

# Futaba Future School's curriculum to create better well-being

英文字はタンポポの綿毛 風に乗って世界に広がって欲しい

「未来」文字 夢や希望が築かれていく

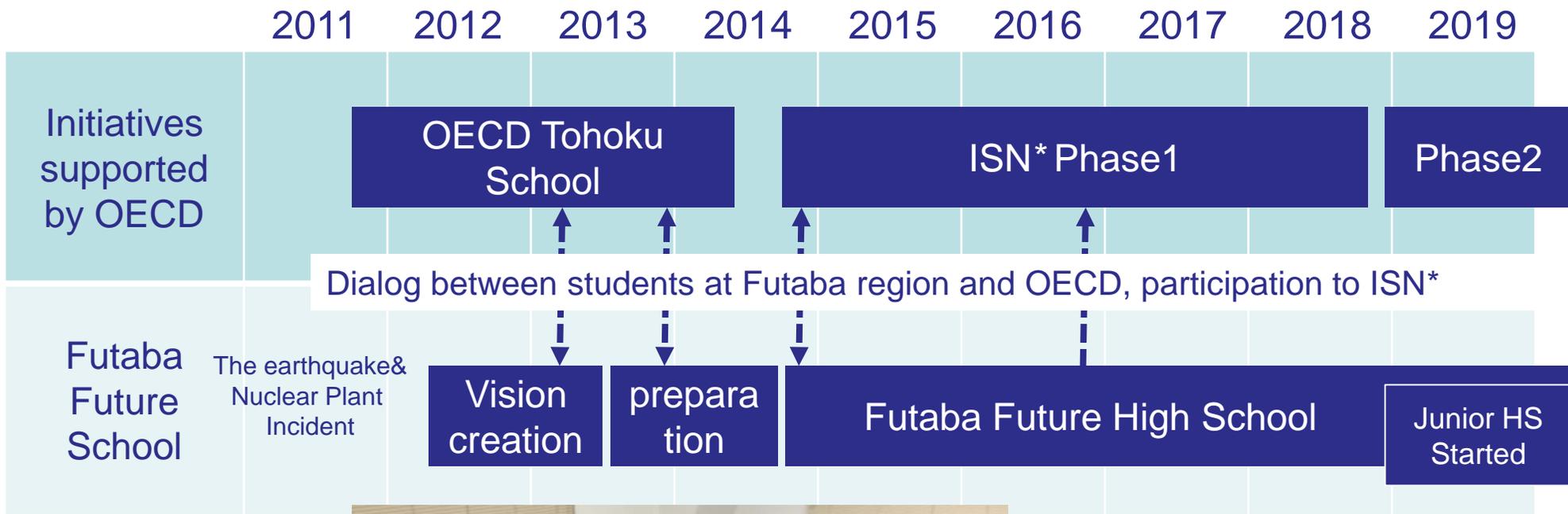
5<sup>th</sup> September, 2019  
Ippei Nango

Vice Principal, Fukushima Prefectural Futaba Future School



National Training Center J-VILLAGE (Hirono-town & Naraha-town, Fukushima)

# The school established based on lessons learned from the OECD Tohoku School



\*Japan Innovative Schools Network supported by OECD

Meeting with Mr. Schleicher at OECD and Board of Education of Futaba region (February 9, 2014)

# 第3回 福島第一廃炉国際フォーラム

皆様の声を福島第一(1F)廃炉の力にする

NDF 原子力損害賠償・廃炉等支援機構  
Nuclear Damage Compensation and Environmental Restoration Organization

## 第二回福島第一廃炉国際フォーラム「問う」セッション

なる。  
磐城 廃炉はこれからも色々な人が携わっていく。若者への教育が不可欠では。学校での教育の現状と、今後。  
未来 大熊出身。合意形成のあり方、意思決定に私たちが関わる必要はないのか。汚染水の話に、科学知だけでなく住環境に積極的に関わるべき。廃炉主体の立場からどう地元の声



The 3rd International Forum on the Decommissioning of the First Fukushima Nuclear Power Plant  
August 5, 2018

## Roles of Teachers

- ① To try not to manipulate students.
- ② To become a bridge for connecting students with people and knowledge outside of school.
- ③ To support students to move forward and learn with students.

# Rubric of Competency Development (7 July 2015 Ver.)

Cooperation

Achievement Categories	No.	Qualification, Competency, Attitude	Level 1	Level 2	Level 3	Level 4	Level 5
Knowledge "What we know"	A	<b>Knowledge and Understanding of Social Issues</b> To acquire knowledge for understanding the changes and problems of society and the world, while also acquiring common sense and basic academic skills.	Gain basic knowledge on the structure of the local area and society.	Gain basic knowledge of the issues regarding regional revitalization and immediate problems.	Gain basic knowledge of the world's current problems and the environmental and energy issues pertaining to the realization of a sustainable society.	Deepen his/her acquired knowledge of social issues and understand them better by accumulating related information.	Understand social issues critically enough to apply related knowledge to the task at hand, be able explain them to other people.
	B	<b>Usage of English</b> To learn to communicate using English.	Have an interest, willingness and attitude for English communication and be able to give a brief self-introduction in English.	Can talk about his/her interests and about the region in English.	Can give a scripted speech in English about his/her region and research, and answer simple questions in English	Can improvise an English speech about his/her region and research, and exchange opinions in English	Can make a persuasive argument in English and support it with stories, data and examples about his/her region and research (CEFR C1 level)
Skills "How we use what we know"	C	<b>Cogitation and Creativity</b> To be able to think logically, deepen his/her critical thinking ability, and to think on a large scale	Can organize the information he/she has received.	Can think logically and critically about the problem at hand and how to solve it.	Can utilize media to accumulate information, find problems and set tasks while analyzing, evaluating and making use of the information.	Can take into account the difference between reality and the ideal, and think critically about already-known facts with a broader perspective and on a larger scale.	Can think patiently about unknown matters, can break away from conventional ideas and his/her own way of thinking to <b>generate new ideas</b> .
	D	<b>Ability to Express and Transmit his/her Ideas</b> To be able to express his/her thoughts boldly in any situation and generate sympathy among others.	Can present his/her opinions and thoughts to the group.	Can convey his/her ideas to the group without hesitation, even when suddenly asked.	Can convey his/her ideas using ICT with data and examples.	Can convey his/her ideas clearly to various people, while keeping each person's background in mind.	Can <b>send out convincing messages to various kinds of people with enthusiasm and use of example stories</b> , and gain sympathy from them.
	E	<b>Ability to Collaborate with Others</b> To cooperate with others and act in ways which encourage each other, transcending differences in culture, sense and age.	Can work on a given task on his/her own, in a group or with other individuals.	Can find his/her role in a group or among other individuals, and use his/her own special qualities for performing actions and helping other members.	Can embrace the good points of group members or other individuals, take in new things, and work toward the common goal.	Can build up a win-win relationship, finding each other's good points in a group or among other individuals. Can promote collaboration using ICT.	Can <b>transcend cultural and national borders</b> and take actions to change society, can <b>establish relationships for building each other up</b> and growing together.
	F	<b>Management Ability</b> To be able to plan work for him/herself or an organization and move forward with it.	Can work while taking directions.	Can work in a voluntary and responsible manner even without direction.	Can find necessary work for the whole group, set priorities for his/her own task and handle multiple tasks at one time.	Can divide roles among teams or among members, keeping in mind how the tasks fit into the general schedule.	Can ascertain future schedules and risks, and work with team members to take countermeasures against the risks.
Character "How we engage in the world"	G	<b>Positive Attitude, Responsibility, Challenge</b> To have confidence and think of him/herself as a person whose existence has meaning, to be able to find his/her own role for solving problems and put all his/her effort into it, to be able to work on a problem until completed.	Can think of him/herself as a person whose existence has meaning and accept things and events in a positive way.	Can have confidence in him/herself and positively accept immediate problems as his/her own and work on them independently.	In groups or with other individuals, can find his/her own role and continue thinking about a problem even if there is no quick solution.	Can work to fulfill his/her responsibility regardless of obstacles and be proactive in order to overcome those obstacles, can accept challenges in a positive way.	Can fulfill his/her responsibility even in difficult situations without running away, can realize benefits even from failure.
	H	<b>Tolerance</b> To be able to accept people from different cultures and with different ways of thinking, have warm consideration for them and cooperate with them in building each other up.	Can have concern for the group and other individuals.	Can imagine the positions and ways of thinking of the group and other individuals, and empathize with them.	Can act with thoughtfulness toward the group and other individuals, can think of the happiness of the surrounding people	Can relate to people who have different ways of thinking, can connect to them with good humor and enjoy the differences. Can accept changes in society and the environment in a positive way.	Can <b>accept the opinions of people whose ways of thinking are different</b> , and consider them to be very important for improving him/herself and society.
	I	<b>Active Citizenship</b> To be aware that he/she has an important role in contributing to society, and be able to think critically about the future of the local area, as well as domestic and international future.	Gain awareness that he/she is one member of the group to which he/she belongs.	Be aware that he/she is a member of society and can focus his/her attention on the problems embraced by society.	Have a desire to improve society having an awareness of him/herself as an important actor in society and have thoughts for the improvement of society.	Have a sense of his/her own value, have a desire to contribute to society and <b>have an influence on society</b> .	Have a will to improve society and the future, can seriously express his/her own opinion to others.
Metacognition "How we reflect and learn"	J	<b>Power to Change Oneself</b> To be able to review and re-examine his/her way of speaking and acting, have a will to constantly improve, and transfer that to future actions.	Can make his/her own goals in order to improve him/herself.	In order to improve him/herself, can examine the difference between his/her goals and present reality.	Can think of measures by which to approach his/her goals and independently carry them out.	Can act independently to accomplish his/her goals while continually re-examining and reflecting on them and continuing to study, can work to connect all of this with future actions.	Can examine and consider his/her role and significance in society, connect it to his/her goals, and act on it while maintaining a broad perspective.

Independence

Achievement Categories	No.	Qualification, Competency, Attitude	Level 1	Level 2	Level 3	Level 4	Level 5
Creation Cooperation	A	<b>Knowledge and Understanding of Social Issues</b> To acquire knowledge for understanding the changes and problems of society and the world, while also acquiring common sense and basic academic skills.	Gain basic knowledge on the structure of the local area and society.	Gain basic knowledge of the issues regarding regional revitalization and immediate problems.	Gain basic knowledge of the world's current problems and the environmental and energy issues pertaining to the realization of a sustainable society.	Deepen his/her acquired knowledge of social issues and understand them better by accumulating related information.	Understand social issues critically enough to apply related knowledge to the task at hand, be able explain them to other people.
	B	<b>Usage of English</b> To learn to communicate using English.	Can understand and explain English materials and be able to give a brief self-introduction in English.	Can talk about his/her interests and about the region in English.	Can give a speech in English about his/her region and research, and answer simple questions in English.	Can give a speech in English about his/her region and research, and exchange opinions in English.	Can make a persuasive argument in English and support it with stories, data and examples about his/her region and research (CEFR C1 level)
Skills "How we use what we know"	C	<b>Cogitation and Creativity</b> To think and act independently, and to think and act in a socially responsible manner.	Can organize the information he/she has received.	Can think logically and critically about the information he/she has received.	Can utilize media to accumulate information, find problems and set goals, and evaluate them.	Can take into account the difference between reality and the ideal, and find solutions to problems.	<b>Can think patiently about unknown matters, can break away from conventional ideas, and generate new ideas.</b>
	D	<b>Ability to Express and Communicate</b> To be able to express his/her thoughts boldly in any situation and generate sympathy among others.	Can present his/her opinions and thoughts to the group.	Can convey his/her ideas to the group without hesitation, even when suddenly asked.	Can convey his/her ideas using ICT with data and examples.	Can convey his/her ideas clearly to various people, while keeping each person's background in mind.	<b>Can send out convincing messages to various kinds of people with enthusiasm and use of example stories, and gain sympathy from them.</b>
Independence	E	<b>Ability to Collaborate with Others</b> To cooperate and act independently, and to encourage others to cooperate in a socially responsible manner.	Can work on a given task on his/her own or in a group.	Can find his/her role in a group or among other individuals.	Can embrace the good points of group members or other individuals, and work toward the common goal.	Can build up a win-win relationship, finding each other's good points in a group or among other individuals.	<b>Can transcend cultural and national borders and take actions to change society, can establish relationships for building each other up and growing together.</b>
	F	<b>Management Ability</b> To be able to plan work for him/herself or an organization and move forward with it.	Can work while taking directions.	Can work voluntarily in a responsible manner even without direction.	Can set priorities for his/her own task and handle multiple tasks one time.	Can set priorities for his/her own task and handle multiple tasks, keeping in mind how the tasks fit into the general schedule.	Can plan future schedules and risks, work with team members to take countermeasures against the risks.
Character "How we engage in the world"	G	<b>Positive Attitude, Responsibility, Challenge</b> To have confidence and think of him/herself as a person who can contribute to society and to play a role in solving a problem until completed.	Can think of him/herself as a person who can contribute to society and to play a role in solving a problem in a positive way.	Can have confidence in him/herself and play a role in solving a problem on them independently.	In groups or with other individuals, can play a role in solving a problem even if there is no quick solution.	Can work to fulfill his/her responsibility regardless of obstacles and be proactive in order to overcome those obstacles, can accept challenges in a positive way.	Can fulfill his/her responsibility even in difficult situations without running away, can realize benefits even from failure.
	H	<b>Tolerance</b> To be able to accept people from different cultures and with different ways of thinking, have warm consideration for them, and cooperate with them in building a better society.	Can have concern for the group and other individuals.	Can imagine the positions and ways of thinking of the group and other individuals.	Can act with thoughtfulness toward the group and other individuals, can think of the happiness of others.	Can relate to people who have different ways of thinking, can connect to them with good humor and enjoy the differences. Can accept differences and cooperate with them.	<b>Can accept the opinions of people whose ways of thinking are different, and consider them to be very important for improving him/herself and society.</b>
Metacognition "How we reflect and learn"	I	<b>Active Citizenship</b> To contribute to society and to play a role in solving a problem, and to think about the future of the local area, as well as domestic and international future.	Can think about the problems he/she belongs to.	Can think about the problems he/she belongs to and the problems solved by society.	Has a desire to improve society and to play a role in solving a problem in order to have thoughts for the improvement of society.	Has a desire to improve society and to play a role in solving a problem in order to have thoughts for the improvement of society.	Has a desire to improve society and to play a role in solving a problem in order to have thoughts for the improvement of society.
	J	<b>Power to Change Oneself</b> To be able to review and re-examine his/her way of speaking and acting, have a will to constantly improve, and transfer that to future actions.	Can make his/her own goals in order to improve him/herself.	In order to improve him/herself, can examine the difference between his/her goals and present reality.	Can think of measures by which to approach his/her goals and independently carry them out.	Can act independently to accomplish his/her goals while continually re-examining and reflecting on them and continuing to study, can work to connect all of this with future actions.	Can examine and consider his/her role and significance in society, connect it to his/her goals, and act on it while maintaining a broad perspective.

Can think patiently about unknown matters, can break away from conventional ideas and his/her own way of thinking to generate new ideas.

Level 5 of "Cogitation and Creativity"

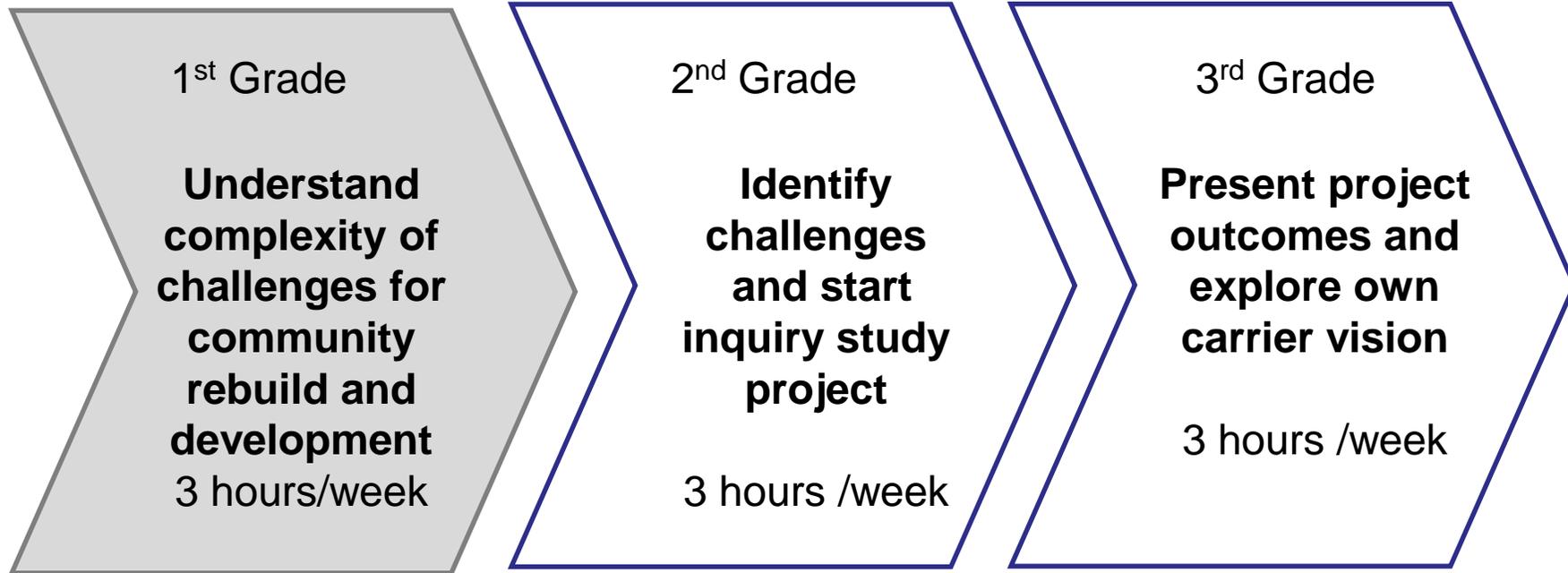
Can fulfill his/her responsibility even in difficult situations without running away, can realize benefits even from failure.

Level 5 of "Positive Attitude, Responsibility, Challenge"

Have a will to improve society and the future, can seriously express his/her own opinion to others.

Level 5 of "Active Citizenship"

## “Inquiry-based Learning to Create a Future” as a core of Futaba’s curriculum



### Student Exchange Program within the country :

We welcome students from other regions and visit them as well, and organize study tour, home stay and discussion to think about challenges in each region as own issues.

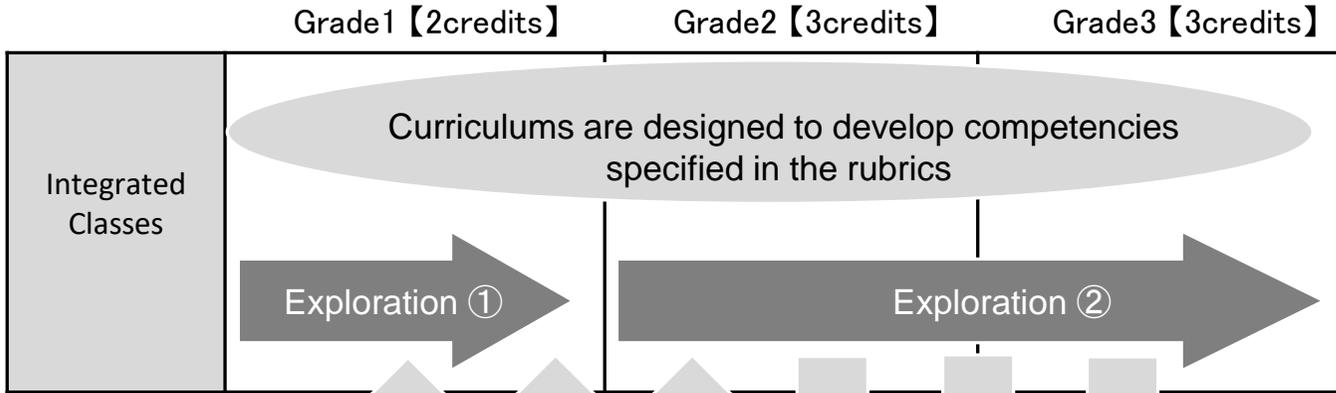


### Product design:

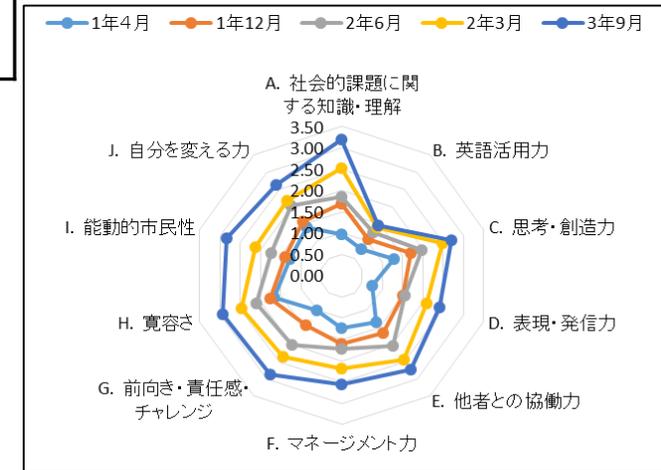
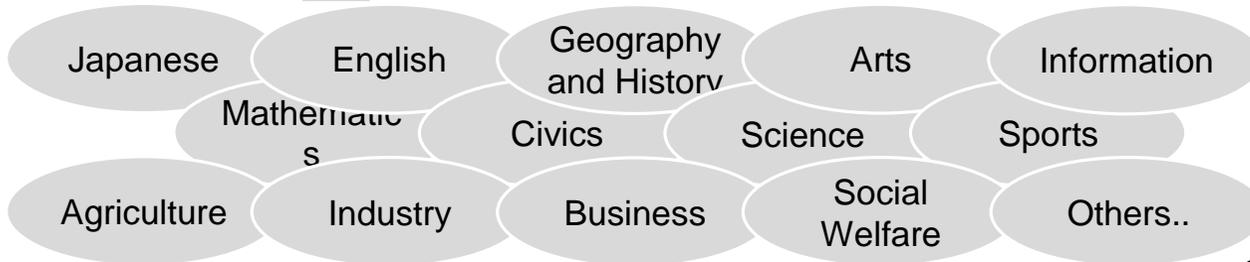
We produce agricultural products using vegetables and fruit from Futaba by closely working with farmers and shops in order to help revitalizing Futaba region



Photo by @fukushimatecho

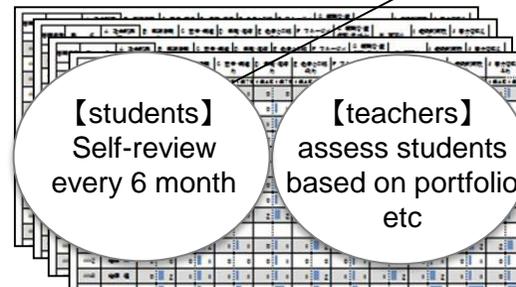
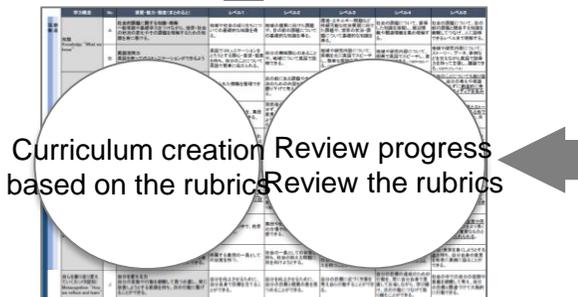


Use knowledges and skills obtained at each subject based class      Stimulate subject matters



Average Growth of Student for 3 years based on our rubric

(Average score of the students entered in 2016 and graduated in 2019)



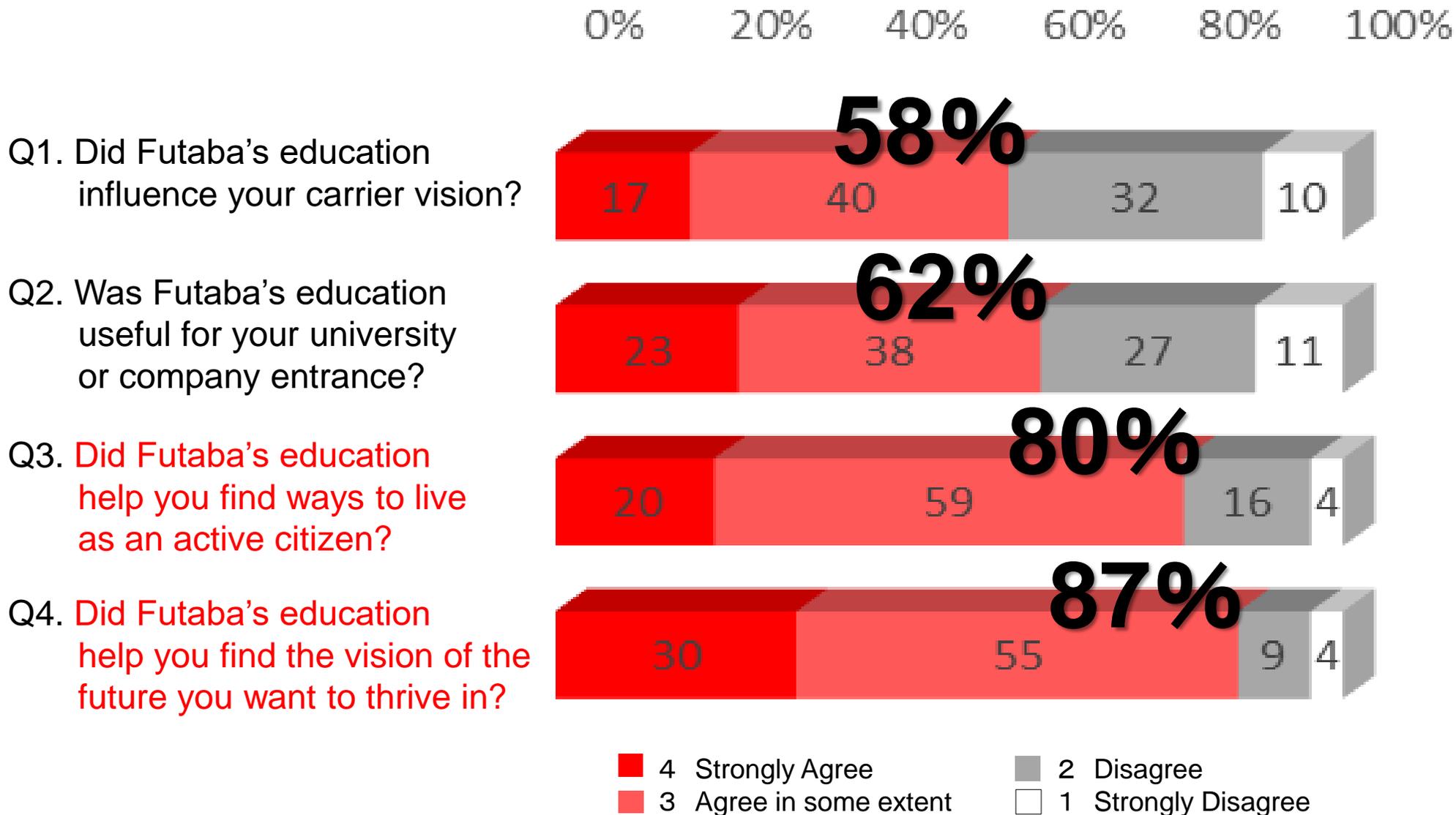
※ From OECD Tohoku School, we identified that actual practices in a real society contributed for students' competencies development. Elements for students' growth based on a rubric assessment is as follows;

1. Interactions with students in other regions (71%)
2. Interactions with students in other ages/grades(56%)
3. Discussion and taking actions for communities in future(54%)
4. Visiting and making presentations in companies and organizations
5. Interactions with teachers
6. Interactions with stakeholders/supporters outside of school

# Feedback by students about Futaba's education



Research results about the education provided in Futaba Future School conducted for the students who graduated in March 2019



- Teachers struggled and continuously discussed how to help students develop competencies which are difficult to measure and have few good precedents. But they became confident about what they had done once they witnessed the growth of students.
- Our curriculum is fully in line with the current national curriculum. We did not have any restrictions for its implementation in our school.
- “Teacher agency” is the key to success of using flexibility and autonomy given in the national curriculum.



Discussion to set competency goals right after the school launch (April 2015)



Continued discussion to brush up curriculum (March 2019)



# 福島県立ふたば未来学園中学校・高等学校