

# Teaching SoTL for graduate students: Future Faculty Program

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# Presentation Overview

1. Current state of Pre-FD programs in Japan
2. Overview of FFP at Osaka University
3. Evaluation of what graduate students who took the FFP learned
4. Significance and challenges of teaching SoTL to graduate students
5. Disseminating SoTL through academic societies

References

# 1. Current state of pre-FD programs in Japan

## Pre-FD in Japan

- In the United States and elsewhere, there are educational programs called Preparing Future Faculty Programs (PFFP), which were launched with the aim to smooth the connection from graduate student to faculty member (Kira 2014). In Japan, these are collectively known as “Pre-Faculty Development (Pre-FD) programs.” (Waga 2003)
- Since the 2000s, various programs have been developed mainly at research universities, and the number of such programs has been on the rise, particularly since around 2010 (Natsume 2011, Konno 2016, Kurita 2020).
- In 2019, universities with graduate schools became legally required to make efforts to conduct Pre-FD programs or provide information as a result of the revision of the Standards for Establishment of Universities (Standards for Establishment of Universities, 2019).
- The content generally includes theories of higher education, course design (including teaching methods and assessment), teaching skills (Simulated Teaching and review sessions), and a summary of educational achievements, with a focus on training in educational practices (Kurita 2015).

# 1. Current state of Pre-FD programs in Japan

## Major Pre-FD initiatives in Japan

(Konno 2016:62)

University Name	Name	Year Started	Format
Hokkaido University	Preparing Future Faculty Program	2010	Graduate school course
	Teaching Science in Higher Education (Japanese version of PFF)	2010	Graduate school course
	Teaching Fellow System	2015	Teaching Fellow System
Tohoku University	Tohoku University Preparing Future Faculty Program	2010	Extracurricular program
University of Tsukuba	Teaching Fellow System	2008	Teaching Fellow System
	Teaching at University as a Profession	2008	Graduate school course
	PFP Program	2013	Graduate school course
Hitotsubashi University	Teaching Fellow Program	2006	Teaching Fellow System (with credit)
The University of Tokyo	The University of Tokyo Future Faculty Program (FFP)	2013	Graduate school course
Nagoya University	University Teacher Preparation Program	2005	Graduate school course
Kyoto University	Program for Graduate Students and Postdoctoral Fellows	2005	Extracurricular program
	Graduate School of Letters PFF Project	2009	Extracurricular program
	Teaching at a University	2012	Graduate school course
	Relay Lectures in the Faculty of Letters in Collaboration with The Consortium of Universities in Kyoto	2015	Extracurricular program
Ritsumeikan University	Preparing Future Faculty	2011	Extracurricular program
Osaka University	Osaka University Future Faculty Program	2014	Graduate school course
Osaka City University	Practical Teaching Training Program for University Teachers	2011	Extracurricular program
Hiroshima University	Teacher Training Program for Teachers in Charge of Teacher Training Course	2007	Graduate school course

In addition to the above, Kyushu University's Preparing Future Faculty Program (Zheng et al. 2021) and Kobe University's Future Faculty Preparation Course (Chikada 2021) are being offered from 2020.

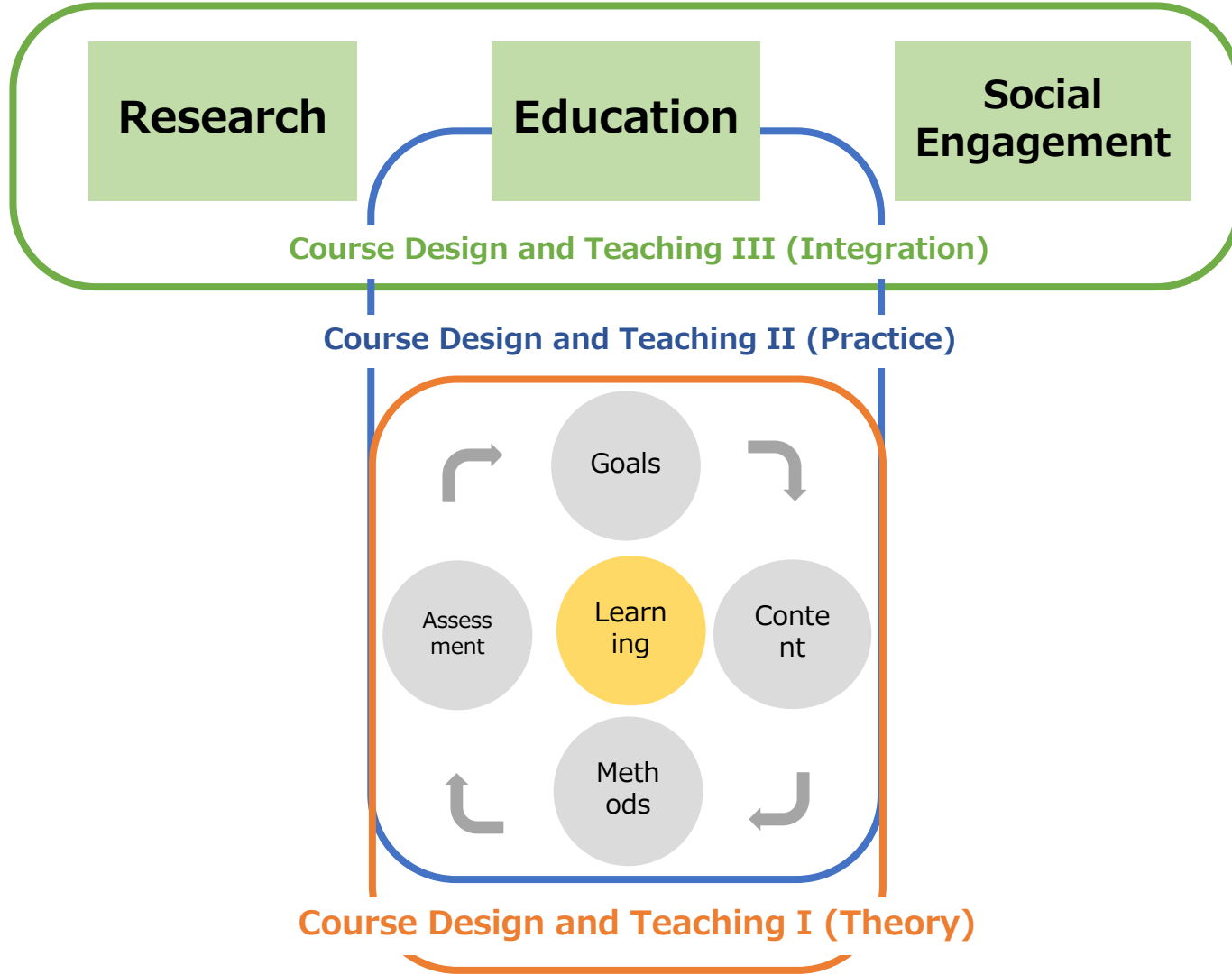
# 2. Overview of FFP at Osaka University

## The Structure of the Osaka University Future Faculty Program

	Course name	Content
Required courses	Course Design and Teaching I	Knowledge learning and technique training for course design and basic educational skills
	Course Design and Teaching II	Training in advanced teaching techniques, practical teaching training, class observation (Prerequisite: completion of Course Design and Teaching I)
	Course Design and Teaching III	Preparing aspirations for education, research, and social contribution, and planning education and research (Prerequisite: completion of Course Design and Teaching I)
Electives	Academic Writing : Writing and Teaching Method	Teaching Writing
	Advanced course on career design	Career design and practices for graduate students
	Other designated subjects	Multiple subjects offered by other departments

- Course Design and Teaching I was started in 2014 and was added sequentially.
- By completing the three required courses and one elective, students can receive a certificate of completion for the advanced Interdisciplinary program officially recognized by Osaka University.
- Starting in 2020, graduates of this program will be partially exempted from New Faculty training program.

# 2. Overview of FFP at Osaka University



Course Design and Teaching    Graphic Syllabus

# 2. Overview of FFP at Osaka University

Table 3 Comparison of learning content between Program for Primary and Secondary school teacher training and FFP at Osaka University

Learning Content	Program for Primary and Secondary School Teacher Training	Osaka Univ. FFP
Content Knowledge	<ul style="list-style-type: none"> <li>▪ Related subjects (English studies, English literature, English communication, cross-cultural understanding, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Specialized courses in graduate school</li> </ul>
Pedagogical Knowledge	<ul style="list-style-type: none"> <li>▪ Subjects significant to the teaching profession, etc. (Principles of teaching, teacher theory, etc.)</li> <li>▪ Courses on basic theories of education (Educational psychology, educational system theory, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Course Design and Teaching I</b></li> </ul>
Pedagogical Content Knowledge	<ul style="list-style-type: none"> <li>▪ Subjects for learning theories and methods necessary for practice (Teaching Methodology for English, mathematics, social studies, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Teaching Methodology for English literature, medicine, engineering, etc.) (Currently not yet offered)</li> </ul>
Teaching Experience	<ul style="list-style-type: none"> <li>▪ Student Teaching</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Course Design and Teaching II</b></li> <li>▪ Experience as a TA or TF</li> <li>▪ Experience teaching younger students in the laboratory</li> </ul>
Integrate Knowledge and Competencies	<ul style="list-style-type: none"> <li>▪ Hands-on practice in teaching</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Course Design and Teaching III</b></li> </ul>

# 2. Overview of FFP at Osaka University

## Course Design and Teaching I

(2 credits=90 hours)

[Course start date]

Spring-Summer: 1 session

Fall-Winter: 1 session

3 days program

[Eligibility]

Master's course, Doctoral course

Date	Class	Content
DAY1	1	Orientation
	2	Micro Teaching (1)
	3	Course design (syllabus writing)
	4	Graphic syllabus
DAY2	5	Micro Teaching (2)
	6-8	Teaching Strategies
	9	Class design
	10	Assessment
DAY3	11-13	Micro Teaching and Peer Assessment
	14	Teaching philosophy and Career Design
	15	Reflection



# 2. Overview of FFP at Osaka University

## Course Design and Teaching II

(2 credits=90 hours)

[Course start date]

Spring-Summer: 1 session

Fall-Winter: 1 session

[Eligibility]

Master's course, Doctoral course

Date	Class	Content
DAY1	1-3	Orientation & self-introduction, review of FFP I
DAY2	4-6	Micro teaching in Active learning method, Teaching practice and observing classes
Depends on students	7-9	Class observation and analysis (classes taught by university teachers and classmates)
DAY3	10-11	Mid-term reflection
Depends on students	12	Teaching Practice (90 minutes or more at a higher education institution)
DAY4	13-14	Online Class Design and Assessment
	15	Reflection on Teaching Practice / Overall Reflections

# 2. Overview of FFP at Osaka University

## Course Design and Teaching III

(2 credits = 90 hours)

[Course start date]

Fall-Winter: 1 session

Intensive lectures

[Eligibility]

Master's course, Doctoral course

Date	Class	Content
DAY1	1	Orientation & Self-introductions, review of FFP I & II
	2-5	SoTL and Planning Research on teaching
DAY2	6	Making the research philosophy
	7-8	Making the social engagement philosophy
	9-10	Making the teaching philosophy
DAY3	11-12	The Current issue about higher education/ relevance of the Three philosophy
	13-14	SoTL case studies by senior students
	15	Philosophy as University teacher

# 2. Overview of FFP at Osaka University

## SoTL and Planning Research on teaching

- 1 ) Learn about the history, theory, and significance of SoTL
- 2 ) Read and analyze papers on educational practice research at universities
  - Reading (one or two paper selected from 20 types of Japanese and English literature)
  - Critique (pair work)
  - Presentation
- 3 ) Plan Research on your own educational practice
  - Formulate research questions
  - Set up research approaches (qualitative, quantitative, mixed research methods)
  - Consider the necessary conditions for implementation
- 4 ) Present and Assess the other students' research plan

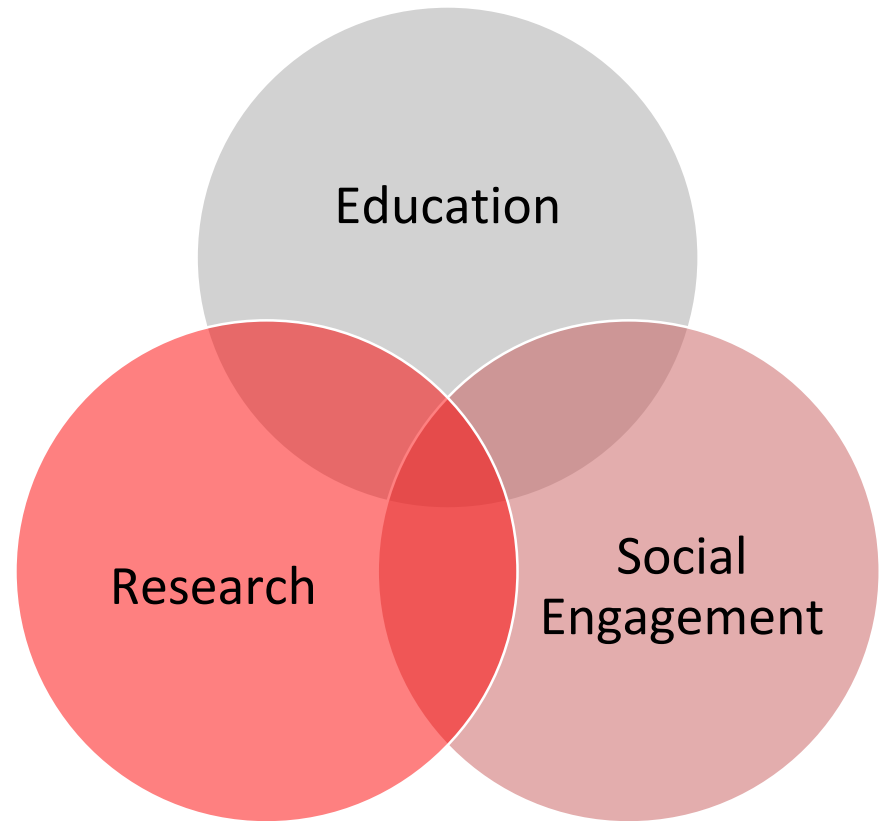
# 2. Overview of FFP at Osaka University

## Relevance of the Three Philosophy

In Course Design and Teaching III, we teach not only the SoTL, but also the scholarship of discovery, integration, and application.

In order to have students build relationships among these concepts, we have them express their philosophy in the three academic disciplines for university teacher—research, education, and social engagement with society—using a Venn diagram.

Finding where the three overlap enables them to make their own sense of how research can be related to education and social engagement.



Venn diagram used in  
Course Design and Teaching III

# 3. Evaluation of what graduate students who took FFP learned

## State of actual completion of classes

- Number of students: 64 (2015-2019)

	2015	2016	2017	2018	2019
No. of graduates	<b>8</b>	<b>15</b>	<b>19</b>	<b>9</b>	<b>13</b>
Graduate Schools breakdown	Medicine (HS) (3) Medicine (MS) (1) International Public Policy(1) Human Science(1) Frontier Biosciences (1) Language and Culture (1)	Letters (2) Human Science(3) Economics (1) Science (1) Medicine (HS) (1) Medicine (MS) (3) Engineering Science (1) Language and Culture (3)	Letters (2) Human Science(4) Science (3) Medicine (HS) (2) Language and Culture (6) Information Science and Technology (1) Engineering (1)	Letters (2) Medicine (HS) (4) Engineering Science (1) Language and Culture (2)	Letters (1) Human Science( 4) Medicine (HS) (3) Engineering (1) Language and Culture (4)
Course breakdown	MC : 5 DC : 3	MC : 7 DC : 8	MC : 5 DC : 14	MC : 5 DC : 4	MC : 6 DC : 7

Proportion of students in the course



(Oyama 2021)

### 3. Evaluation of what graduate students who took FFP learned

## Examples of SoTL Themes

General teaching issues	<ul style="list-style-type: none"><li>• Examining <b>the effect of grouping</b> on motivation for group learning participation</li><li>• Examining <b>the effects of handouts</b> in lecture method</li><li>• Effects of <b>designated seating</b> on learners in lecture methods</li><li>• Examining the effects of <b>a flipped classroom</b> in a seminar</li></ul>
Field-specific teaching issues	<ul style="list-style-type: none"><li>• Is <b>flipped classroom teaching</b>, in which students learn independently, <b>effective in raising national examination pass rates?</b> (regarding Nutrition in the <b>national examination for dental hygienists</b>)</li><li>• Effectiveness of <b>e-learning in preparation for the national nursing examination</b></li><li>• Verification of the effectiveness of group study of <b>Hiyari-hatto (Close-call) cases during practical training: In pre-Basic Nursing Practices orientation</b></li><li>• The effect of <b>flipped classrooms</b> on the maturity level of <b>Statistics Practices course</b></li><li>• Development of course design to improve <b>rehabilitation students'</b> practical report writing abilities</li><li>• The effects of <b>introducing individual work</b> on students' memory of class content: A case study in <b>cognitive psychology</b></li></ul>

- Doctoral students are more likely to cite field-specific teaching issues than master's students (Oyama et al. 2017).

- Field-specific teaching issues

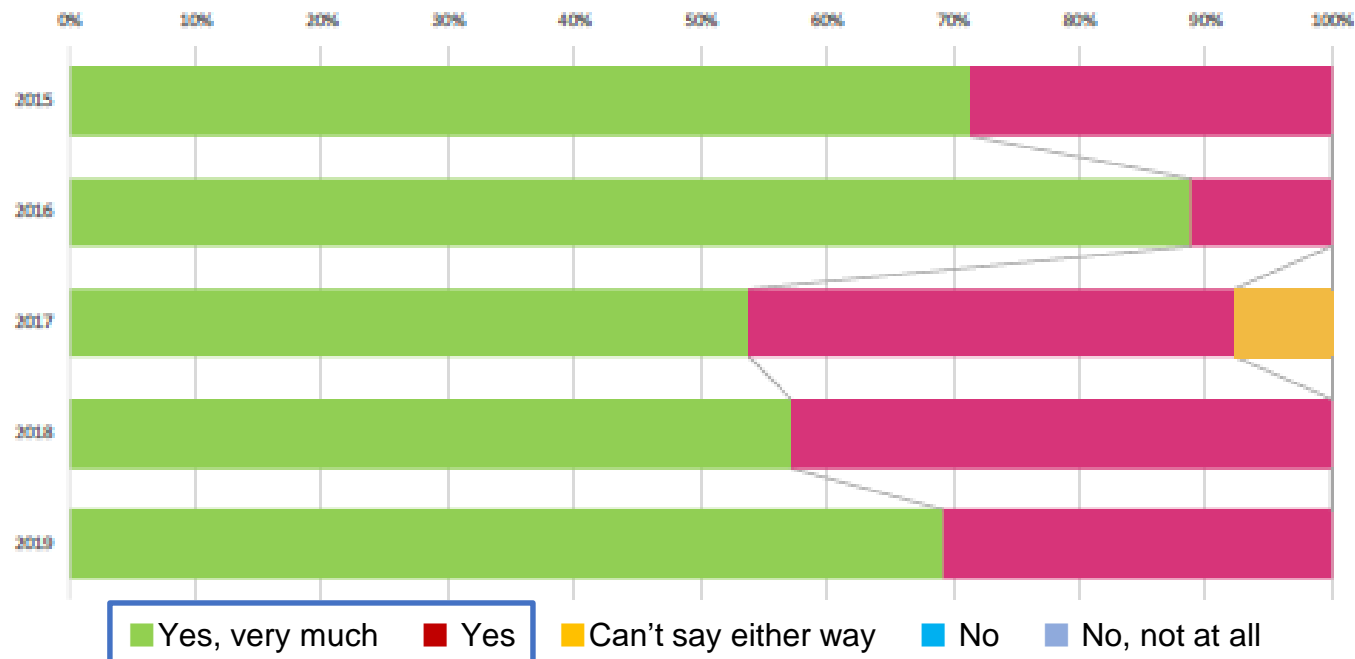
- General teaching issues + case study, Field-specific teaching practices

(Oyama 2021)

# 3. Evaluation of what graduate students who took FFP learned

## Evaluation of the class

- I am satisfied with this class (5-point scale)  
(2015 n=7, 2016 n=9, 2017 n=13, 2018 n=7, 2019 n=13)



- Generally high level of satisfaction

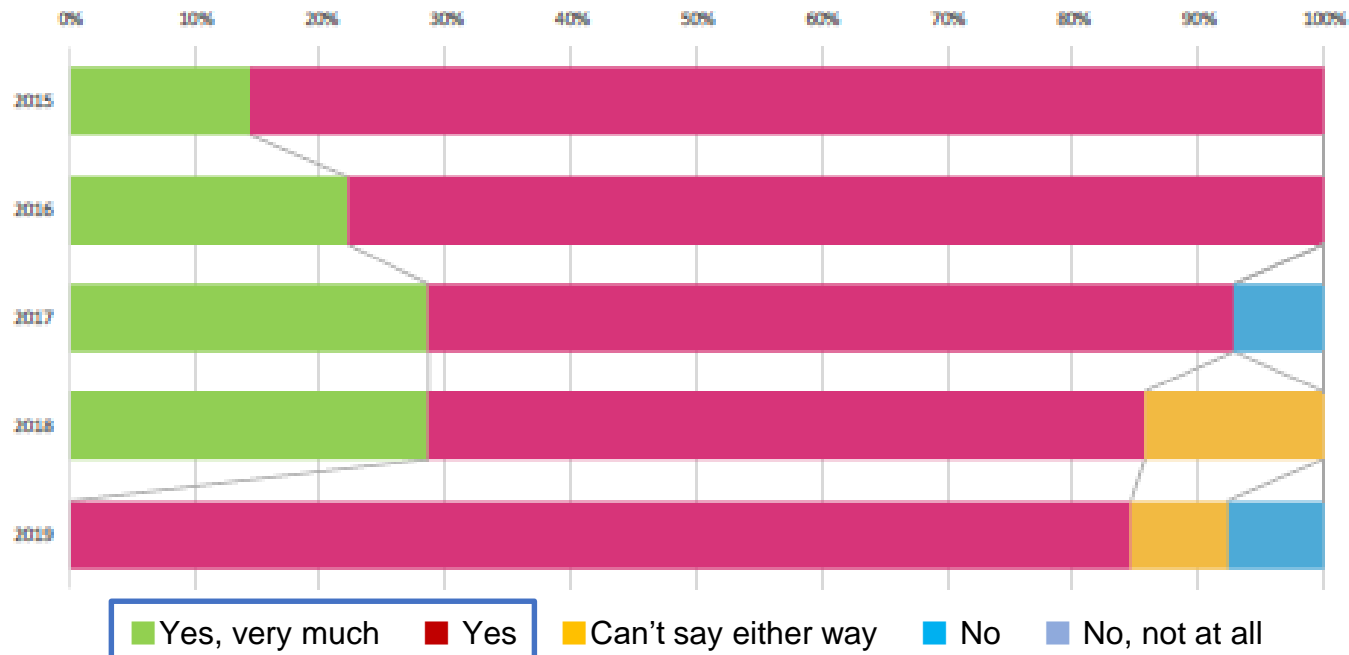


(Oyama 2021)

### 3. Evaluation of what graduate students who took FFP learned

## Evaluation of the class

- Did you understand SoTL concepts sufficiently? (5-point scale)  
(2015 n=7, 2016 n=9, 2017 n=14, 2018 n=7, 2019 n=13)



- Concepts were generally understood



(Oyama 2021)

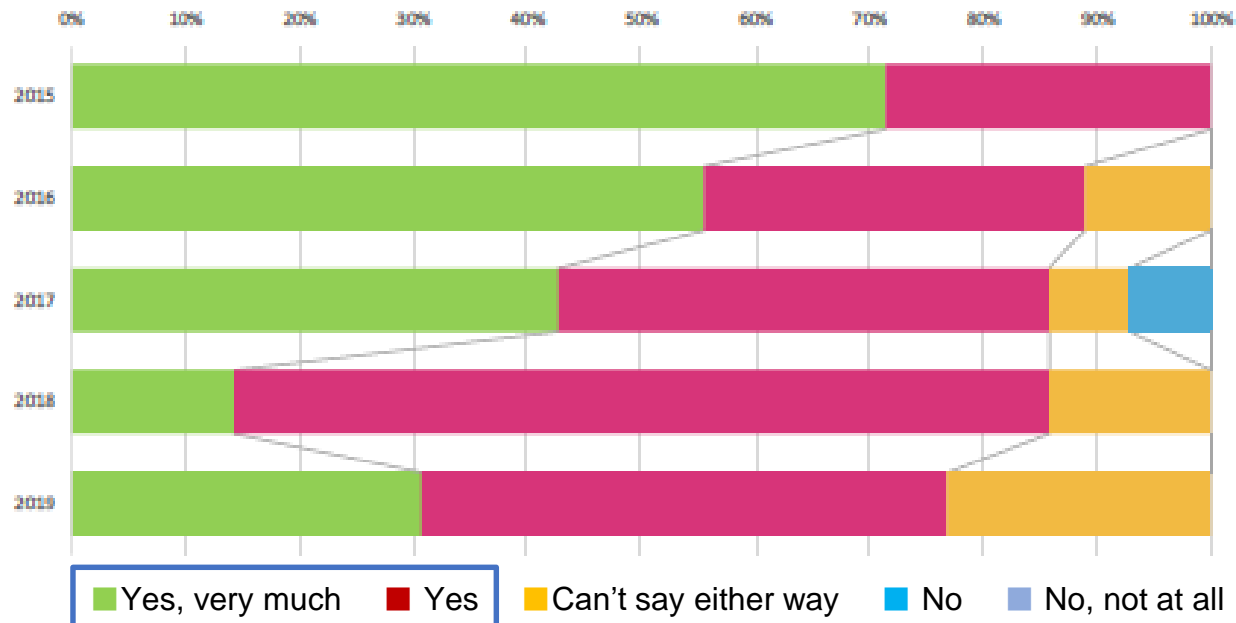


### 3. Evaluation of what graduate students who took FFP learned

## Evaluation of the class

- Do you plan to practice SoTL when you become a university teacher? (5-point scale)

(2015 n=7, 2016 n=9, 2017 n=14, 2018 n=7, 2019 n=13)



- Most students plan to practice SoTL



(Oyama 2021)

# 4. Significance and challenges of teaching SoTL to graduate students

## Significance of teaching SoTL to graduate students

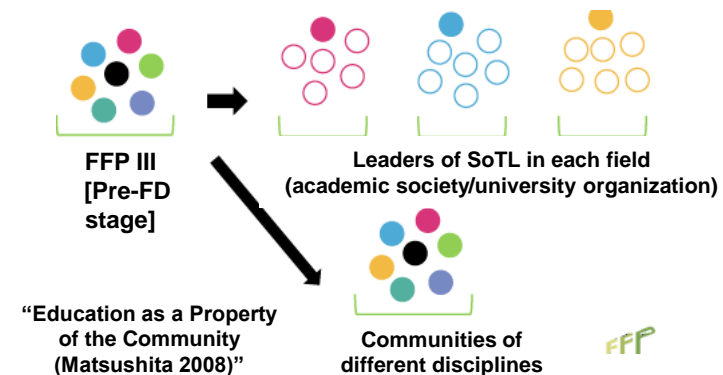
### 1) Significance to the individual

- Advantageous for finding job (increases achievements in teaching)
- Enable continuous improvement of teaching based on theory and practice
- Contribute to the formation of a cross-disciplinary community for practice (Encourages the building of an ongoing community of educational practice. Osaka University has an Alumni Academy, a sustained network of graduates, and ongoing teaching research.)

“In order to put the SoTL-based educational practice research plan into action, it is important to build a network of graduates among FFP students and support community where discussions on educational practice research can take place on a regular basis.” (Oyama et al. 2017)

### 2) Significance to the organization

- Teach SoTL as a course
- Cultivate human resources who can lead SoTL at academic societies and in various fields
- Develop human resources for educational leaders in each university (FD committee members, department chairs, deans, etc. in the future)



(Partial revision of Oyama 2021)

## 4. Significance and challenges of teaching SoTL to graduate students

### **Challenges of teaching SoTL to graduate students**

1. Possibility of becoming a university teacher is not 100%
2. Small amount of practical teaching experience
3. Weak public relations system (it's difficult to get students)
4. Uneven distribution of students (there are few students in science and engineering)
5. Lack of understanding and cooperation from faculty members
6. Insufficient cooperation with the Teaching Assistant system
7. Insufficient linkage with research and management development

(Prepared referencing Kurita 2015, Oyama et al 2017, and Chikada 2021)

# 5. Disseminating SoTL through academic societies

## Examples of activities to disseminate SoTL through academic societies

### 1) Japan Academy of Nursing Education(JANE)

Under a project of its Board of Directors, since 2016, JANE has been organizing workshops on SoTL for university and vocational school teachers specializing in nursing education. (The author served as a lecturer from 2016 to 2020.)

### 2) Japan Association for College and University Education(JACUE)

The Committee for Researcher Development of JACUE has been conducting an introductory course in university education research since 2018 to improve research abilities. (The author served as the committee chair from 2020 to 2021.)

SoTL concepts have been emphasized in these initiatives. There are also graduate students among the participants.

There are few universities in Japan for learning research methods on teaching in higher education. Dissemination activities by each academic society are significant to creating opportunities for graduate students to learn about SoTL.

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