Impact Objectives

- Understand and investigate the principles of the International Baccalaureates
- Investigate the implementation of education at International Baccalaureate accredited schools in Japan
- Analyse the theory and practice of the implementation

Learning in a global world

Professor Kenji Tanahashi explains how his research into the International Baccalaureate is being used to create new templates for the Japanese curriculum



How did you come to be involved in studying the International Baccalaureate (IB)?

Currently, there is

an increasing demand for the development of global human resources in Japan. The IB is attracting attention as an effective programme for global human resource development. The introduction of the Japanese Diploma Program (DP) is a new move towards its popularisation and expansion. As a result, there is a rapid increase in the number of IB accredited schools in Japan, but the overall number of IB classes is still small, there is also a need to share and accumulate lesson plans. One of the reasons for this joint research is that I wanted to contribute to the creation of a library of lesson plans. However, this study is not just for the IB accredited schools. I would also like to contribute to the improvement of each subject education, including those that correspond to the development of qualities and abilities that can play an active role in the global society for all Japanese schools.

Can you talk about the case studies and qualitative analysis you are using?

Each curriculum and class that is implemented or envisioned at each

IB accredited school has different characteristics. Every school and teacher understands and interprets the philosophy of the IB differently. My work involves observing the lessons and creating a lesson plan that will depict those characteristics. Moreover, based on the questions raised by the teachers to encourage the students, such as what kind of knowledge, how they are applied, and what new knowledge are formed by the students, their motivations are being extracted and its relationships are being considered. In addition, the classes and lesson plans will determine the similarities and differences of the classes and lesson plans that are traditionally used in many schools. This is significant in determining the effect on the student's learning process and outcomes.

You are also building a model curriculum, lesson and evaluation plan. How are you testing these?

These are still in experimental stages. Although the project itself only involves the conduct of experimental and mock lessons, we ask our forum and seminar participants to conduct their lessons based on the lesson plan and report the results including any issues. Therefore, in order to encourage as many teachers as possible to use it experimentally, the lesson plan described in the project report can be copied and used by anyone freely.

In what ways have you worked with collaborators in this research?

The biggest concern was how well the field of education would accept the lesson plans that were created in a university 'laboratory'. To prevent this, we have incorporated external collaborators into the research. The external collaborators include faculty members of IB accredited schools as well as history, science, language and art education researchers, amongst others.

How will this research be beneficial? What impact will it have?

If this research becomes successful, it will have an extremely large impact on the reform of education in Japan. The key features of IB education is its recognition and tolerance of diversity, autonomous judgment, development of communication ability, and the learner-centred, participatory and collaborative learning that makes it possible. We believe that exploratory learning is the key and will lead to a fundamental transformation of Japanese schools. We believe that improving the schools and classes will bring great benefits for both the teachers and the students whom they teach.



Researchers at Graduate School of Human and Social Sciences, Hiroshima University are working on creating a new system of teaching for Japan based on the principles of the International Baccalaureate

The world is changing, becoming more globalised and technologically advanced. To match this changing world, education must also evolve. Education in the 19th and 20th centuries has often focused on acquiring literacy and numeracy and, beyond that, the accumulation and recollection of facts across different subjects. This was particularly useful during times when huge amounts of information was being generated but the vast majority of it was stored in analogue and so was difficult to access. Having ready access to facts and figures was extremely useful. However, in the 21st century, there is a massive surplus of easily accessible information. Accordingly, remembering facts and figures is much less important than being able to understand large amounts of potentially contradicting information to reach the core issues.

In addition, education is regularly used as a method of promoting patriotic narratives over thinking and understanding the global world in a clear-sighted fashion. Whilst this approach can be extremely beneficial for creating a feeling of togetherness and of a society all pulling in the same direction, it can distract and obscure from truly understanding and thinking about different subjects. This is particularly important in subjects such as history and literature which are often used to pluck the best narratives and kindest interpretations for a given country. This can lead to a false impression of a country's

abilities and resources in the world and make understanding and compassion between nations difficult. In an increasingly global society, such inaccuracies can be fatal.

Education will need to change to meet the changing skill sets required for this century. The focus will need to shift towards the key skills such as communication ability, problem solving and critical thinking. Whilst education in most countries is still based largely on the 20th century model, courses and qualifications that better fit the 21st century have been developed and are starting to become more important. Once such qualification is the International Baccalaureate (IB). Despite being well-suited to the 21st century, the IB was founded in 1958 to be an educational programme that could promote global peace. The IB's principals have evolved and adapted but its founding principles are well set for leading 21st century education being focussed on communication, exploratory learning and critical thinking that can be applied across a variety of subjects.

CHANGING FOR THE MODERN WORLD

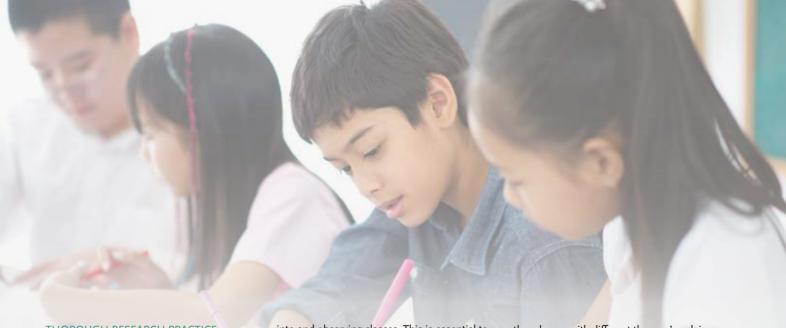
Japan is undergoing a reappraisal of its education systems at all levels. There is a growing realisation that the country needs to evolve its educational approaches to maintain their position on the global stage. Professor Kenji Tanahashi of the Graduate School of Human and Social Sciences, Hiroshima University, Japan, is one of a range

of researchers looking to provide new models and curricula for the Japanese education system. He has been inspired by the principles of the IB and is looking to understand, investigate them further and adapt them to the Japanese setting.

The IB has held a fascination for Tanahashi, and he believes it could represent the backbone to future education. 'One of the greatest features of IB learning is "inquiry learning",' he comments. 'Modern society is fast changing and fierce, and it is not possible to meet challenges by simply accumulating plenty of knowledge.' From his perspective, it is important to also find the essence of a problem, analyse it and find a solution. 'In addition, the tolerance and acceptance of diverse ideas and understanding is essential,' he continues. 'It can be said that IB education represents just one model of such modern and future education.'



Workshop on IB classes attended by high school teachers and graduate students



THOROUGH RESEARCH PRACTICE

Tanahashi, along with a wide range of collaborators, is working on qualitative and case study analyses of the IB approach. The aim is to better understand the positives and negatives of the programme, and create lessons and curricula based on the research results. These lesson plans are then trialled by collaborating educators and their effects fed

into and observing classes. This is essential to truly understand how the principles actually work and are being applied. 'We observe classes held at IB schools, exchange opinions with the teachers, and receive comments and advice from the teachers at seminars and forums sponsored by our project,' he explains. 'This kind of cooperation is very important. Particularly so because the researchers on our

other classes with different themes,' explains Tanahashi, 'Furthermore, since there is more than one form of lesson, I think there is a need to create different model plans for the same theme.' In short, Tanahashi is aiming for nothing short of a comprehensive change in how we teach in the 21st century.

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back into Tanahashi's research. 'Naturally, the aim is to iteratively improve the classes and, finally, to develop a programme for Japan that incorporates all the best and most effective elements,' he observes.

The principles of this research are, like all the best projects, clear and obvious. This is extremely important given that complexity quickly arises from all angles. Different subjects, for example, require different lesson styles and resources. This is why Tanahashi has, from the beginning, sought the help and feedback of experts in the key areas of IB education – history, science, language and art. These experts are bringing their expertise in the pedagogy of their field to this research. 'The members of the team are all experts in pedagogy of each subject,' he comments. 'They analyse the commonalities and peculiarities of their respective subjects by studying their curriculum, lessons and evaluations, and sharing them with the other members who are responsible for other subjects.'

Tanahashi also engages directly with IB and non-IB teachers in order to develop his lesson plans. This involves a whole range of different collaborative activities, particularly getting

project are all university faculty members and are obviously not in a position to actually teach IB classes.

FUTURE LEARNING

The aim of Tanahashi's project is to create lessons and curricula for each subject and each year of Japanese education. This will take time, but the effort made by the team will create a highly flexible lesson toolkit. 'The lesson kit created in this joint research project is not for all lessons that will be conducted throughout the year, rather it is just a model plan,' he outlines. 'Of course, it can be used as it is in any educational settings and we hope that this will be disseminated, and the kit will be used as a model in creating new lessons on other themes.'

The long-term aim is also to alter how society views education towards an approach that allows for better critical thinking, more effective learning and a greater development of key skills. The first steps towards this will be to incorporate more subject areas than the four ones currently covered by the project. 'Since the lesson plan that can be created during the duration of the research period is only a small part of the IB curriculum, I think it will be necessary to create a lesson plan for

Project Insights

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