project. The students met the first time in March 2012 in a four-day workshop where they took decisions on the themes to be presented at the 2014 Paris event and on the working methods

¹⁹ For basic information and factual presentation see the official website of the OTS project (<http://www.oecd.org/education/school/oecd-tohokuschool.htm>)

²⁰ For more detailed information see also the earlier report entitled “OECD Tohoku School. Overcoming the Earthquake Disaster - Toward Creation of New Education” written by Gaby Hostens (manuscript, 2013)

²¹ See the presentation by Mrs. Miho Taguma (Senior Policy Analyst of OECD) at http://www.nier.go.jp/06_jigyoku/kyouiku_sympto_h23/21_siryoku.pdf

to progress towards this goal. Nine local teams have been formed in the participating localities²² which work as “*local schools*” organising meetings typically on weekends and working collectively on the preparation of the program elements assigned to them. Parallel to this, four teams with management tasks (*thematic teams*) have been established, with responsibilities for (1) preparing the Paris event, (2) external and internal communication, (3) documenting the whole process and (4) fundraising and relations with business and community actors. The two parallel structures have been operating as a small “matrix organisation” with the leading participants having a role in both of them. The project has been supported by an increasing number of “empowerment partners” representing business and local communities, schools outside the distress area, government organisations and the academic world.

From the very beginning it has been clear that beyond the immediate project goal of preparing and realising the 2014 Paris event, there have been longer term and more ambitious goals. These have been expressed explicitly and frequently by almost everybody we interviewed: pupils, teachers, local community leaders, principals of participating schools and the representatives of the national ministry. As one of the leading participants expressed: “*in this project the essence is not the event at the end but the process itself*”. As another said: “*In 20-30 years many of these students will be in leadership positions, not only in Japan but also in the World*”. And another key figure of the project added: “*We are nurturing human, spiritual ‘power ability’ (ningen-ryoku) in this project*”:

Main features

It is not easy for an external observer to understand the unique nature of the OTS project. This is an original educational innovation which differs from most other known forms of innovative educational environments.²³ Some of its key features (see the box below) may naturally appear in other innovations but their unique combination has made it a new, original model. As we stressed above, it also seems to be an original form of initiating, sustaining and managing change in a systemic environment that has often been described as immobile, overregulated and resisting to change.

The main features of the OTS project²⁴

- ▶ **An extraordinary post-catastrophic context:** The project has been launched in an extraordinary context following the great East-Japanese Earthquake, Tsunami and Nuclear Disaster.
- ▶ **The dominance of external (non-school related) goals:** The main original goals of the project are not related to improving the quality of teaching and learning or other aspects of school life but to support recovery and to enhance the education of a generation of potential future leaders for recovery in the region hit by the catastrophe.

²² These are Adachi, Date, Iwaki, Kesenuma, Okuma, Onagawa, Otsuchi, Soma, Togura

²³ For an inventory of innovative learning environments in OECD countries see the website entitled “Innovative Learning Environments: The Innovative Cases Strand” of the Centre for Educational Research and Innovation of the OECD (<http://www.oecd.org/edu/cei/innovativecases.htm>). Unfortunately no Japanese case is can be found here.

²⁴ It is important to stress that the features listed in the box are not necessarily those intended and some of the features originally intended might not appear in this list if they have not been realised as key features..

► **Focus on out-of-school activities:** Most of the activities in the project are out-of-school activities outside the remit of the formal education system. The project is not related to regular school activities, especially to the formal curriculum and classroom teaching and learning.

► **A model based on regional cooperation:** The project is based on the cooperation of a regional network of local teams of students lead by adults whose majority are teachers

► **Strong involvement of external stakeholders:** The involvement of external stakeholders (local community leaders, business community) is a particularly important feature of the project. Another key feature of the project is that the financial resources needed for the achievement of its goals are to be provided by enterprises

► **Limited involvement of and impact on participating schools:** Schools are not formally engaged in the project, their participation has been limited, and the immediate project goals do not aim at influencing the internal work and life of the participating schools.

► **Student control:** Participating students have a particularly strong influence on the course of the project. Only a very limited number of teachers are actively involved, they act as “adults” and not in their formal role of teachers

► **The presence of a number of well identifiable key actors:** (1) OECD, (2) the adult leaders of local teams, (3) student leaders of student teams, (4) a supporting university (Fukushima University) and (5) the national ministry of education). The professional coordination of the project is provided by a regional university (Fukushima University) and the presence of the OECD and the immediate project goal (the “Paris Event”) give an international dimension to the project

► **Strong international component:** The project has extremely strong international components as reflected both in the main immediate goal of student activities (to prepare an event in Paris) and the involvement of OECD and international experts.

► **A bottom-up innovation model:** The project, though supported by the Japanese national education authorities, has been launched as a bottom-up initiative with voluntary local participants, both its goals and forms of activities being determined by these voluntary participants.

► **Moderately supportive education policy context:** The project has been realised in a national education policy context characterised (1) by relatively modest systemic support for school level innovations and strong commitment to safeguard common national standards by educational authorities, and (2) by the strong activity of reform oriented professional and social groups, dissatisfied with the operation of the education system.

► **Cross-sectoral dimension:** The division responsible for the implementation of the project in the Japanese ministry of education is not the directorate responsible for primary and secondary education but another department responsible for lifelong learning and overall policy strategy. This not only disconnects the project from the daily routine operation of school education and makes it immune to the pressures related with this, but also connects it to issues that do not belong to the habitual world of schools (e.g. those related with reconstruction, local communities, economic restructuring or regional revitalisation).

► **Conceptual eclecticism:** Unlike most innovative educational initiatives the project has not been based on a coherent, explicit and well elaborated professional educational/pedagogical concept formulated by well identifiable professional groups. Its networked, decentralised and bottom-up character made it possible the co-existence of different parallel approaches and also their evolution in time. The OTS project has

had a rather eclectic conceptual background which has not been described in a systematic way to help external observers to understand its nature.

► **Internal diversity:** The eclectic conceptual framework has been encouraging the emergence of parallel, alternative implementation patterns alongside various dimensions, such as, for example, the strength of connection with regular schools or the locus of leadership. In some cases the most influential leading actor has been the local educational authority, in other cases the school from which participating pupils have been recruited, and there is a case where the representatives of a strong informal local community have been the leading actors.

► **Dispersed leadership:** The project does not have a well identifiable leader or leaders: leadership functions are dispersed among the five participating actors mentioned above and it may informally shift from one actor to another.²⁵

► **Networked institutional structure:** The project has been operating as a network of loosely connected thematic and local teams, pursuing one common goal (realising the “Paris Event”) but enjoying very high level autonomy. The parallel presence of thematic and local dimensions has created a kind of matrix structure.

The combination of these 16 specific features has created a specific innovation pattern that makes the OTS project not only different from any other innovation but also very difficult to describe and to present it as a coherent model. This pattern is not only original but also very complex which will make any attempt to replicate it quite difficult. This aspect has to be considered when thinking about possible follow-up scenarios (see the last chapter on “*Conclusions and options for the future*”) and also when thinking about the potential impact of the project on regular educational practices in the formal education system (see the chapter on “*Impact and change potential*”). Further below, in the section entitled “*The ‘Tohoku change model’*” we shall come back to the question of the nature of the OTS project as a particular innovation or change model but before doing so it is important to clarify the linkages of this pedagogical model to existing, well known educational approaches and practices in Japan. This is particularly important in the case of an innovation model that shows high level uniqueness and originality.

Situating the OTS approach against existing models/practices

The understanding of the nature of the OTS approach might be facilitated by contrasting it with existing educational models or practices. In our conversations we invited practitioners and researchers to find similarities between the OTS project and other, better known and existing educational approaches in Japan and to reveal possible similarities. On the basis of this we could identify six well known educational practices which show some common features with the specific approach of the OTS model. These existing practices are not independent from each other: some of them naturally partly overlap with others but they can all be described as existing patterns of organising education differently from the way it is organised in regular schools.

- *School based extra-curricular activities (tokubetsu katsudou, bukatsu).* These school-based activities play a fundamental role in the socialisation of Japanese youth (Cave, 2004; Sugimoto, 2010), and participating in some of them is compulsory. Although

²⁵ We make a deliberate distinction here between “dispersed leadership” and what the OECD thematic review on school leadership described as “distributed leadership” (OECD, 2008). Leadership functions are less visible, less explicit and they are more difficult to grasp when these functions are “dispersed” than when they are “distributed”. When leadership is “dispersed” there is a higher risk of weakening of leadership functions leading to operational difficulties.

they are extra-curricular, educational authorities regularly provide guidelines on how to organise them and they are seen as an integrated part of the regulated world of school life. They have various forms, such as student self-government, home-room activities, clubs, guidance and various "school events" such as festivals or school-based sport events. In these frameworks students play a much more active role in determining the content of activities than in regular classrooms.

- *Community schools.* The notion of community school refers to an educational model which stresses the importance of close connections between schools and local communities as well as the opening of schools towards the external world. This model has existed in several parallel forms in Japan and, similarly to many other countries, has often been promoted by community developers and adult educators (Hayashizaki, 2008). The idea of community schools has been supported by MEXT as part of its strategy of promoting the building of social capital (Okumoto, 2003).
- *Education in youth movements.* The educational practices of youth organisations, aiming typically at developing citizenship and leadership skills among young people, show many similarities with what happens in the OTS project. Although youth associations might be supported by the ministry of education, they are civil organisations operating outside the formal school system (often under the control of various political parties and civil movements). During the past decades they played an important role in the socialisation of the political leaders of the country.
- *Integrated studies (sogotekina gakushu; sogo-gakushu).* Integrated studies (IS) was introduced as a new subject in Japanese schools in 2002 (see box below). This has been a major innovation, although its implementation raised many challenges and it has been uneven, with more success in lower than in higher school levels (Bjork, 2009).²⁶ Many of those whom we asked about the possibilities to use the experiences accumulated in the OTS project in regular school practice mentioned IS as the logical place where such opportunities are given. As one of the school leaders interviewed has formulated: what students do in the framework of the OTS project can be conceived as an „extended version of 'sogo-gakushu'. The practice of IS could make it for every student to gain experiences similar to what students participating in the OTS can gain. What happens to students in IS lessons is exactly what happens in this project.”²⁷

Integrated studies (IS)

„For students in grades 3 through 12, MEXT created a class period called “Integrated Studies” (*sogotekina gakushu*), which embodied its reconfigured approach to education. The Integrated Studies (IS) period, which was introduced in all elementary and junior high schools in 2002, was designed to augment local educators’ influence over curricula and to encourage experimentation with instructional methodologies. (...) Schools were given great flexibility to determine the length of IS lessons, the

²⁶ Following the change of government in 2012 the time devoted to IS was reduced but IS remained part of the official curriculum.

²⁷ It is important to stress that supporting the implementation of IS in the affected schools does *not* figure in the goals of the OTS project, even if some schools and teachers have decided to use the OTS project for this purpose.

arrangement them to collect and develop original materials to support the unique investigations conducted by their students. They were also encouraged to incorporate technology into learning activities.

„In general, teachers using the IS approach select themes (e.g., community studies, international understanding, or the environment) from which students come up with individual IS projects. These projects involve going out into the community to gather information through interviews, observations, and the use of technology and other resources in the students' neighbourhoods. The culmination of such studies is often a series of oral presentations in which students summarize what they have discovered.”

(Bjork, 2005; 621)

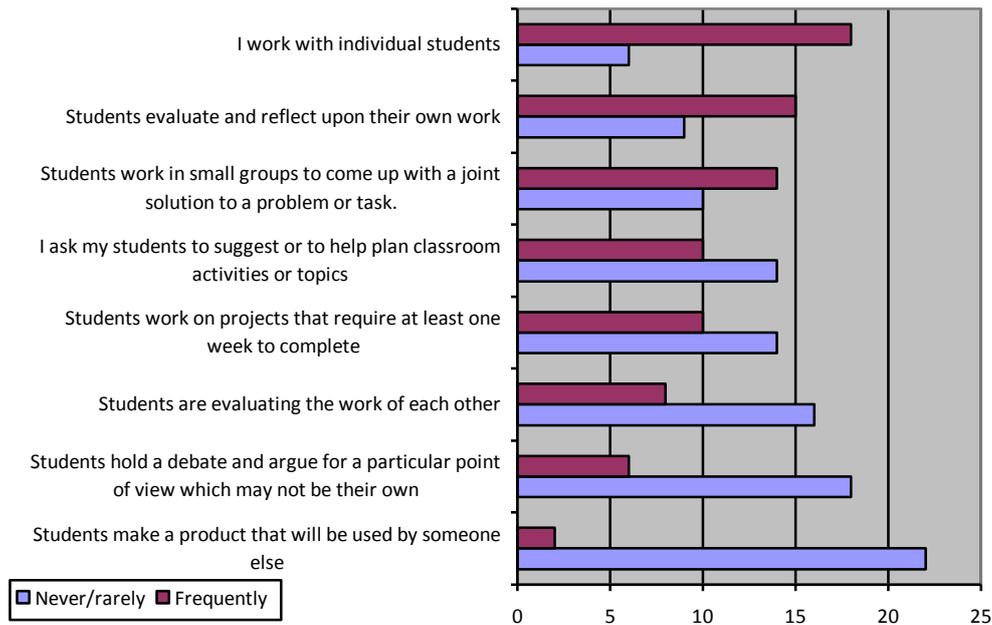
- *Active, cooperative teaching methods.* These are progressive methods of organising teaching and learning in regular classrooms, such as learning in cooperative peer groups, project based teaching or inquiry learning. In principle these methods can be used in every subject in regular classroom settings but their use in Japan outside IS seems to be rather rare due to the highly regulated nature of the official curriculum and the pressure on pupils and teachers to concentrate on preparation for examinations. In the framework of this research it has not been possible to gather information on the use of these methods in subject teaching in regular schools but it is quite probable that in some institutions, especially those that belong to the category of experimental schools supported by MEXT²⁸ there are cases of using cooperative and project based learning methods in regular subject teaching. The frequency of using non regular classroom teaching methods in our small sample of teachers from schools participating in the OTS project (see *figure 2*) seems also to show that these are not as exceptional as most observers assume.
- *Alternative education.* The number of “alternative schools”, such as free schools, homeschooling, church schools, schools applying well established alternative pedagogies (such as Waldorf or Montessori schools) and those public institutions that operate under the regulation on special regulatory zones and acquire the legal possibility to apply pedagogical approaches that do not belong to the mainstream²⁹ is low, although apparently increasing in Japan (Nelson, n.d). This research does not allow the exploration of existing pedagogical practices in this sector but it is quite probable that some of them use co-operative, project-based learning not only in the periods of integrated studies (IS) but also in subject teaching.

Figure 2.

The number of teachers using various teaching methods in the schools participating in the OTS project (N=26)

²⁸ On experimental schools see the webpage entitled „Improvement of experimental schools system” of MEXT (http://www.mext.go.jp/b_menu/hakusho/html/hpac200201/hpac200201_2_018.html)

²⁹ See the website entitled „The independent, democratic, free schools in Japan and the history of the free school movement” of the digital community „Education in Japan” (<http://educationinjapan.wordpress.com/the-scoop-on-schools/the-independent-democratic-free-schools-in-japan-and-the-history-of-the-free-school-movement/>)



Question: “Please indicate how often you are using the following methods in your daily teaching practice!” (questions taken from the TALIS teacher questionnaire).

These existing practices listed above differ from each other in several dimensions. Some of them are, for example, closer to the regular classroom practice of schools, others are at more distance from it. Some are more under the control of regular schools, others are fully or almost fully independent from them. There might be great differences in the skills they intend to develop or in the respective roles adults and students play in them. Some of them operate at a very small scale while others are present and are visible in every school and locality. Some of them have explicit intentions to have an influence on how education and classroom teaching in regular public schools is organized; others do not have such intentions. And, in addition, most of them can be divided into several modalities which all might be different from each other in one or several of the dimensions mentioned here.

In addition to these existing models and approaches that have been listed above a further, more recent development has to be mentioned. Following the disaster the need to connect school life and classroom learning better to the specific post-catastrophe context has emerged in all the three affected regions (Fukushima, Miyagi, Iwate). With the support of the national ministry of education and with the coordination of the prefectural education offices regional curriculum development activities have been started. Local universities and many school teachers have participated in this development process which resulted in new curriculum materials (books of guidance, task books, teacher manuals etc.) and triggered also relevant teacher professional development programs. The new regional curricula have been implemented in schools in a time slot – typically 20-30 hours a year – taken from various existing national curriculum areas, such as social studies, moral education or integrated studies. In most cases these new curricula brought in not only new content elements (such as knowledge about local community traditions or related with nuclear radiation) but they also encouraged the use of new, innovative teaching methods (such as project-based learning or drama pedagogy).³⁰

³⁰ The information in this paragraph is based on interviews with prefectural board officers in the three affected regions during the second field visit in February 2014.

The OTS project has, unavoidably, been using the experiences of the existing models and these models have necessarily been influencing the emerging OTS model. The latter could also be described as a unique combination of the various traits of these existing models with, naturally, new traits added (for example by the fact that it has originated from an extraordinary situation of natural catastrophe and reconstruction efforts or by the fact that it is strongly connected with a global intergovernmental organization, the OECD). In fact, one of the key features of the emerging OTS innovation model is its deliberately eclectic character, strongly connected to what we described as “conceptual eclecticism” in the previous section. In fact, this is one of those factors that seem to make the OTS project an original “change model”, that is, a new pattern of initiating and implementing innovation in school systems that are not or are only modestly open to changes.

Impact and change potential

The central question of this research is how much the OTS project influences regular school practice and, particularly, what its potential is to have such an influence. As we have seen the OTS project is rather isolated from the regular practice of schools: this is basically an out-of-school activity which involves directly only a few students and typically only one teacher from participating schools. Even using the notion of “participating school” is questionable in this context because schools are not formally connected with the project and the engagement of their pupils and teachers is often seen as their “private affair”. The answer of participating students to the question whether what they do in the OTS project is known in their school was almost always negative. According to student responses school principals would perhaps know that some students in their schools are taking part in the OTS project but they would not be able to name them. Only homeroom teachers would know by name those students from their classes who are participating. The words of a local education board leader showed that there might even be a deliberate intention to isolate the project from the regular activity of schools.

In our interviews with students and teachers directly participating in the project, as well as in our interviews with the principals of three schools involved in the project we tried to explore how much the OTS project, operating in a relative isolation from the regular life of schools, has a potential to influence regular teaching and learning practices. This was also the main focus of our data collection on the small sample of teachers involved and not involved in the project. This question of observable and potential impact is important because this determines strongly the value of the OTS project as a specific innovation model. This is what determines whether the OTS project has a real potential to become a “change agent” in the Japanese education system.

Observed and potential impact

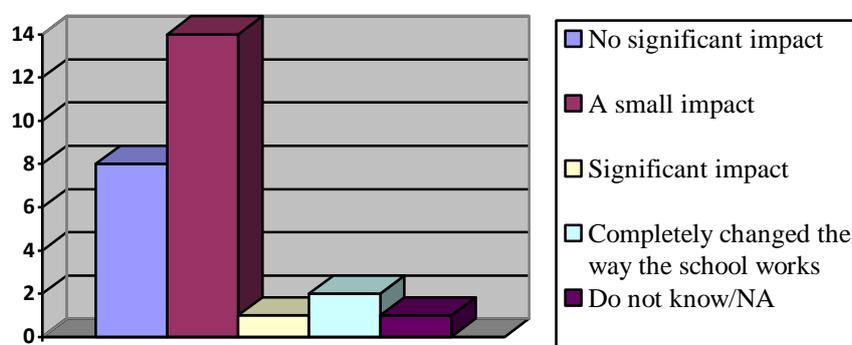
Our impression, on the basis of our visits in three schools involved in the project, is that although the project operates in a relative isolation from schools it has had an impact on them. The principals of all the three visited schools supported the idea of participating students and teachers presenting the experiences they have gained in the project to their peers who have not been involved. “*I want our students [who participate in the project] to share their experiences with other students and to have an opportunity to show what they do in the project. I can see their personal development and I want this to have an impact on the way we educate pupils in this school*” – said one of the principals. Another principal, talking about the students of his school participating in the project said: “*I am proud of them. They have gained extraordinary*

experiences and their image about the future is different from what the others have (...). I hope they will have an opportunity to present what they do to other students in this school.” And he added, answering the question about what he would recommend if such a presentation was taking place: *“Talk about what you think and what you want to do in the future. This project has a goal and talk about how you would like to achieve this goal. Talk about the details: show how you work to achieve the goal.”* The third principal expressed a similar opinion: *“I hope the students participating in the OTS project will share their experiences in this school. (...) I would recommend that they explain why they work on the theme they have chosen, that they share their emotions and try to transfer what motivates them, the reasons why this is interesting for them...”*.

Impact on schools

What the principals said seems to confirm that the OTS project has a real potential to have an impact on the schools attended by the participating students and where participating teachers are doing their regular work. However, the existing or observable impact still seems to be rather modest and we have also heard about difficulties and conflicts that might reduce the impact potential. From among the teachers who answered our questionnaire only a very small number reported on “significant impact” (see *Figure 3* and *question No. 11* in annex) and we did not find significant differences between teachers involved and not involved. One of the external “empowerment partners” even expressed the opinion that the project “*did not have any impact on schools*”.

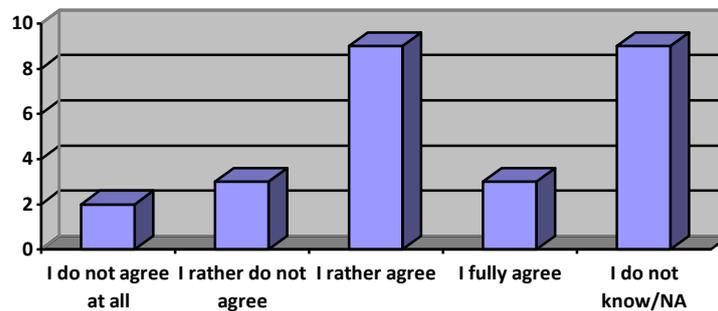
Figure 3.
The distribution of teachers in function of their views about the impact of the OTS project (N=26)



Question: “How do you see the impact of the Tohoku School Project on your own school (i.e. the school where you are currently working)?”

Some participant teachers reported about conflicts with their non-participating colleagues. In one school a non-participating teacher expressed explicitly that she was not supporting the participation of students in the OTS project because she thought this would be detrimental to their preparation for university entrance examinations. When teachers were asked about whether some of their colleagues had reserves towards the pedagogical approach of the OTS project the majority of them answered affirmatively (see *Figure 4* and *question No. 13* in annex) and only one of them agreed with the statement “All teachers in our school support the participation of this school in the Tohoku School Project” both among involved and non-involved teachers (see *question No. 13* in annex).

Figure 4.
Opinions about the support of the OTS project by teachers (N=26)



Question: "Please indicate the degree of your agreement with the following statement:" "There are some teachers in this school who seem to have reserves towards the pedagogical approach of the Tohoku School Project"

Although we heard much about explicit reserves and aversions by teachers who are not involved in the OTS project our visits to schools and our interviews with principals gave us the impression that in several schools there is a very receptive and supportive climate. One of the principals described the negative attitudes of some teachers towards the OTS project in the following way: *"Those who think that the participation of students in this project is wasting time have a short sighted thinking and they do not see the real interests of pupils. Even if they fail at the examination the experiences they have gained in this project will have a tremendous impact on their future. Our task is not simply sending our children to the university. We have to think about life on the long term. I would be pleased if all our students could have similar experiences."*

When we asked teachers and principals about whether the experiences accumulated in the OTS project could be applied in regular classroom practice we were typically receiving the answer that this was possible in integrated studies (IS) lessons. As mentioned above, one of the principals described the project as "an „extended version” of integrated studies. The general director of MEXT responsible for primary and secondary education also mentioned IS as the part of formal curriculum which develops similar skills that are being developed in the OTS project. We heard similar answers also from students. One of them, for example, described a three-year long project realised in the framework of IS on the theme of sustainable development which included contacts with external partners (e.g. in "recycling industry") and the presentation of solutions elaborated by students that could be applied in their home city. We also found an example where an external partner participating in the OTS project has been involved in the realisation of an IS project. But it has also been stressed that the framework provided by IS was much less optimal than the OTS project framework because of time limitations in the former. As one principal expressed: in IS *"we cannot allow students to really control their own learning because of time pressure"*.

Impact on teachers and teaching practices

One of the most frequently stressed features of the pedagogical approach of the OTS project is the balanced, two-way communication between teachers and students. Almost all students and teachers we interviewed mentioned the symmetric pedagogical relationship characterising the OTS project which allowed not only pupils learning from teachers but also "teachers learning from pupils". Students often stressed that this was in sharp contrast with the dominant pedagogical approach of regular schools where teachers typically do not tolerate symmetric

pedagogical relationships and students are often even not allowed to ask questions. At the plenary session of the Tokyo workshop, where students met the OECD ambassador of Japan one of them made the following amazing intervention: *“What impressed me the most in this project has been that here adults also learn and they learn also from students. This is important because if adults are not capable to learn from us they will not be capable to teach us.”*

Many observers would think that the pedagogical approach of the OTS project, characterised by making pupils work with teachers as equals, is so distant from the pedagogical universe of regular Japanese schools that this in itself would radically limit the potential impact of this project on the pedagogical practice of regular schools. Although every student we were talking to seemed to confirm this assumption, a much more positive picture emerged from our interviews with the principals of participating schools. We asked all of them about what they were thinking about the student intervention quoted above and their answers gave us the impression that the pedagogical gap between the OTS project and the practice of regular schools is not as deep as we thought. One of the principals reacted to this story in the following way: *“We teachers do not know, do not understand everything. If our students gain special experiences we can learn from their presentations and this is useful for us, teachers. Although we are teachers, we learn from our students. Those who do not understand this have ‘small heart’. Teachers are learning from, pupils even in the elementary school”*.

Participating in the project seems to have had a remarkable impact not only on students but also on several teachers. One of them told us that before he joined the project he could not imagine that teachers and students *“can be at the same level and can solve problems together”*. He reported on his understanding that he can be *“partner of students”* and his *“way of teaching being completely transformed”*. Before this, he *“did not encourage students to ask questions”* but now he sees *“their activity as necessary”*, and he thinks, *“students have to think in different perspectives”*. Another teacher reported on his way of *“learning gradually the most difficult thing: keeping a balance between directivity and passivity”* and to *“find out until when students can be left in uncertainty”*. This shows a deeper understanding of the nature of student learning, that is, understanding that giving too quick answers might hamper deep learning. A third teacher mentioned that since he joined the project he has been *“accepting more parallel interpretations”* and he knows that his own interpretation is *“only one of the possible interpretations”* which makes him encouraging more discussions in the classroom. While in the past he was *“patronizing students”*, now he feels *“more respect for their opinion”* and gives *“more room for them to express themselves”*. As he said: *“I could accept that students have their own opinion even before the project but now I feel respect for it.”* The pedagogical approach of the project and its impact on the attitudes of participating teachers has also been presented in a lecture by a participating teacher at the seminar on the potential of the OTS project, organised as part of the 2013 August Tokyo “Summer School” (see the box below).

Teacher learning in the OTS project

“Adults have knowledge, experience and wisdom but at the same time these experiences tell us to avoid taking risks and deprived us of our curiosity at times. So, by working together with the students we have re-learnt or re-gained curiosity and courage to take risks. Students, the opposite way, do not have experiences as they are

young but they have not lost the natural traits of curiosity. Also, when adults were not coming to a conclusion with the arguments beating about the bush, it was the students who reminded us of how to use our time effectively. The childishness in adults has elicited the maturity in children. The students have said at one of the workshops that they want to become adults who can take responsibilities ‘unlike the adults I often see’ (...) We have about 10 ideas, born out of the minds of the students, to implement for the event in Paris. One example is to show the real height of Tsunami which hit our regions with the height of a giant balloon; it is being planned to be placed at the Champs de Mars. In refining these ideas, we have set out an activity called ‘critique’. Students evaluated other teams’ ideas constructively. The activity revealed that these students have never done an activity like ‘critique’. Also, there still seems to be a cultural barrier, that is, the difficulty in criticising others’ work, in particular, those of friends. Therefore, students learnt the methods to do so. The experience has led us to believe that we can learn.”

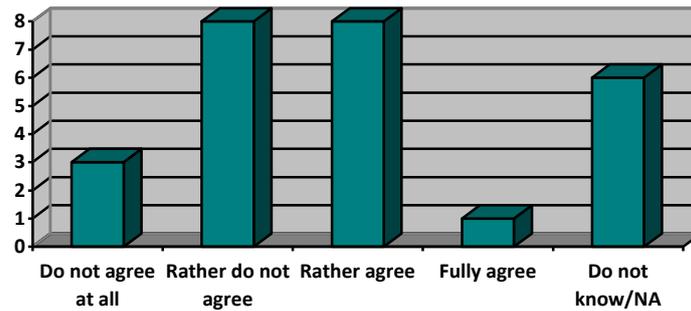
Source: teacher presentation at the seminar entitled “Making changes happen in education – Tohoku experience in comparison with other countries”, Tokyo, 2013.08.07

The challenge teachers participating in the OTS project had to face originated not only from the difference between the pedagogical approach of the project and pedagogical culture characterizing the typical Japanese high school, but also from the fact that the former was not defined in detail in advance. The teacher quoted above, who spoke about the “balance between directivity and passivity”, also noted that when they started the project they did not get any specific guidelines about how to manage the project but they had to invent practically everything together with the students. They had to learn, at the same time, new skills to teach or organise learning, and to manage an original, unknown pedagogical environment which is characterized by openness and high level uncertainty. As another teacher presenter of the 2013 August Tokyo seminar described it: “*the biggest challenge was that I did not have an answer myself to the issue we set out to investigate. This being said, if I set out an issue with the students for which I felt comfortable, within my knowledge, my students would not have made such a success, i.e. producing the jelly*³¹. *As I have gone out of my comfort zone myself, I was able to learn many things myself. There is surely difference between well-established, framed project learning and the approach we took to project-based learning.*”

The opinion of the teachers of our small sample about the impact of the OTS project on teaching practices in the participating schools, however, seems to be divergent. While 11 from 26 teachers answered that they see “a significant impact on the way teachers think about teaching and learning in the schools participating the project”, 9 of them did not see a “significant impact” (see *Figure 5*). But in this respect the opinion of those involved and those not involved was very different: while only 3 of the 12 teachers not involved saw a significant impact, from the 14 involved teachers 8 thought that there was a significant impact (see *question No. 17.3* in the annex).

Figure 5.
Opinions about the support of the OTS project by teachers (N=26)

³¹ This is a reference to one of the objects to be presented at the 2014 Paris event.



Question: “Please indicate the degree of your agreement with the following statement:” “The Tohoku School Project has had a significant impact on the way teachers think about teaching and learning in the schools participating in the Project”

The results of the small survey among teachers involved and not involved in the OTS project seem to confirm that the impact of the project on teaching practices and teacher behaviour in the participating schools has remained limited and it has made its way almost exclusively through those individual teachers who have been directly involved in the project as local leaders. The members of this latter group have sometimes reported, however, about spectacular changes both in their thinking about teaching and learning, and in their practical teaching skills. The logical implication of this could be summarized this way: while the observed impact of the OTS project on teaching practices in regular schools is still modest, it certainly has a major impact potential.

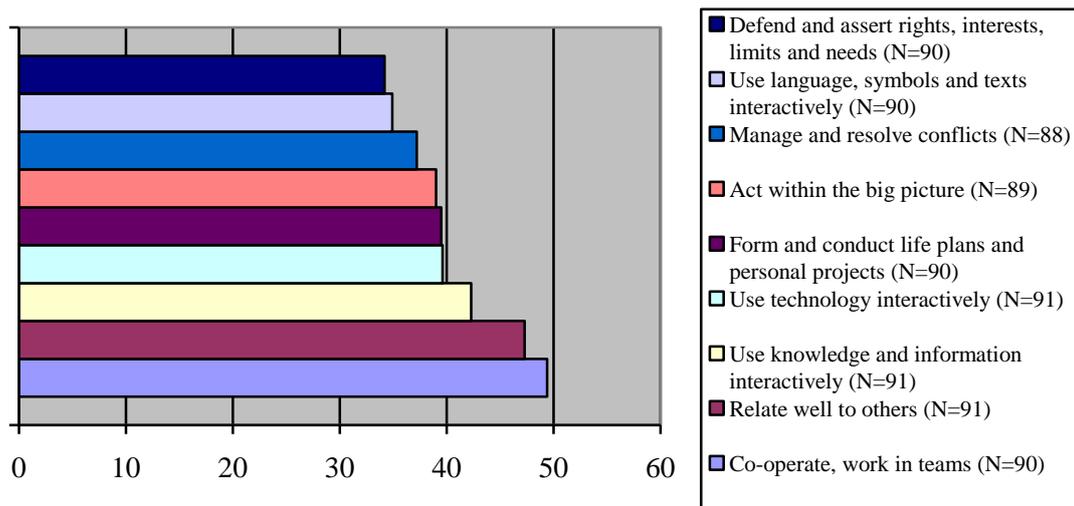
Impact on students

Although this analysis does not intend to look at the impact of the OTS project on students, it is important to see this aspect as well. Practically everybody we met reported on a very strong impact of the OTS project on the behaviour, skills and attitudes of participating pupils. The most frequently mentioned impact was the spectacular development of the capacity of students to cope with situations characterized by openness and uncertainty and to find solutions creatively in such situations. Another often mentioned new capacity was related with increased self-confidence and self-expression. As one of the participating teachers formulated: “*There has been an improvement in their capacity to succeed in open situations, to find new, autonomous solutions, to express firmly their opinion and their wishes and to make presentations in front of a larger audience.*” A repeated self-assessment in the first and the second year of the project among participating students showed a significant improvement in a number of skills related with communication or using knowledge and tools interactively (see Figure 6).³²

Figure 6.

The improvement of certain competencies among students participating in the OTS project during the first year of the program (increase of self-evaluation test scores, %)

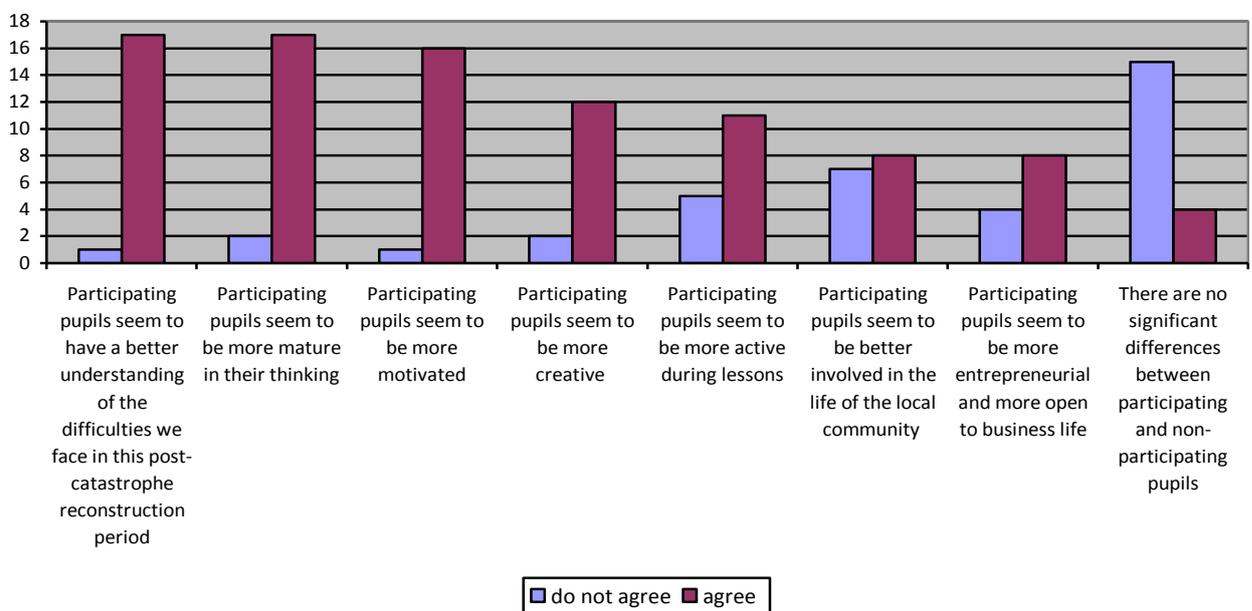
³² These are the so called OECD key competences as defined earlier by the OECD DeSeCo program.



Calculated on the basis of data based on self-evaluation tests by Taguma (2013).

Teachers who were asked about the differences between students participating and not participating in the OTS project reported on significant differences in several aspects, such as understanding the difficulties faced in this post-catastrophe reconstruction period, maturity in thinking, level of motivation, creativity, activity in lessons, involvement in the life of the local community, entrepreneurship and openness to business life (see *Figure 7* and *question No. 18* in Annex).

Figure 7.
Opinions about the differences between students participating and not participating in the OTS project (N=26)



Question: "How do you see the difference between pupils who are directly involved in the Tohoku School Project and those who are not involved?"

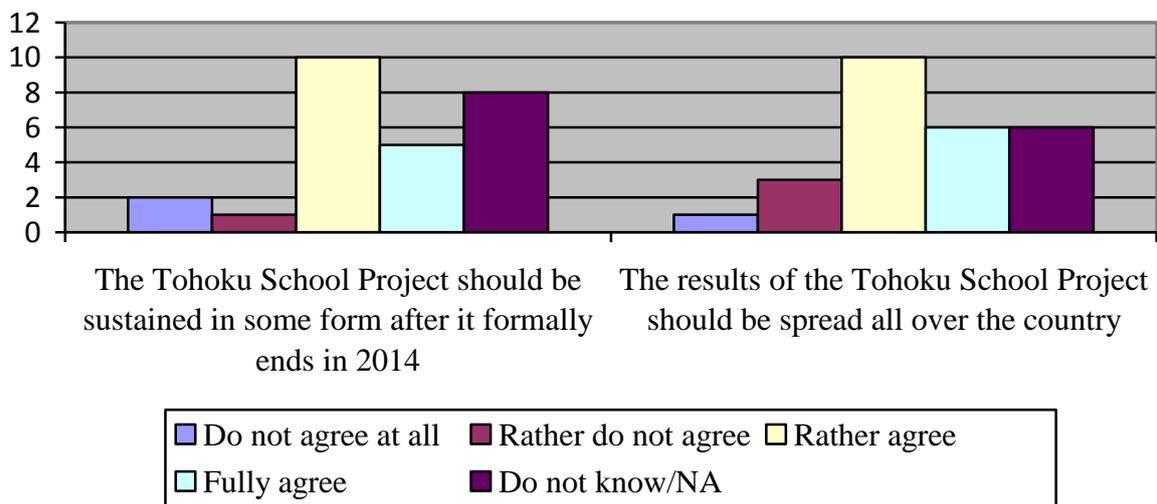
Unlike teacher competences, the development of specific student competences has been among the original explicit goals of the OTS project. As the background document of the

project published in 2011 on the official website of the OECD formulated: “during the process of organising the event, students will learn to develop such competencies and skills as leadership, critical thinking, negotiation and co-operation, creativity and international awareness. These are aligned with the OECD framework of key competencies required for 21st century.”³³ It is important to stress, however, that it is not possible to draw a sharp distinctive line between student competences and teacher competences. The development of student competences listed in the original project document quoted above makes it necessary the use of specific pedagogical tools that requires also specific teacher competences. This has been made explicit in the original project document when it specified “*project-based learning*” as the method to be used. As the document formulated: “project-based learning is used to best engage students. To accomplish the assigned mission, students will encounter real-life tasks, which will encourage them to take initiatives and oblige them to collaborate and work in team.”³⁴

Dilemmas related with the change potential of the OTS project

All people we interviewed when asked about the future of the OTS project expressed their conviction that the project should not have an end with the Paris event in August 2014 but it should have some kind of follow up. The majority of our small sample of teachers involved and not involved in the project also agreed with the opinion that “The Tohoku School Project should be sustained in some form after it formally ends in 2014” (see *Figure 8* and *question No. 13* in annex). All those who did not agree with this belonged to the group of the not involved. An even higher proportion of teachers agreed with the statement about the need to exploit or disseminate the results of the project: “The results of the Tohoku School Project should be spread all over the country”.

Figure 8.
Opinions about the follow-up and the exploitation of the OTS project (N=26)



Question: “Please indicate the degree of your agreement with the following statements”

One of the students, when asked about the future of the OTS project said “*It would be a shame if only we could have the opportunity to experience the impact of this project. When we*

³³ See the document entitled „Background and context for the OECD-Tohoku School” (<http://www.oecd.org/edu/school/49878090.pdf>)

³⁴ i.e.

shall be older we shall speak about this project to the others and about what we have learnt here. There is a need for many projects like this, in which students are taking decisions and experience the responsibility that we have experienced, and not only here but everywhere in the county (...) Perhaps a new movement should be started.” One of the teachers, who has been seen by many participants as one of the most influential informal leaders of the project said the every Japanese school should be involved in projects similar to the OTS project. Many students and teachers expressed explicitly that they would actively participate in a follow-up activity that would aim at involving further schools and students beyond the Tohoku area and at disseminating the results of the project to those who have not been involved. There seemed to be a general agreement that students participating in the OTS project could become mentors or facilitators in similar projects in the future and several of them expressed explicitly that they would be happy to do this. Even the idea of creating a new school in the future has been mentioned by some participating students. We shall come back to this later in the section “*Conclusions and options for the future*”.

As we have seen the OTS project originally did not have the explicit intention to have a direct impact on regular schools and particularly not on classroom level teaching practices. It has been clear, however, since the very beginning, that if the project achieves its explicit, direct goals (preparing and organising the 2014 Paris event through active involvement of students) this will raise the question of the relevance of its pedagogical approach also for regular schools and classrooms. If, in the project environment, students prove to be capable to organise their own learning and to develop effectively “21st century skills” and if their teachers are capable to work with them in a collaborative way as the facilitators of their learning why similar processes could not be realised in regular school settings?

The OTS project, even if this has not been its explicit goal, has become a major pedagogical experiment in Japan. The question of its potential impact on regular teaching practices in regular Japanese classrooms will inevitably be raised and those who wish to modernize these teaching practices might see the OTS project as a potential “change agent”. One of the key dilemmas of those leading the project is, therefore, whether to encourage this type of broader and more ambitious “use” of the project or to remain stuck to the original restricted project goals. In other words: the dilemma is whether to think about the OTS project as the origin of an emerging “new education model”³⁵ which might be relevant for the entire educational system in Japan or even beyond Japan or to continue to think about it as a specific initiative with the limited goals of supporting post-catastrophe recovery in the region hit by the Great East-Japanese Earthquake.

This dilemma is strongly connected with another one: is it worth investing significant intellectual energies into making the implicit pedagogical principles of the OTS project explicit, to systematize the pedagogical experiences accumulated in the framework of the project and to present them in a standardized way so that others could learn from it or apply it in other contexts? This is partly a dissemination or up-scaling dilemma but it is also connected to an internal innovation management dilemma: should the project have a stronger *conceptual* leadership or should it be let, as it is now, develop in a rather open and spontaneous way, directed by the very concrete direct project goal (realising the 2014 Paris event) and not by more abstract pedagogical considerations? Again, in other words: is there an emerging “Tohoku pedagogy”? If yes, does it have relevance beyond the Tohoku region? If yes, is the

³⁵ The term „Fukushima Education Modell” has appeared, for example, in the PowerPoint presentation quoted earlier („OECD Tohoku School „Educational Project for Creative Recovery - through the OECD Key Competencies and the Project-based Learning”)

time already ripe to describe and to present this pedagogy in a systematic way or is it still too early to do this?

One of the risks to present the specific education model that seems to emerge from the OTS project in a structured and explicit way is that a too early structuring might cause harm to the further development of the model. In this respect the fact that the OTS project has not been launched as a *pedagogical innovation* (assumed to lead to a new model of organising teaching and student learning) but rather as a *support program* (targeted at recovery in the region hit by the catastrophe) seems to be an advantage. This leads us to the most important conclusion of this report: the OTS project has not only been producing a particular – rather eclectic – educational model or pedagogy but it has also produced an “educational change model” that merits being studied as such independently from its pedagogical content. This “change model” has been using a unique “opportunity window”, created by the natural catastrophe, and perhaps the most important feature that characterizes it is its *indirect nature*. This is what we try to analyse in the following section.

The ‘Tohoku change model’

In the previous sections we described the OTS project as a unique combination of a number of key features which all, separately, might be found in various other cases of educational innovation but they were put together here so that they have led to the emergence of a new pattern. We also stressed that this is not only a new and original *way of organising student learning* but also an interesting *change model*. The OTS project has, in fact, created a new and original way of initiating and implementing educational change that we shall call “*Tohoku change model*”.

As stressed in the section about the context, the OTS project has been launched in an educational system which can be characterised by two key features: (1) high level effectiveness (in producing what we often describe as “19th or 20th century skills” as opposed to “21st century skills”), (2) relatively high level resistance to change. These two features are naturally not independent from each other: when key social actors perceive a system as being effective they naturally do not feel pressures for change. Systems like this can be described as being in a state of equilibrium where initiating and implementing changes is extremely difficult. The context and the dynamics of change in such systems is similar to what we can observe in regions or countries described by the recent OECD skills strategy as being in a state of “low skills equilibrium” (OECD, 2012b). These are regions or countries where people do not feel the need to produce higher level economic output and, as a consequence, they are satisfied with the low level skills needed to produce the given output. Such systems might need to be pushed out of the bad equilibrium.

The OTS project was launched in an extraordinary, post-catastrophic context and it has been targeting not the “core activity” of schools (strongly determined by examination related pressures) but other aspects of school life (related with the specific needs of recovery). The project has been focusing on out-of-school activities and on the active involvement of external stakeholders and it has involved only a limited number of students per schools. The implication of this is that, in principle, it made it possible for participating schools not to change anything in their daily practice. Thus, the project has had a “seducing” but not a “pressing” potential. Through establishing a regional network the project has also created an effective platform of mutual learning and “cross-fertilisation” and created favourable conditions for what David Hargreaves’ described as “Education Epidemic” (Hargreaves,

2003). The ambitious specific project goal (the 2014 “Paris Event”) has created a huge pressure on the participants to sustain a strong activity in the network which could counterbalance the tremendous pressures to redirect energies towards daily routine school activities (preparing for examinations). Further factors, such as strong student control and the presence of international actors also helped in resisting the temptations to turn back to daily routines.

The loose conceptual framework or conceptual eclecticism, and the internal diversity of emerging implementation patterns are key features of the Tohoku change model. This implies a specific trade off. On the one side, it is difficult to create strong leadership and maintain the coherence of action which makes the change process fragile and vulnerable. But, on the other hand, this not only allows the maintenance of high level adaptive capacity and flexibility during the whole change process but it also makes it difficult for those being opposed to the change to block it. This change model is based implicitly on the principle of “moving targets” which, while making it difficult for those who are involved to see clearly what target they have to follow, for the opponents it makes it difficult to “shoot” on the target. What we described as “dispersed leadership” has a similar effect. The fact that there is no well identifiable leader makes participants complain about the “lack of leadership” but it also gives them a special feeling of security because the change process cannot be mutilated by the opponents through dismissing leaders. In addition no one can appropriate or monopolise the role of the leader and to subordinate the change process to his/her own interests. There are many people in this change model who can take a leadership role, and the matrix structure of the temporary project organisation makes it necessary to create parallel leadership roles which are not subordinated to each other.

The conceptual eclecticism or openness of the Tohoku change model is strongly connected with what one of its leaders described as an “*innovation framework*”. We shall be elaborating on the meaning and the implications of this notion below but before doing this it is important to make a short reference to a cultural feature of Japanese society which might have relevance for understanding the specific Tohoku change model. The conceptual eclecticism of this model seems to have some commonalities with what Sugimoto (2010) describes as “double code” in his analysis of Japanese society.³⁶ In the circumstances we characterized by the notion of “bad equilibrium” explicit, straightforward, linear strategies of change, which propose the achievement of a clear goal and define in detail all the steps leading to this goal simply do not work. In such situations leaders often use what the strategic management literature sometimes describe as “strategic ambiguity”. Although this might raise some ethical or psychological concerns this is an effective way of working when people with very divergent views have to cooperate with each other or when the high complexity of the context does not allow the rapid clarification of organisational goals (Paul - Strbiak, 1997). The education policy context of the OTS project is definitely such a context. The conceptual and methodological eclecticism of the project and, particularly, the fact that the question of whether this is only a single occasion emergency program (or, on the other extremity, it is the prototype of a new pedagogical model that can be scaled up and widely disseminated in the

³⁶ „...dominant subcultural groups rely heavily on an ideology which discourages transparent and forthright interactions between individuals. While indirectness, vagueness and ambiguity are facets of human behavior in any society, the Japanese norm explicitly encourages such orientations in a wide range of situations. Double codes are legitimized in many spheres of Japanese life, thereby creating a world behind the surface. The Japanese language has several concept pairs which distinguish between sanitized official appearance and hidden reality. The distinction is frequently invoked between the facade, which is normatively proper and correct, and the actuality, which may be publicly unacceptable but adopted privately or among insiders” (Sugimoto, 2010; 32)

country) has not been raised can easily be described as “strategic ambiguity”. This seems to be fully functional in the specific macro and micro level educational context which might have certainly become a “high-risk environment” for the project if it had been exposing explicit, ambitious goals for educational change in Japan.

As mentioned above the Tohoku change model can be described by the notion of “innovation framework” used by one of the leaders of the OTS project. This is not far from what the innovation literature and also the innovation strategy of the OECD describes as “innovation platform” (OECD, 2010). The goal of such “innovation frameworks” or “innovation platforms” is not the application or the implementation one specific solution but the creation of an *open space* where those facing common challenges and interested in finding solutions can bring in their ideas about possible solutions, they can confront their views, they can combine the partial solutions they have already found and they can try to apply them together. Interestingly this is also very close to what one of our interview partners described as “*deep discussion*” or “*deliberative dialogue*” (“*jukugi*”) which is a form of bottom-up searching for solutions in democratic communities.³⁷ Perhaps the most important feature of the Tohoku change model is the creation of an institutional framework that operates, at the same time, as an “innovation platform” (enhancing the emergence of new, innovative technical solutions) and as a “deliberative space” or “*jukugi*” (enhancing the solution of institutional problems that are always accompanying the implementation of innovations). This is a particularly interesting combination because the acceptance and the implementation of innovative solutions is a process that is never purely technical. Such processes are necessarily generating “micro-political” conflicts in organisations which often “kill” the innovation. In the Tohoku change model the invention of new solutions is typically accompanied with open, democratic and constructive discussions about questions with “micro-political” relevance such as taking risks, allocating responsibilities or distributing resources or work-burden.

An important aspect of the Tohoku change model is connecting learning with the external world, that is, the world outside schools. The external world is typically more supportive of changes in pedagogy than schools where not only institutional traditions and routines play a stronger role in shaping pedagogical practices but also the burden of adaptation is immediately felt by teachers and their leaders. Disconnecting pedagogical innovation from what happens in classrooms, that is, from the core activity of schools is always a risky solution because this works like a double edged sword: it may facilitate the application of solutions that are quite far from daily routine of classroom practice but it may also make them less relevant for this practice. This disconnection exists both at micro and macro level in the Tohoku change model. At micro level it appears in the relatively low involvement of participating schools and the low level knowledge about and weak recognition of the OTS project in them. At macro level it is illustrated by the fact that the main coordination responsibility for the OST project at national level lies not with the ministerial directorate responsible for primary and secondary education but with the department responsible for lifelong learning. The Tohoku case seems to show that the trade-off of bringing pedagogical

³⁷ MEXT has a specific website on „*jukugi*” which defines this in the following way: „*Jukugi* is a process of resolving problems and formulating policies through deliberation and repeated discussions among the many concerned parties. In concrete terms, the process involves the following: (1) the parties concerned (...) get together, (2) to study, deliberate and discuss the issues, (3) to better understand one another’s positions and the roles which each is responsible for, (4) so that understanding can be reached and (5) everybody becomes able to appreciate and carry out his/her role.” (see the website entitled “*Jukugi – Aiming for virtuous cycle between resolution of problems on site and formulation of educational policy*” http://www.mext.go.jp/b_menu/hakusho/html/hpab201001/detail/1326863.htm)

innovations outside the school and bringing them back later, when they have already demonstrated their potential, might be positive.

The creation of stronger linkages between the internal world of schools and formal curricula, on the one hand, and the external environment that surrounds these schools, on the other, is certainly facilitated significantly in regions being hit by a catastrophe such as the Tohoku triple disaster. In places where the homes of thousands of people disappeared in a few moments and hundreds have lost their life, where whole cities have been evacuated and where the increased radioactive radiation will be part of life for decades it is not possible to maintain the traditional isolation of learning in schools from real life. This is well illustrated by the prefecture of Fukushima where education officers started talking about “nuclear education” and they have started promoting the elaboration of special curricula for this new curricular field or in the city of Ooduchi where an original local curriculum has been elaborated for a subject matter called „Hometown studies” (*furusato*), including what the local superintendent calls „preventive disaster education” and aiming also at educating a generation that would rebuild the devastated city.³⁸

Although in this specific context the OTS project can be described as much as generating than generated by actual processes most of what we could see form it during our two missions in Japan seem to confirm that it is not only part of a new, original pattern of educational innovation but it is also a remarkable experiment to generate change processes in an educational system that is rather immobile, overregulated and resisting to change, with the majority of key institutional actors showing high level risk aversion and strong attachment to existing structures. It seems to be possible that from this initiative a new, original pattern of effective change management will emerge which can be used in all centralised and relatively inflexible educational systems and might, therefore, call the attention of those who wish to improve the performance of such systems through innovation. It is important to stress, however, that the OTS project is still in its process of evolution and understanding its nature and its potential needs further research and exploration.

Conclusions and options for the future

In this section we try to formulate some possible options for the future in connection with the OTS project. One of the most important conclusions of our mission is that since (1) the project has been producing valuable outcomes, (2) these outcomes seem to be relevant for the whole system of education in Japan, and (3) the project has the potential to produce a new, innovative model of learning that might have relevance also beyond Japan it is necessary to think about what will happen after the formal closure of the project in 2014 and about how it can be exploited for educational development in Japan and elsewhere. When we asked our interlocutors about the possible forms of follow-up, as already mentioned, they all responded affirmatively, stressing the importance of having some kind of continuation and also making concrete proposals for this. From our conversations the following five different follow-up options have emerged:

1. **Full repetition.** This would mean a simple repetition of the OTS project with similar project goals (realising a major event in a big city abroad and educating a second generation of future regional leaders in the Tohoku region). The second project would remain closely connected with recovery in Tohoku. In this case the most active

³⁸ These two illustrative examples have been found during the second field visit to the Tohoku region in February 2014.

students of the OTS project could play the role of mentors or facilitators together with some of the teachers acting as local leaders in the OTS project. This would require strong private funding and the support of regional education authorities and would probably allow a stronger involvement of participating schools in the Tohoku region.

2. **Smaller scale realisations all over Japan.** This would mean the realisation of smaller scale projects in different regions of Japan based on the pedagogical model of the OTS project. This also would allow the most active students and adult leaders of the OTS project to become mentors or facilitators. It would make it necessary a systematic analysis of the pedagogical model of the OTS project and its coherent presentation so that this model could guide the various local realisations and dissemination. This would allow the creation of a new professional network which would foster pedagogical innovation in Japanese schools. The funding of this could be assured from resources devoted to educational innovation in Japan.
3. **Creating a movement or an NGO.** This could be the possible scenario in the case of no formal follow-up being officially supported by national or regional authorities. In this case the most active students and teachers would create a voluntary social network, institutionalised as an association or as an NGO which would take care of the “heritage” of the OTS project and would promote its spirit and its ideas. Such an association or NGO could have as an aim to realise, on the longer, term one of two other scenarios presented above or the next scenario presented below.
4. **Establishing a new experimental school.** We heard about plans to create a new, experimental school in Fukushima prefecture which would offer a new, attractive form of schooling for those evacuated from the region hit by severe nuclear radiation. This would be a regular school, but operating under a special authorization by MEXT (either under a special clause of the law on education that gives an opportunity to MEXT to authorize special local solutions or under the regulation on special regulatory zones mentioned in the section of “*The broader economic political, social and cultural context*”). This would create a unique opportunity to apply the pedagogical approaches elaborated in the OTS project in real classroom settings. This would require a strong cooperation between at least four partners.
 - a. The national authorities
 - b. The local/regional authorities
 - c. One or two local universities who would play the role of innovation partners and who would be responsible to monitor the practice of experimental pedagogy and to systematically analyse and present the emerging new educational model.
 - d. The “inheritors” of the OTS project, that is, those students and teachers who “invented” the OTS pedagogical model and who first applied it in the context of the current OTS project
5. **Mainstreaming.** This would be introducing various components of what we call here “Tohoku pedagogy” into regular, mainstream education. This could take two different forms: one is making these components part of the regular, compulsory curriculum, the other is to allow schools to use these components without making this compulsory. In fact, as we have seen, with the introduction of IS (integrated studies - *sogotekina gakushu*) as a specific subject this has already been done, in principle, more than one decade ago. The implementation problems accompanying this progressive curriculum

innovation – practicing project-based teaching, experiential learning, inquiry-based learning and using the world outside the school as a learning environment – illustrate well the limits of this approach. The effective implementation of IS requires the use of a sophisticated technologies of organising learning which requires specific, advanced teaching skills, the learning of which is a highly complex process. Such technologies normally cannot be mandated through formal regulations: they can spread only gradually in function of the learning of the relevant complex teaching skills by teachers. Mainstreaming advanced teaching-learning technologies that require sophisticated teaching skills is always a risky process: while it gives the illusion of rapid and massive dissemination very often it “kills” the very core of the innovation. This is illustrated well by the frequent practice of using the time allocated to IS inappropriately for preparation for university entrance examinations (Bjork, 2009).³⁹

Given the cyclical nature of the dominant pattern of curriculum reform in Japan⁴⁰ – that is, the change model described by Margaret Archer (1979) as “stop-go”, characterising centralised systems as opposed to “incremental”, which is the feature of decentralised systems – the typical way for an innovation such as the OTS project to influence regular classroom practice is to “wait” for the next curriculum reform when the experiences accumulated in it can be used by those devising the new official curriculum. However, in the last decade the space for incremental curriculum changes between two cycles of reform has been widened through increased support to experimental schools called “research and development schools” which “do not necessarily conform to the current standards and conduct practical research on new curricula and teaching methods”⁴¹ and also through other innovation support measures by the various departments of MEXT. In the Tohoku region the special needs of the people hit by the triple catastrophe has made the national regulation of curriculum more flexible than elsewhere and made it possible – as mentioned earlier – the development of innovative regional curricula. But the increasingly popular practice of curriculum experimentation has not challenged the dominant thinking about curriculum reform.

The dominant idea behind curriculum experimentation is that experiences and evidences accumulated in the process of experimentation will feed into the next major wave of curriculum reform, that is, the room for horizontal and gradual spreading remains limited. This environment is not very favourable for complex and sophisticated educational practices requiring advanced teaching skills and fundamental behavioural changes (such as project-based learning implemented partially outside the classroom). In such an environment the “mainstreaming” solution seems to be particularly risky for the exploitation of the OTS project for regular classroom practice.

We would like to stress particularly the importance of conducting a systematic analysis of the experiences of the OTS project in order to maximize learning from this unique initiative. This is in accordance with the principles of reconstruction presented in the section on “*The broader economic political, social and cultural context*”) in the first part of this paper which stress the importance of learning from the experiences. Each of the possible follow-up scenarios should

³⁹ We also witnessed this during our visits in high schools.

⁴⁰ The official curriculum (“course of study”) is revised once in every decade (see the webpage entitled „Research and Development Schools of MEXT - http://www.mext.go.jp/a_menu/shotou/kenkyu/htm/01_doc/0101.htm). As we were told by a researcher involved in curriculum reform, the next reform cycle is due in five years.

⁴¹ See the webpage entitled „Improvement of experimental schools system” of MEXT (see http://www.mext.go.jp/b_menu/hakusho/html/hpac200201/hpac200201_2_018.html)

be supported by such an analysis and each of them could directly feed into this analysis. One of the implications of what we said above about the nature of the OTS project is that this analysis should cover two parallel, but strongly interconnected themes: one is what we described as “Tohoku pedagogy” the other what we labelled the “Tohoku change model”. The first requires mainly pedagogical knowledge, and the second requires knowledge on change and implementation processes in educational systems.

The OTS project seems to offer an exceptional opportunity for Japan to develop a better understanding of the nature of educational changes in a highly regulated administrative environment. The “Tohoku change model”, as it has emerged from the OTS project, can be described as a sophisticated form of initiating and implementing change in a highly regulated, centralised education system which might lead to a number of strategic conclusions (see the box below for a preliminary list of conclusions).

Understanding change processes
(conclusions drawn from the implementation of the OTS project)

- ▶ an open “innovation framework” characterised by (1) the absence of a unique, coherent and well-focussed pedagogical concept, (2) dispersed leadership, (3) the encouragement of the internal diversity of local approaches and (4) the acceptance of a certain level of “strategic ambiguity” might significantly enhance change process in education systems that are less open to changes but the inherent risks of this approach must be well understood by those leading the change
- ▶ changes applying a gradual approach, based on bottom-up processes, voluntary experimentation and strengthening the feeling of ownership among those who implement them might have more chance to survive than mandatory changes introduced frontally in a top-down manner in the entire education system
- ▶ changes targeting the peripheries of schools practice (such as extracurricular activities) instead of targeting core activities (such as subject teaching in regular classroom practice) generate less resistance and they might have more chance to survive
- ▶ if changes are initiated at the periphery of school education and they are only loosely connected to the core activity of classroom level teaching and learning the risk of isolation from regular school life has to be compensated by a stronger involvement of key internal actors, especially school leaders
- ▶ changes involving external partners (such as community and business representatives and international partners) and encouraging the cooperation of teachers with them, as well as changes based on cross-sectoral cooperation and conceived in a lifelong learning perspective have better chances to survive
- ▶ targeted financial support, the creation of flexible regulatory frameworks that allow trials with experimental solutions and explicit symbolic support are particularly effective ways for central authorities to foster innovations
- ▶ local innovations should be accompanied by continuous monitoring and evaluation which, on the one hand, provide feedback to those implementing the innovation and,

on the other hand, allow the identification and dissemination of successful practices and outcomes⁴²

▶ most educational changes, especially the use of advanced methods of organising learning – which is necessary for the development of complex 21st century skills – require an intensive development of the teaching skills of teachers

▶ the effective development of advanced teaching skills requires the creation of appropriate learning environments for teachers that allow intensive knowledge sharing, including knowledge embedded into practice; as a consequence a key component of innovation processes is the creation of networks fostering knowledge sharing, horizontal learning and the emergence of professional learning communities⁴³

▶ the successful management of changes requires the continuous building of professional knowledge on implementation and change management, especially in the fields of curriculum innovation and curriculum implementation; this knowledge has to be continuously channelled into the professional development of school leaders and educational administrators.

We would like to put a special emphasis on the last conclusion in the box above. One of the impressions we gained during the two-week long field visit was that although there is a particularly high level reflection in Japan on the logic of social or institutional change processes in general, this reflection seems not to be effectively used in the particular domain of education which might be due to the overregulated and centralised character of the Japanese education system. Introducing changes and implementing policies in such systems often appear as a simple linear process, starting with policy decisions and ending with by local actors executing the decisions. This administrative environment is typically not favourable for the development of sophisticated thinking about the nature of changes and implementation processes in complex, multi-actor and multi-level education systems. However, as research on implementation processes in the education sector and also in the broader sphere of public sector has shown, these processes are extremely complex and they are never linear (see, for example McLaughlin, 1990, Thomas, 1994; Fullan & Pomfret, 1997; Altrichter, 2005; Hill & Hupe, 2009; Twist et al., 2011).⁴⁴ One of the valuable outcomes of the OTS project is that – as stressed several times above– it has produced not only an original model of organising teaching and learning but also a change model which can be used as a source of learning for those whose intention is to introduce changes in educational systems that are only moderately open to change.

The main conclusion of this report is that the OTS project has a remarkable potential to enhance innovation in the Japanese educational system. This project, in various forms of follow-up, can be used as a “change agent” or “change engine” to support innovation for better quality also in the formal education system, including the improvement of regular classroom level practices. The experiences gained in this project can also be used to

⁴² This element seems to be one of the weaknesses of the OTS project. The project would need more intelligent monitoring and evaluative reflection.

⁴³ The OTS project can be interpreted as the creation of a network that already operates as a professional learning community. The adult leaders (local leaders) and most active student leaders already constitute a strong community of practice and a community of common learning.

⁴⁴ It is worth being mentioned that in the framework of the project “Innovative Learning Environments” of the Centre for Educational Research and Innovation” there is an on-going activity to build knowledge about change and implementation. See the webpage entitled ““Innovative Learning Environments: The Implementation and Change Strand” (<http://www.oecd.org/edu/cei/cei-innovativelearningenvironmentsimplementationandchangestrans.htm>)

understand better and to manage more effectively change processes in the Japanese education system and also in other education systems.

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Annex

Questionnaire survey: basic distributions of answers to selected questions

Q5: Please indicate your position in your school

	Involved	Not involved	Together
Member of the top management team (e.g. principals and deputy principals)			0
Member of middle level management (e.g. head of division, team leader)	1	2	3
A teacher with some coordination responsibility in certain domains	5	1	6
A teacher without any formal management/coordination responsibility	6	9	15
No answer	1		1

Q7: How many of the students of your school are currently participating in the Tohoku School Project?

None	3
1-2	4
3-5	4
5-10	4
More than 10	2
I do not know/I cannot answer this question; No answer	9

Q8: Please indicate the level of your personal involvement in the OECD Tohoku School project?

Role in the project	Number of teachers
Not involved at all	12
Involved	11
I am slightly involved but I do not have any particular role or responsibility	2
I have an active role a “local leader”	8
I have an active role in it as an “empowerment partner”	2
Other active role	1
No answer	3
Total	26

Q10: What do you think about the public recognition of the Tohoku School Project? What proportion of the people living in the region might have heard about it? What proportion of teachers working in the region might have heard about it?

	People living in the region	Teachers
More than 80%	0	0
50-80%	0	1
20-50%	1	2
Less than 20%	19	18
I do not know/I cannot	6	5

answer this question		
	26	20

Q11: How do you see the impact of the Tohoku School Project on your own school (i.e. the school where you are currently working)?

	Involved	Not involved	Total
There has not been significant impact	5	3	8
There has been a small impact	7	7	14
There has been a significant impact		1	1
This has completely changed the way the school works	1	1	2
I do not know/, NA	1		1
	14	12	26

Q13: Please indicate the degree of your agreement with the following statements

	I do not agree at all	I rather do not agree	I rather agree	I fully agree	I do not know /NA
1. The staff of this school has been informed in detail about the Tohoku School Project	6	14	2	2	2
2. Teachers not directly involved in the Tohoku School Project show a strong interest for the project in this school	7	13	3	0	3
3. All teachers in our school support the participation of this school in the Tohoku School Project	6	11	2	0	7
4. There are some teachers in this school who seem to have reserves towards the pedagogical approach of the Tohoku School Project	2	3	9	3	9
5. Local leaders of the Tohoku School Project (teachers in charge of coordination) receive strong support in this school	2	11	3	0	10
6. Teachers know well the work their students perform in the Tohoku School Project and they appreciate it	2	11	4	0	9
7. I see the Tohoku School Project as an important pedagogical innovation	3	3	8	4	8
8. Participating in the Tohoku School Project has created some difficulties in this school	5	8	4	2	7
9. The results of the Tohoku School Project should be spread all over the country	1	3	10	6	6
10. The Tohoku School Project should be sustained in some form after it formally ends in 2014	2	1	10	5	8
11. The quality of education is very high in this country	0	8	12	3	3
12. The quality of education in this country has been declining since the last decade	4	6	9	2	5

Q13: Please indicate the degree of your agreement with the following statements

	Teachers involved		Teachers not involved		All	
	do not agree	agree	do not agree	agree	do not agree	agree

1. The staff of this school has been informed in detail about the Tohoku School Project	9	2	11	2	20	4
2. Teachers not directly involved in the Tohoku School Project show a strong interest for the project in this school	10	1	10	1	20	2
3. All teachers in our school support the participation of this school in the Tohoku School Project	9	1	8	1	17	2
4. There are some teachers in this school who seem to have reserves towards the pedagogical approach of the Tohoku School Project	3	5	2	7	5	12
5. Local leaders of the Tohoku School Project (teachers in charge of coordination) receive strong support in this school	6	2	7	1	13	3
6. Teachers know well the work their students perform in the Tohoku School Project and they appreciate it	8	2	5	2	13	4
7. I see the Tohoku School Project as an important pedagogical innovation	2	6	4	6	6	12
8. Participating in the Tohoku School Project has created some difficulties in this school	8	1	5	5	13	6
9. The results of the Tohoku School Project should be spread all over the country	1	8	3	8	4	16
10. The Tohoku School Project should be sustained in some form after it formally ends in 2014	0	7	3	8	3	15
11. The quality of education is very high in this country	11	2	9	3	20	5
12. The quality of education in this country has been declining since the last decade	5	5	5	6	10	11

Q14: Please indicate how often you are using the following methods in your daily teaching practice (questions taken from the TALIS teacher questionnaire)

	Never	Rather rarely	Rather frequently	Very often	N/A
1. Students work on projects that require at least one week to complete	9	5	9	1	2
2. Students work in small groups to come up with a joint solution to a problem or task.	6	4	11	3	2
3. I work with individual students	3	3	11	7	2
4. I ask my students to suggest or to help plan classroom activities or topics	5	9	8	2	2
5. Students evaluate and reflect upon their own work	2	7	9	6	2
6. Students make a product that will be used by someone else	14	8	2	0	2
7. Students are evaluating the work of each other	6	10	7	1	2
8. Students hold a debate and argue for a particular point of view which may not be their own	7	11	5	1	2

Q15: Now please look again at the same list and indicate whether there has been any change in the frequency of their occurrence in your own daily pedagogical practice since your school has been participating in the Tohoku School Project.

	This happens more often than before	There has been no change in the frequency of these things happening	This is not relevant in my case (or "I do not know" or no answer for any other reason)
1. Students work on projects that require at least one week to complete	1	6	2

2. Students work in small groups to come up with a joint solution to a problem or task.	2	5	2
3. I work with individual students	1	5	3
4. I ask my students to suggest or to help plan classroom activities or topics	0	6	3
5. Students evaluate and reflect upon their own work	1	6	2
6. Students make a product that will be used by someone else	2	4	3
7. Students are evaluating the work of each other	1	5	3
8. Students hold a debate and argue for a particular point of view which may not be their own	2	5	2
9. I ask pupils to prepare personal portfolios containing the documents or results of their learning (individual learning plans, reports, essays, personal reflections, photos etc.)	1	6	2

Q16: Would you say, in general, that your daily teaching practice or your pedagogical ideas have changed since you have pupils who are participating in the Tohoku School Project in your class?

	Invol ved	Not invol ved	All
I have not experienced change	0	2	2
Yes, a perhaps little	4	1	5
Yes, significantly	1	3	4
I cannot answer this question/ no answer	9	6	15

Q17: Please indicate the degree of your agreement with the following statements.

	I do not agree at all	I rather do not agree	I rather agree	I fully agree	I do not know/ NA
1. Reconstruction in the Tohoku region will be a very long and painful process	0	0	7	17	2
2. The great potential of the people living in the Tohoku region can significantly accelerate the recovery process	1	2	15	4	4
3. The Tohoku School Project has had a significant impact on the way teachers think about teaching and learning in the schools participating the Project	3	8	8	1	6
4. The Tohoku School Project has had a significant impact on the way teachers think about teaching and learning in the Tohoku region even in those schools which do not participate in the project	6	11	1	0	8
5. The Tohoku School Project provides a significant support to the recovery process in this region	3	3	9	2	9
6. The Tohoku School Project opened the mind of participating pupils to the importance of entrepreneurship and business life in the recovery process	0	3	13	1	9
7. Schools participating in the Tohoku School Project seem to be very different from those that are not participating	2	3	9	1	11

8. Schools participating in the Tohoku School Project seem to cooperating more intensively with the local community than other schools	0	6	8	1	11
9. Schools participating in the Tohoku School Project are cooperating more intensively with local business than other schools	1	8	4	1	12
10. Pupils involved in the Tohoku School Project seem to be significantly different from those who are not involved	1	2	13	3	7

Q17: Please indicate the degree of your agreement with the following statements.

	Teachers involved		Teachers not involved		All	
	do not agree	agree	do not agree	agree	do not agree	agree
1. Reconstruction in the Tohoku region will be a very long and painful process	7	5	0	12	7	17
2. The great potential of the people living in the Tohoku region can significantly accelerate the recovery process	2	11	1	8	3	19
3. The Tohoku School Project has had a significant impact on the way teachers think about teaching and learning in the schools participating the Project	3	6	8	3	11	9
4. The Tohoku School Project has had a significant impact on the way teachers think about teaching and learning in the Tohoku region even in those schools which do not participate in the project	9	0	8	1	17	1
5. The Tohoku School Project provides a significant support to the recovery process in this region	3	5	3	6	6	11
6. The Tohoku School Project opened the mind of participating pupils to the importance of entrepreneurship and business life in the recovery process	2	6	1	8	3	14
7. Schools participating in the Tohoku School Project seem to be very different from those that are not participating	1	4	4	6	5	10
8. Schools participating in the Tohoku School Project seem to cooperating more intensively with the local community than other schools	2	5	4	4	6	9
9. Schools participating in the Tohoku School Project are cooperating more intensively with local business than other schools	4	2	5	3	9	5
10. Pupils involved in the Tohoku School Project seem to be significantly different from those who are not involved	2	7	1	9	3	16

Q18: How do you see the difference between pupils who are directly involved in the Tohoku School Project and those who are not involved?

	I do not agree at all	I rather do not agree	I rather agree	I fully agree	I do not know	No answer	Total
1. There are no significant differences between participating and non participating pupils	3	12	4	0	6	1	26
2. Participating pupils seem to have a better understanding of the difficulties we face in this post-catastrophe reconstruction period	0	1	14	3	7	1	26

3. Participating pupils seem to be more mature in their thinking	0	2	14	3	6	1	26
4. Participating pupils seem to be better involved in the life of the local community	0	7	6	2	10	1	26
5. Participating pupils seem to be more motivated	0	1	13	3	8	1	26
6. Participating pupils seem to be more active during lessons	0	5	10	1	8	2	26
7. Participating pupils seem to be more creative	0	2	11	1	11	1	26
8. Participating pupils seem to be more entrepreneurial and more open to business life	1	3	7	1	13	1	26

Q18: How do you see the difference between pupils who are directly involved in the Tohoku School Project and those who are not involved?

	Involved		Not involved		All	
	do not agree	agree	do not agree	agree	do not agree	agree
1. There are no significant differences between participating and non participating pupils	7	2	8	2	15	4
2. Participating pupils seem to have a better understanding of the difficulties we face in this post-catastrophe reconstruction period	1	6	0	11	1	17
3. Participating pupils seem to be more mature in their thinking	1	8	1	9	2	17
4. Participating pupils seem to be better involved in the life of the local community	5	2	2	6	7	8
5. Participating pupils seem to be more motivated	0	9	1	7	1	16
6. Participating pupils seem to be more active during lessons	3	6	2	5	5	11
7. Participating pupils seem to be more creative	1	5	1	7	2	12
8. Participating pupils seem to be more entrepreneurial and more open to business life	3	1	1	7	4	8

Program: people met and organisations visited

August 2013

Date	Event
01.aug	Departure to Japan
03.aug	Planning meeting in Tokyo
	Meeting with self-documentary team empowerment partner (Mr.Nagi)
	Observation of a preparation meeting of OTS students and teachers
04.aug	Meeting with empowerment partner Todai Fuzoku School (Mr.Iguchi)
	Meeting with empowerment partner (Mr.Katagai)
	Meeting with students
	Dinner
05.aug	Workshop participation
	Lunch with local leaders of Kesenuma and Okuma (Sugawara and Hatanaka)
	Dinner with local leaders of Onagawa and Ozuchi team (Kawai, Moroto)
06.aug	Workshop participation
	Meeting with TFA/Youth Empowerment Project staff
	Meeting with Mr. Futada
07.aug	Workshop participation
	Seminar on education policy development in Japan
08.aug	Meeting with head of Fukushima Museum (professor Norio Akasaka)
	Meeting with professor Kiyomi Akita (Tokyo University)
	Meeting with local leaders of Iwaki team (school teachers and educational committee members)
	Meeting with local community leader (Mr. Goto) and Togura local team
	Meeting with local leader of Togura team (Mr. Taniyama) and team members
	Data analysis and consultations
	Meeting with former and a current school principals and local leader (Date)
	Meeting with principal of Soma High School
	Meeting with local leader of Soma team
	Meeting with Fukushima University team
	Dinner with Fukushima University staff
13.aug	Meeting with principal of Adachi High School
	Meeting with MEXT staff in Tokyo (Mr. Nango, Ms. Ichimura)
	Meeting with Yahoo Japan, empowerment partner (Mr. Minowa)
14.aug	Meeting with local leader of Adachi High School (Mr. Tsushima)
	Lunch with MEXT staff (Mr Inoue)
	Debriefing meeting
15. aug	Departure to Europe

February 2014

Date	Event
7-Feb	Arrival to Japan Meeting with MEXT staff
8-Feb	Arrival to Sendai Departure to Onagawa town by car Site visits in Onagawa town Meeting with Onagawa town Board of Education Leave from Onagawa to Sendai Meeting with OECD/Tohoku School teachers Meeting with Futaba town committee for promoting reconstruction vision Welcome dinner hosted by the president of Miyagi University of Education
9-Feb	OECD/Japan Seminar
10-Feb	Meeting with staff of division of upper secondary schools Miyagi Prefecture Board of Education Meeting with staff of Fukushima Prefecture Board of Education
11-Feb	Travel from Sendai to Ooduchi Meeting with Ooduchi local leader (Ms. Kawai) Visit to the Ooduchi OTS project local school Meeting with Chief supervisor, School affairs Ooduchi town Board of Education Travel back to Morioka
12-Feb	Meeting the Special Director of Division in charge of recovery education Iwate Prefecture Board of Education Travel from Morioka to Tokyo Meeting with MEXT staff (Mr. Ippei Nango) Dinner with MEXT staff Travel back to Europe