RESEARCH SUMMARY



Implementation and impact of the dual language International Baccalaureate Diploma Programme (DP) in Japanese secondary schools

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Background

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In 2011, the Japanese government announced its plans to introduce the International Baccalaureate (IB) Diploma Programme (DP) into 200 Japanese secondary schools over a five-year period (referred to in this report as the "IB 200 schools project"). An important step supporting this expansion of the DP in Japan was the creation of the dual language (English and Japanese) Diploma Programme in 2013, a joint initiative of the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) and the International Baccalaureate Organization. Initial investigations made clear that a dual language DP would help facilitate the growth of the DP in "Article One"¹ secondary schools in Japan.

This study offers a description of the implementation of the dual language DP in Japanese secondary schools in order to identify enabling processes and practices as well as to understand barriers and disablers. Secondly, it sets out to create an instrument to measure and establish baseline data to inform on-going programme monitoring and summative evaluation activities.

Research design

A multi-method research design was employed to explore how the dual language DP is being implemented in Japanese schools. Qualitative data gathering took place in five case study schools (three private schools and two state sector schools), which were selected because they were in the process of becoming authorized, in preparation for delivering the DP. Data was collected in the case study schools through interviews and observations. The case studies were also informed by data gathered from established IB World Schools and DP workshops. To better understand the motivations of stakeholders outside of the schools, researchers conducted interviews with officials from MEXT, the IB and local boards of education. Lastly, key policy documents were examined.

In a second phase of the study, researchers explored recent Japanese articulations of key student competencies as well as the IB learner profile and other student competencies that reflect the concept of global jinzai, or global human resources, a key idea articulated by the government and business community. Based on these sources, the researchers developed an instrument to measure and establish baseline data to inform on-going programme monitoring and summative evaluation activities. Researchers administered the instrument to DP and non-DP students in three schools that had recently become authorized to deliver the dual language DP (n = 1,218). A questionnaire was also administered to DP and non-DP parents (n = 625) regarding desired future academic or professional pathways for their child as well as expectations for their child's learning with regard to developing certain competencies.

Findings

The researchers explored the motivations of the Japanese government, MEXT and key business interests in supporting the IB 200 schools project. A reading of documentary sources and interviews with key stakeholders indicated that a strong push to implement the DP initially came from the business community. Leading business organizations view the DP curriculum as an ideal pedagogical tool to develop Japanese youth who can act as global *jinzai* (human resources) and support Japan's economic success in the future. Researchers



¹ Mainstream schools in Japan, public and private, that are mandated to offer the Japanese National Curriculum.

also found strong support from MEXT, the ministry tasked with the IB 200 schools project. According to key officials involved in expanding the DP in Japan, the DP curriculum fits well with the ministry's long-held goals of fostering *ikiru chikara* (a zest for living) and developing in young people high-level critical thinking skills and learner autonomy, including the ability to identify and investigate problems, as well as global competencies, such as international-mindedness.

While initially the plan was to deliver the DP in English, key stakeholders soon realized that to achieve the goal of 200 schools offering the DP in Japan, the programme needed to be dual language (English and Japanese). Creating a dual language DP was a strategic decision to enhance dissemination of the DP curriculum, pedagogy and learning outcomes. Indeed, schools that participated in this study noted that the establishment of the dual language DP was key in their decision to become a candidate school, as it allowed the programme to become a more realistic option.

The researchers made at least one visit to each case study school and used the data drawn from interviews to examine the motivations and experiences of the schools, as articulated by school heads and DP coordinators. In particular, researchers sought to understand any enabling and disabling factors that were impacting implementation as these schools moved through the DP authorization process.

Factors supporting implementation

The main enabling factors that the researchers identified were: the leadership and vision of key players in the case study schools and a tradition of creativity regarding curriculum development that these schools had already embraced. For the case study schools, introducing the DP was seen as a way of bringing together and enhancing, in one aligned curriculum, a range of activities that the schools had previously been doing to some degree, including international education, learner-centred education and interactive types of learning. Furthermore, each school embraced in its own way the goal of creating internationally-minded citizens, which aligns well with the IB philosophy.

Another enabling factor was networking, which had been facilitated by MEXT, the IB and the IB Liaison Committee for the dual language DP (*renraku kyōgi kai*). The support of pre-existing IB World Schools was also highlighted as being important. All five case study schools explained how crucial networking and the support of authorized IB World Schools was in relation to the progress they had made to date with implementing the DP. However, there was concern, that existing IB World Schools may experience burnout due to the additional burden of supporting candidate schools. As will be noted below, securing suitable teaching staff was identified as a major challenge by schools. Respondents acknowledged, however, that the dual language DP lowered this hurdle by allowing up to four of the six required subject areas of the DP to be taught and assessed in Japanese, with other subject areas taught and assessed in English.

Implementation challenges

In terms of disablers or challenges, the case study schools identified a number of areas that they felt were acting as impediments to DP authorization and implementation. These included financial, structural, organizational, pedagogical and linguistic challenges.

Cost was mentioned as a major consideration for the privately run candidate schools. It was noted by interviewees in all three private schools that while MEXT offers financial support for the translation of IB materials and workshops, schools themselves receive no direct funding for the programme. The Super Global High School (SGH)² funding was viewed as complementary to the IB 200 schools initiative by some schools, but as a distraction by others. School heads and DP coordinators noted the generous funding for SGH activities compared to the lack of direct funding to schools for dual language DP implementation.

Study participants identified considerable costs involved in becoming a candidate school and subsequently maintaining the status of an IB World School. These included expenses associated with delivering the DP, such as paying for internet services,³ complying with regulations regarding laboratory safety and purchasing textbooks. Moreover, additional costs for students included purchasing specific calculators and lab coats and paying examination fees. Schools explained that they were reluctant to pass on such costs to students for a number of reasons, not least the desire to make the DP available to all who want to participate in the programme, regardless of family background. The private schools in particular said they would like to see more financial support provided by the government, especially during the candidacy stage.

In terms of school management, neither MEXT nor the IB offers support for student recruitment. With this in mind, the researchers suggested that it could take some time to build a strong DP cohort in Japan. The typical class size at Japanese high schools is approximately 40

² Super Global High School (SGH) is an internationalization project for high schools, launched in 2014 to nurture global leaders with problem-solving and communication skills.

³ Japanese schools do not use a lot of ICT as a typical part of teaching, including at the upper secondary level. As such, many teachers lack experience using the internet in class, meaning that enhancing teaching and learning in this area remains an important task.

students, which is the stipulated budget allocation for teachers from the prefectural government. To support small DP classes, extra teachers over-and-above the usual school allocation are required, or teachers who are willing to teach both the DP and National Curriculum courses, which again creates cost implications for schools.

A significant structural issue identified by some of the case study schools is the need to fulfill National Curriculum requirements. While some DP content can be counted as equivalent to the National Curriculum, there remain parts of the latter that schools have to cover as supplementary curriculum content in addition to the demanding DP content. Depending on the subjects that students take for the dual language DP, and at what level (standard level or higher level), the amount of National Curriculum content that would remain to be covered could differ substantially for each student. For example, a student who takes a higher level mathematics course will have fulfilled much of the designated mathematics curriculum required for Japanese high school graduation, but a student who takes a standard level mathematics course would not. Due to these and other difficulties with aligning the DP and the National Curriculum, the announcement by MEXT in 2015 that they would allow greater flexibility in how content equivalency is determined was welcomed within the emerging DP community in Japan.

The lack of alignment between DP examination periods and the Japanese academic year was highlighted as placing further pressure on teachers and students, as DP content needs to be covered in time to meet either a November or a May examination period. With the Japanese academic year starting in April, Article One schools are choosing the November exam period, but this means that student learning is interrupted by two long summer holidays, one in their first and another in their second year of DP studies. Schools need the flexibility to enable students to begin work on the DP at the end of year 10 (the end of their first year of high school) to enable them to offer the necessary hours for standard and higher level courses and to complete the extended essay, TOK and CAS.

Lack of experience with IB-style pedagogy was also raised by case study schools as posing a challenge for teachers and learners in schools implementing the dual language DP. While the case study schools had been developing investigative and project-based learning to some degree, interviewees reported that many aspects of the DP pedagogy are unfamiliar for teachers. Examples include, the use of ICT in teaching, criteria-based grading and narrative feedback. To support these and other areas of the DP, the researchers indicated that significant training and support would be beneficial. Language was identified by schools as a disabler, despite the introduction of the dual language DP. Even DP coordinators who felt they could read English reasonably well complained about the large amount of IB related literature that needed to be digested. While MEXT had provided funding for the translation of some documentation, much of the documentation was not available in Japanese. Some interviewees also stated that the documents being targeted for translation were not necessarily those that would aid schools the most. Participants expressed a strong desire to have all of the instructional documents necessary to comply with IB requirements during the authorization process available in Japanese. Additionally, schools explained there was a need for guidelines in Japanese on how to align the DP curriculum with the National Curriculum.

The school visits and interviews with stakeholders allowed the researchers to gain richer insights into the complexities of the implementation process. Taken as a whole, the case study school interviews highlighted the need for practical help in addition to general advice from MEXT and the IB. In addition, greater flexibility was regarded by schools as desirable on the part of both MEXT and the IB.

Establishing baseline data

In order to measure the impact of the dual language DP, a baseline is needed to understand the skills, competencies, expectations and attributes nurtured by the courses of study at the upper secondary level in Japanese schools. At the same time, it is necessary to establish whether and to what extent the students who choose to take the dual language DP are achieving these competencies as compared to their peers who take the National Curriculum at the upper secondary level.

The Osaka University and Nara University of Education researchers developed an instrument to measure and establish baseline data, which was administered to DP and non-DP students. The results showed that there were some statistically significant differences between the IB and non-IB cohorts at the point of entry in terms of aspirations, expectations and interests. There were also some notable differences between IB and non-IB parents. Key areas of difference are as follows:

- 1. **Post-secondary plans**—25% of the DP students were considering attending overseas universities, as compared to less than 2% of the non-IB sample.
- 2. Future working environments—In comparison with non-IB students, IB students were more inclined towards working in an international environment and an environment where they are able to take on a leadership role.

- 3. **Programme expectations**—When asked "what are your expectations of what your high school life will teach you", IB students had higher expectations than their non-IB counterparts regarding "becoming more internationally-minded", "gaining all-round proficiency in English", "acquiring the ability to solve problems", "acquiring leadership skills" and "acquiring the ability to take the initiative and act on things myself".
- 4. **Student competencies**—When asked to provide self-assessments on a range of competencies, IB students gave higher self-ratings for being: "internationally-minded", able to "use English effectively" and "able to make use of information and communication technology effectively". Self-rated skills and knowledge in mathematics and science were more or less equal for both groups.
- 5. **21st century skills**—Using the Kusumi-Hirayama scale revealed, in both an absolute and comparative sense, that IB students rated learning "about many different cultures" and "learning by working with others who have a variety of ideas" more highly than non-IB students.
- 6. **Global competencies**—In other parts of the student questionnaire, major differences in self-reports between IB and non-IB students centred around global competencies, such as open-mindedness and critical thinking, with these rated more highly by IB students.
- 7. **Differences between parent groups**—IB parents had higher expectations than non-IB parents that the DP experience would contribute to their child's development of international-mindedness and proficiency in English. IB parents were also more likely than non-IB parents to want their children to work in an international environment in the future.

Conclusions and recommendations

When considering the challenges that the five candidate schools have encountered, it is clear that for the goals of the IB 200 schools project to be met, more support will be required. Funding and alignment issues loom particularly large. Schools do not want to pass the costs of the DP on to individual students and their families; hence, there is a need to provide schools with more support. The launching of the SGH project, which provided generous funding for curriculum innovation, left some school stakeholders wondering why this was not at least matched for the IB 200 schools project. Participants explained that DP implementation requires sweeping changes to the school environment, teaching styles and the management of assessment and examinations. In addition, the DP is a long-term project that must be sustainable across many years.

This research suggests that some important steps have been made in flexibly counting aspects of DP curricula as equivalent to required components of the National Curriculum. Nevertheless, the situation needs to be monitored to ensure that the workload for students and teachers is not excessive. In addition, allowing students to register for the DP towards the end of year 10 to give schools time to offer the curriculum for a November exam schedule would ease the pressure on students and schools considerably.

The DP places emphasis on breadth and depth of learning as well as cognitive and non-cognitive learning and growth. This is an attractive feature of the DP for the Japanese government and the business community. Too much emphasis on final examination scores, however, may mean that schools and students are forced to cut corners with the DP core components in order to secure high scores in subject areas. With this in mind, the study researchers concluded that it was incumbent on MEXT and the IB to ensure that the timetable and demands of the DP and the National Curriculum allow students 'room to grow' as global citizens.

This summary was developed by the IB Research department. A copy of the full report is available at www.ibo.org/en/research/. For more information on this study or other IB research, please email research@ibo.org.

To cite the full report, please use the following:

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