



Innovate Japanese Education

~ Challenge towards Creativity ~

Kobe Municipal Fukiai High School

1. Background Information

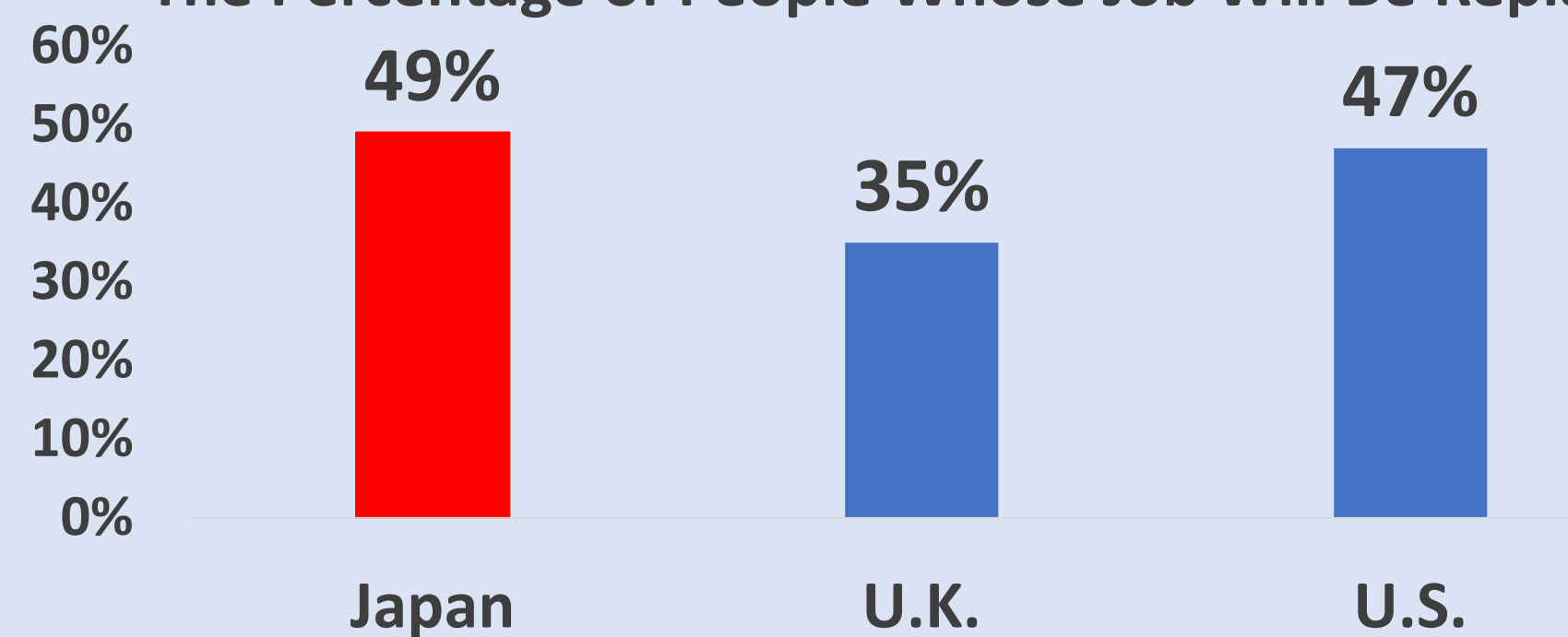
1. The Japanese Education System

	1998	2008	2017
Keyword	ゆとりと生きる力	確かな学力	主体的・対話的で深い学び
Content	<ul style="list-style-type: none"> The Period of Integrated Study Introduction of "Information" in high school 	<ul style="list-style-type: none"> Introduction of "English" in upper elementary grades Reduction of the Period of Integrated Study Emphasize moral education 	<ul style="list-style-type: none"> Active Learning Introduction of "English" in elementary school Introduction of "moral education"

- Passive Learning
- "Tankyu" is not enough
- "Center Test"

2. The Threat of AI

The Percentage of People Whose Job Will Be Replaced by AI



AI cannot create from 0 to 1. (OPTIM)

3. Creativity

Creativity is the ability to produce new or original ideas. (Vernon, 1984)

2. Research Question

What can be done to nurture creativity in Japanese high school education?

3. Methodology

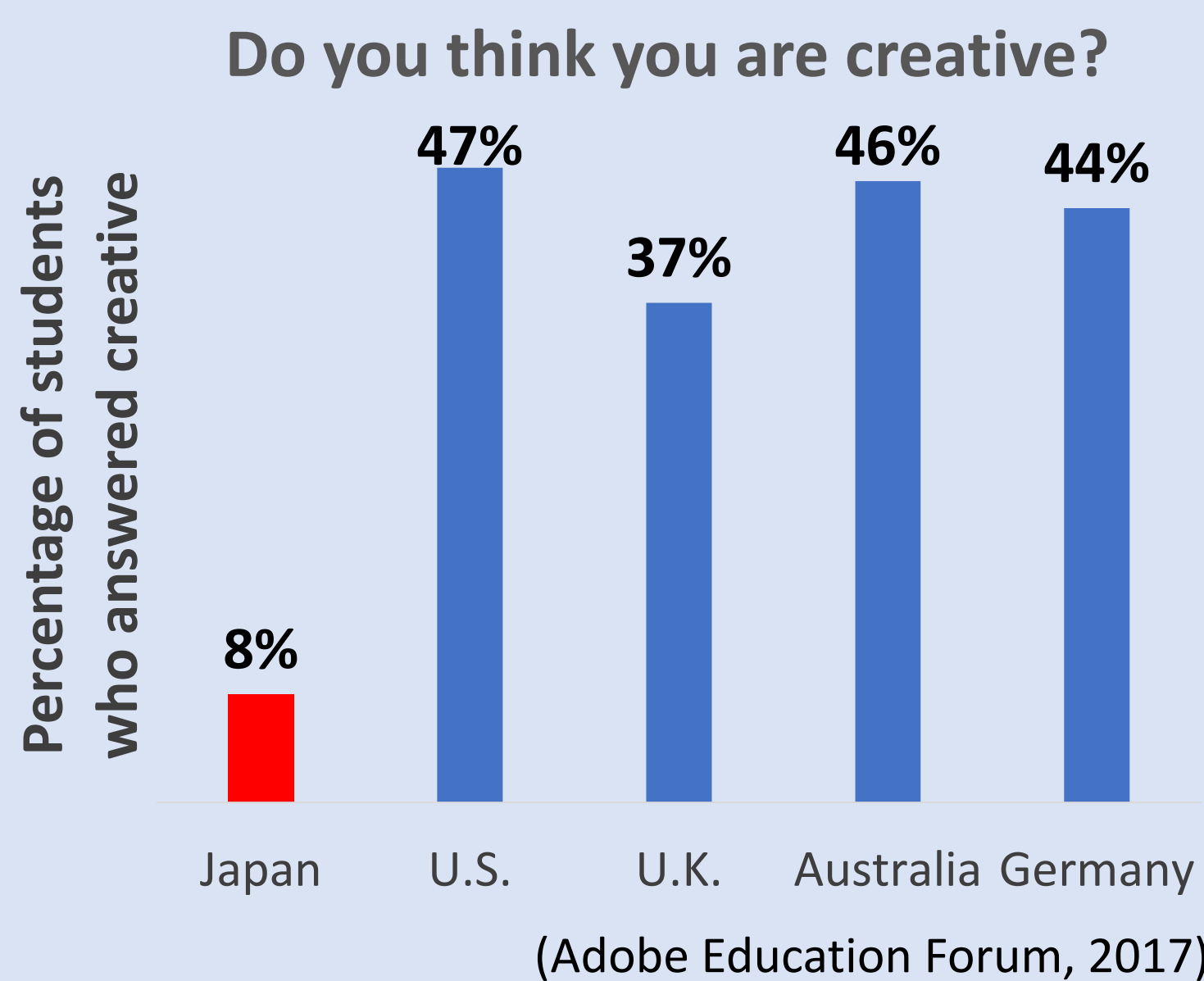
Internet articles, Research papers, Books, Surveys

4. Data / Analysis

1. The Comparison of Creativity by Country

Rank	Country	Technology	Talent	Tolerance
1	Australia	7	1	4
2	United States	4	3	11
3	New Zealand	7	8	3
4	Canada	13	14	1
5	Denmark	10	6	13
5	Finland	5	3	20
24	Japan	2	58	39

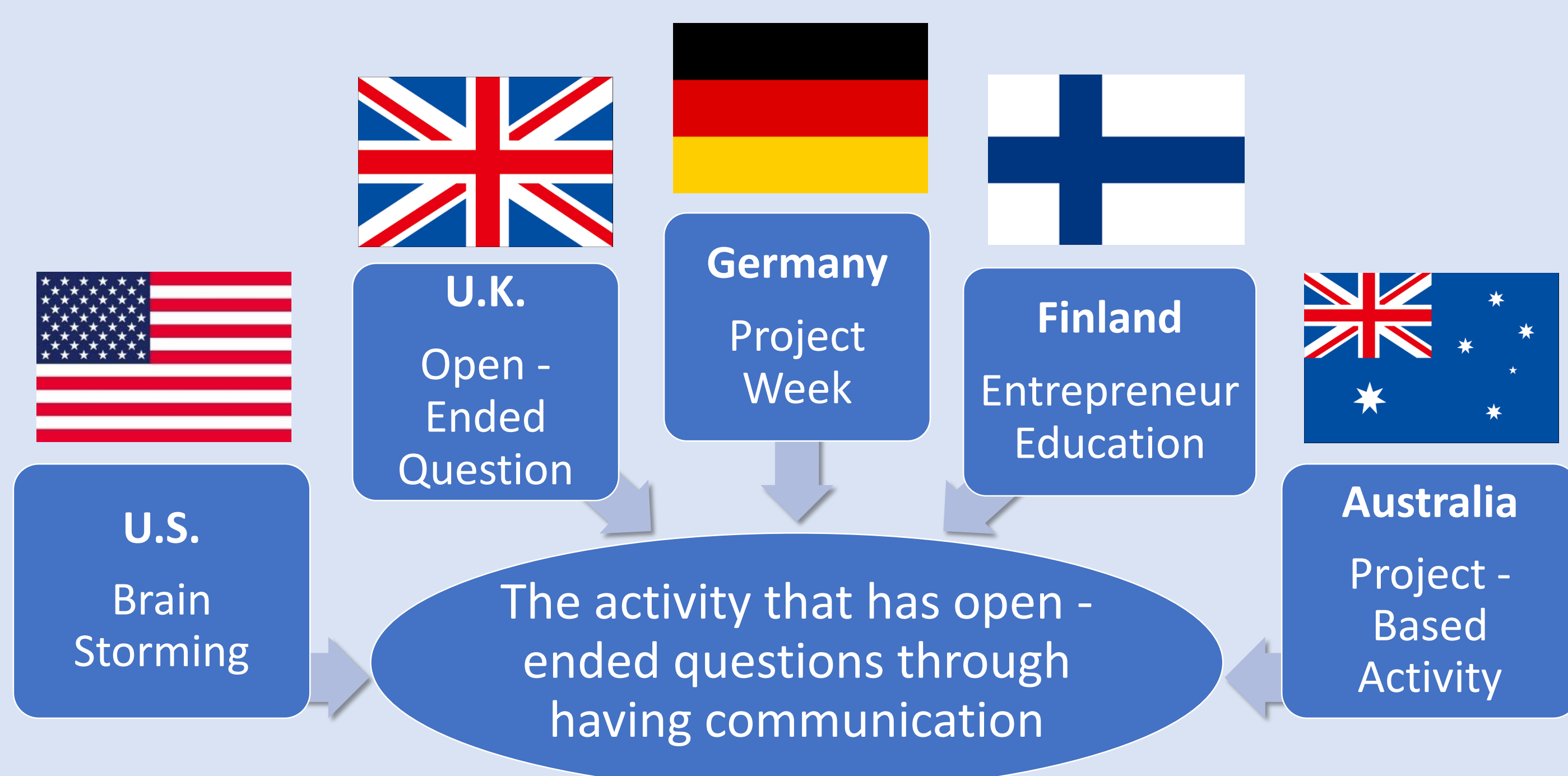
(Global Creativity Index, 2015)



(Adobe Education Forum, 2017)

2. Education in Other Countries

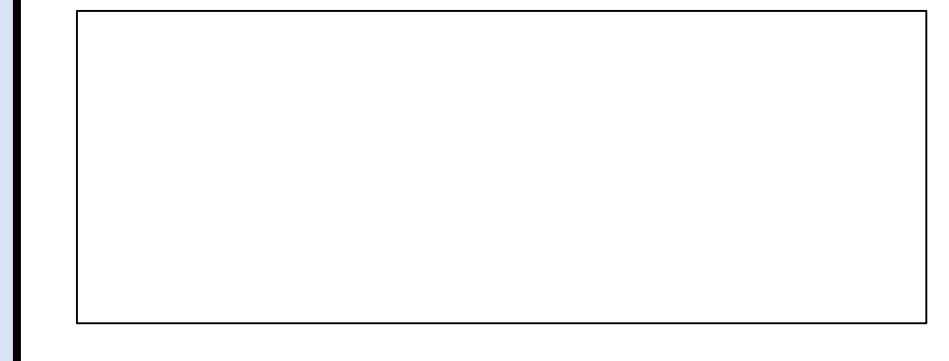
U.S.	U.K.	Germany	Finland	Australia
<ul style="list-style-type: none"> Brain Storming Cross Curriculum Discussion 	<ul style="list-style-type: none"> Open - Ended Question Activity Cross Curriculum (drama & creative writing) ICT Education 	<ul style="list-style-type: none"> Art Education (creative writing, drama, musical, etc.) Brain Storming Open - Ended Question Activity Project Week 	<ul style="list-style-type: none"> Entrepreneur Education Art Education (story telling, handy craft, etc.) Cross Curriculum Small Group 	<ul style="list-style-type: none"> Cross Curriculum Project-Based Activity (work study) Physical Creative Activity Book Telling



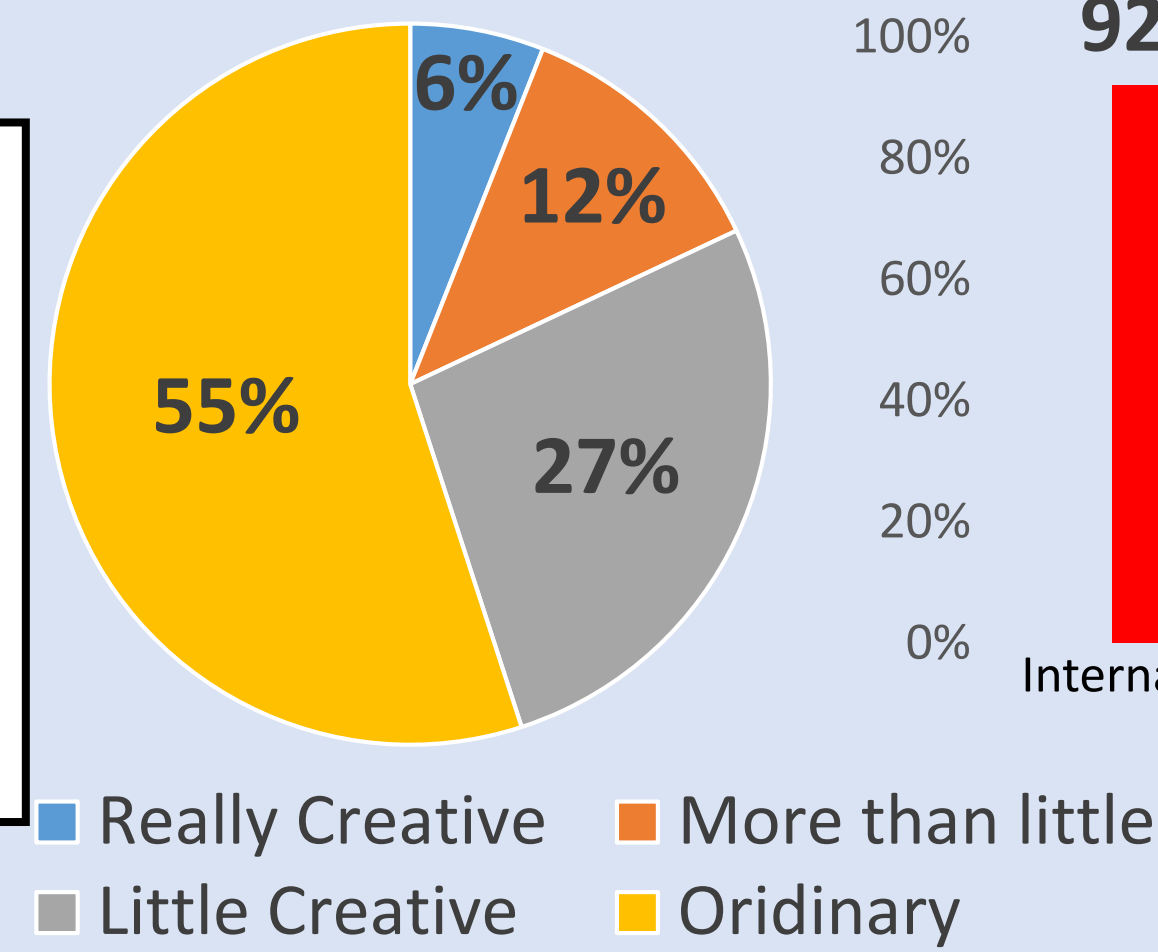
3. Survey

How to Measure Creativity

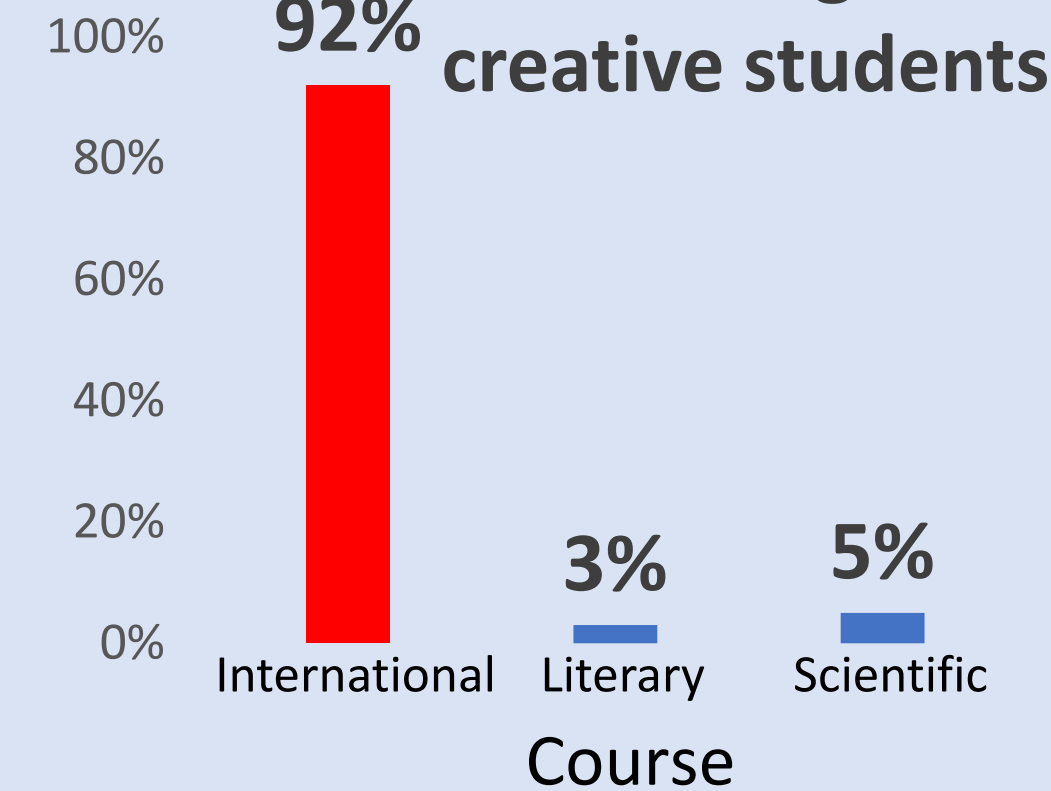
Q5. What do you see when you think of a park? Please take 5 minutes to draw the scene. Your drawing ability will not be evaluated.



Creativity Rate



Percentage of creative students

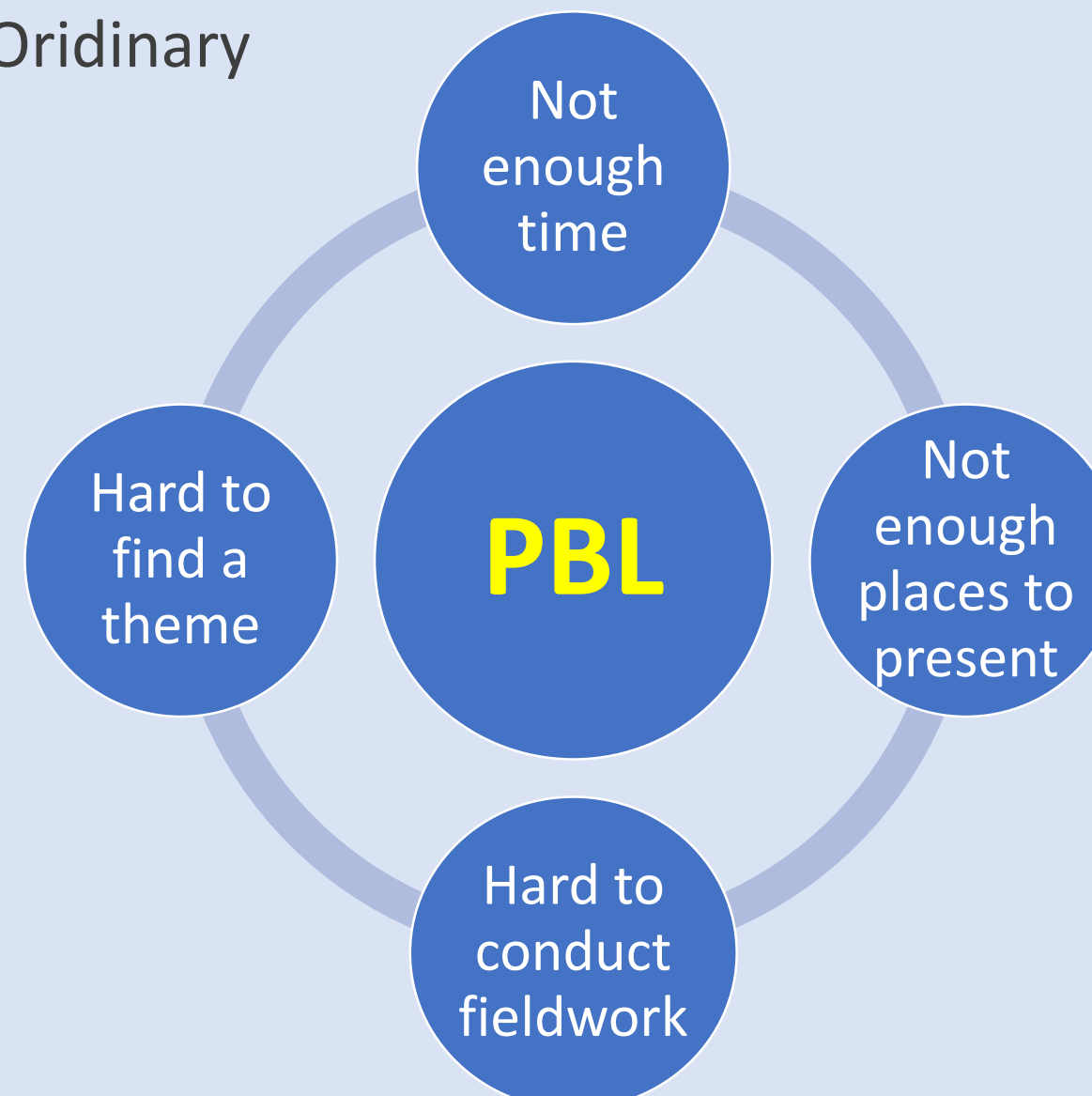


5. Discussion

Problem - Based Learning (PBL)

- Logical Thinking
- Communication Skills
- Various Perspectives
- Skills to collect information
- Presentation Skills

However...

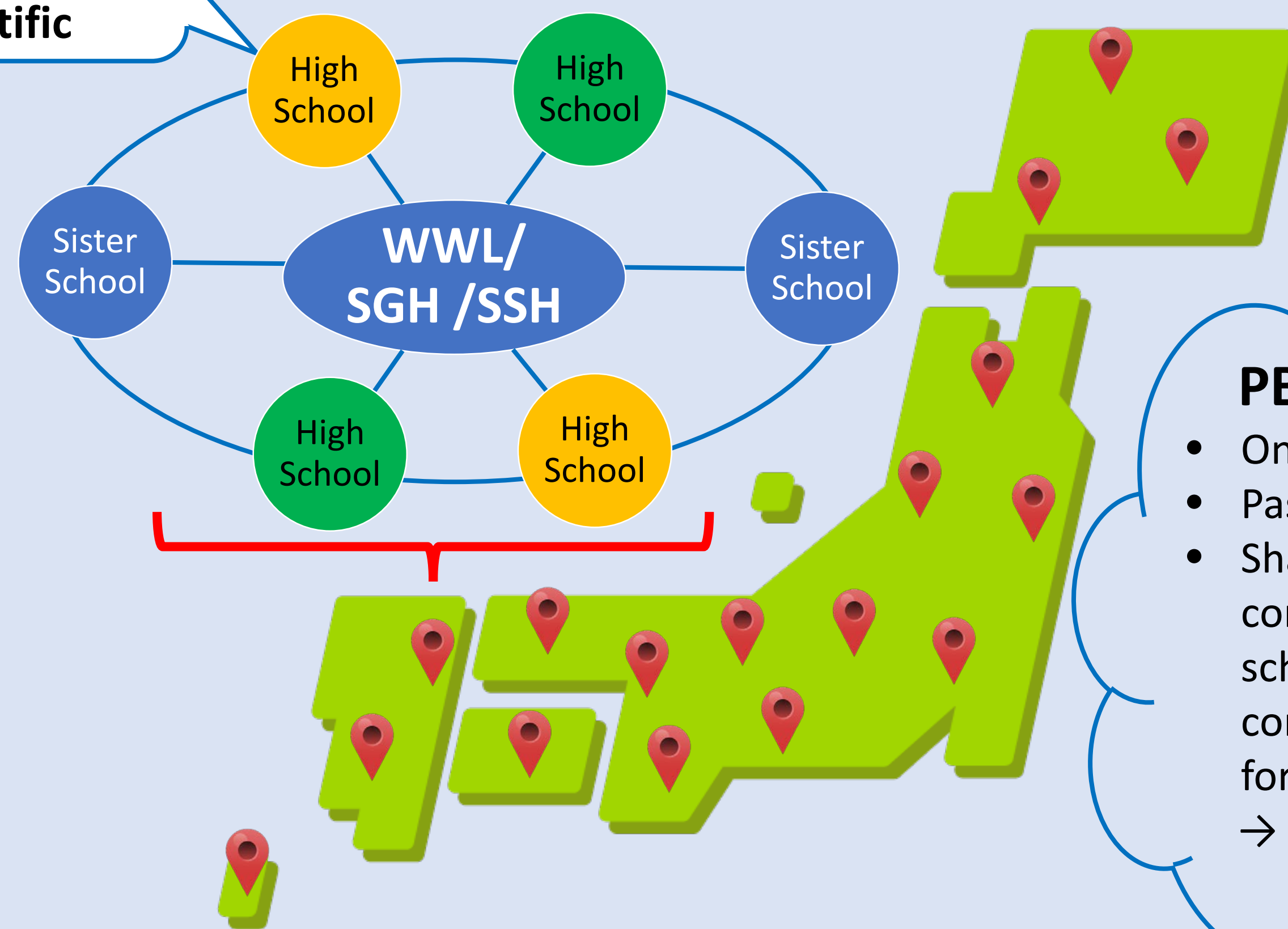


6. Suggestions

- Propose to Ministry of Education, Culture, Sports, Science and Technology
- Introduce to all high schools that follow the curriculum guideline

1. Online Network for PBL

From all over Japan
Yellow: Literary
Green: Scientific



PBL Data Base

- On the Internet
 - Past research
 - Share the connections to schools, universities, companies, NPOs, foreign countries, etc.
- Online Fieldwork

2. Multi - Dimensional PBL

1st Grade: Find the theme

- Students learn the problems related to SDGs in all English classes.
- Online Global Discussion (once a term) → Discuss and be interested in the problems with sister schools (→ WWL / SGH / SSH will support other schools)

2nd Grade: Research

- Increase "Tankyu" to at least twice a week
- Network Discussion Board on the Internet & PBL Data Base → Feedback, Survey, Online Fieldwork, etc.
- Online Global Conference (once a month) → Discuss by category and revise with sister schools

3rd Grade (summer vacation): Presentation

- National High School Global Forum (全国高校生グローバルフォーラム) → Make a presentation with sister schools in the network first
- One representative from each network elected by students makes a presentation globally

7. References

Nomura Research Institute. (2015). 日本の労働人口の49%が人工知能やロボット等で代替可能に [49% of Japan's working population can be replaced by artificial intelligence and robots]. Retrieved June 25, 2020 from: https://www.nri.com/-/media/Corporate/jp/Files/PDF/news/newsrelease/cc/2015/151202_1.pdf

Senoo, M. (2019). 「欲ばり」な学校教育を続けるのか 平成の教育史を振り返る [Why does the Japanese education continue to conduct greedy one? Looking back on the history of education in Heisei]. Retrieved June 22, 2020 from: <https://news.yahoo.co.jp/byline/senoomasatoshi/20190419-00122699/>

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Yumino, K. (2015). *世界の創造性教育* [Creativity Education in the World]. Kyoto: Nakanishiya