

Future University Hakodate
Center for Meta-Learning
AY2017-2018 Activity Report



メタ学習センター
Center for Meta-Learning

Think reflectively. Act collaboratively. Design the future.

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AY2017-2018 CML Committee Members

Department (Course)	Name
Chair of CML	Keiji Hirata (Professor)
Center for Meta-Learning	Mio Tsubakimoto (Associate professor)
	Atsuko Tominaga (Associate professor)
	Michiko Nakamura (Associate professor)
	Yoshihito Tuji (Associate professor)
	Smith Adam (Associate professor)
	Rivers Damian (Associate professor)
Communication group	Andrew Johnson (Associate professor)
	Dominic Kasujja Bagenda (Associate professor)
	Michael Vallance (Professor)
	Peter Ruthven-Stuart (Associate professor)
Information Design Course	Yoshinari Takekawa (Associate Professor)
Advanced ICT Course	Kei Ito (Associate professor)
Intelligence Systems Course	Yasuyuki Sumi (Professor)
Complex Systems Course	Yuichi Katori (Associate professor)
General Affairs of CML	Education Affairs Department (University Office)
CML Coordinator	Satoko Mitobe

AY2017-2018 CML Activity Report

1. Foundation for Meta-Learning

1-1. CML Orientation

Program description

University students are expected to take responsibility for their own learning and be able to make their own academic decisions. For FUN students, the first such opportunity comes at the end of their first year when they select their ‘course’. Because this is their academic major and it shapes the rest of their academic career at FUN, it is important for them to choose the best-fit option. The CML orientation aims to get the first-year students started on the course-selection process. In this one-day orientation, students learn their course options and informational resources available to them. They also have an opportunity to gather firsthand information on their potential majors by walking around the campus and interview FUN faculty and senior students. While hands-on collaborative activities are utilized as much as possible to facilitate students’ active participation and communication among peers, the pedagogical message consistent throughout the session is the importance of student autonomy in learning and decision-making. CML orientation staff strongly believes that helping students become aware of it is the first step toward their transition to college work where self-directed purposeful learning is the key to academic success.

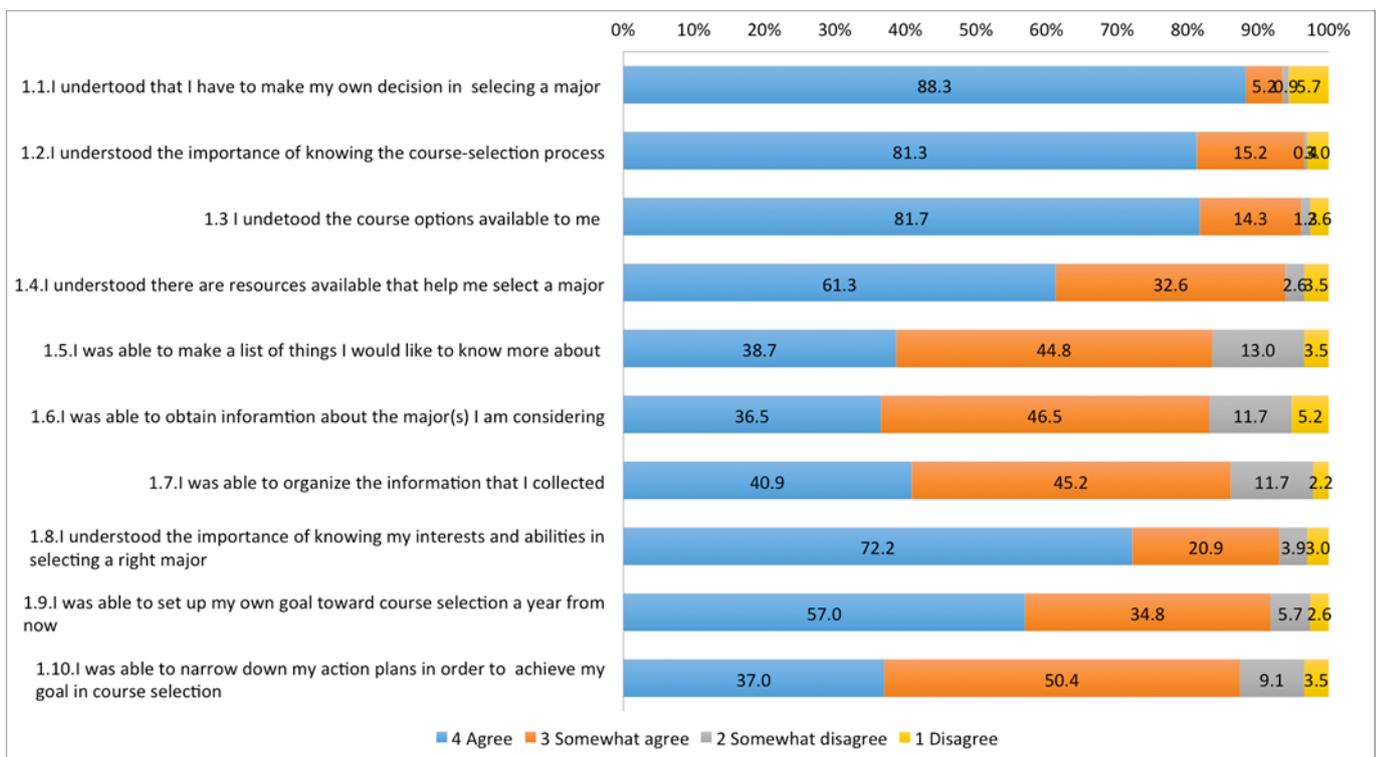
Overview of AY2016-2017 activity

- Date: April 13, 2017, 9:00-15:40
- Place: Large lecture room (Kujira)
- Target students: 2017 first-year students
- Orientation staff: Michiko Nakamura, Atsuko Tominaga, Mio Tsubakimoto, Yoshihito Tsuji, Satoko Mitobe
- Schedule:

9:00	Introduction (introduction of staff, goals, schedule, orientation materials)
9:30	An overview of FUN courses by course directors and seniors ~ Panel discussion & students’ Q&A
10:55	Informational resources useful for course selection (by CML staff)
11:10	Planning the information-gathering activity (a.k.a., campus ‘walk-around’) (Students made groups, introduced to each other, prepared interview questions, etc.)
	(lunch break)
13:00	Information gathering (‘walk-around’) activity (Students visited faculty offices/labs and asked questions about FUN courses)
14:30	Personal reflection and planning for the first year (Self-reflection of today’s learning, goal-setting, plans for self-exploration and further information gathering)
15:00	Review of CML orientation & assignments
15:20	Answering surveys

Outcomes

To better understand students’ perceptions toward their experience and learning from this orientation, a survey was conducted online at the end of the orientation. It consisted of ten 4-point-scale Likert questions (from 1 “disagree” to 4 “agree”) followed by five additional multiple-choice questions and one open-ended question. A total of 230 students responded to the survey. Overall, students’ feedback was positive. 93% of students said they understood that they would have to make their own decisions when it comes to selecting a course (Q1.1). Similarly, a majority of students agreed that making their own decisions requires understanding the decision-making process (Q1.2; 96%) as well as knowing themselves (e.g., their own interests and strengths/weaknesses, Q1.8; 93%). Over 90% of students also reported that they were able to set their own goal for course selection a year ahead (Q1.9). The results of the Likert questions are shown in Table 1 (English) and in Table 2 (Japanese).



Reported by

- Michiko Nakamura
- Atsuko Tominaga
- Tsuji Yoshihito
- Mio Tsubakimoto
- Satoko Mitobe

1-2. Meta-Learning Lab

Program description

Meta Learning Lab (hereinafter referred to as “MLL”) is an organization that supports extracurricular learning among FUN students aimed at the improvement of their study habits, consciousness/behavior towards learning methods, and basic learning skills. During AY2017-2018, 18 undergraduate and graduate students belong to MLL as a tutor. They have involved in extracurricular self-directed learning activities as a supporter, particularly on basic subjects for the 1st and the 2nd year students.

Overview of AY2016 activity

【Overview of Tutoring Sessions】

Number of tutoring sessions and maximum number of tutees accepted for the 1st and the 2nd semesters in 2017-2018 are as follows.

- 1st semester, 2017.....Tutoring sessions: 24 slots/week
Maximum number of tutoring session accepted: 51/week
- 2nd semester, 2017.....Tutoring sessions: 24 slots/week
Maximum number of tutoring session accepted: 48/week

Outcomes

【Number of tutoring sessions and the level of tutees’ satisfaction】

In AY 2017, 297 tutoring sessions were implemented, increased by 62 sessions. Tutoring sessions was held more often in the 1st semester (253 sessions) than the 2nd semester (44 sessions), because MLL emphasized on the linkage with the class titled “Introduction to Information Expression” (which is a required subject for the 1st year students in the field of Programming). 53.9% of the concerns brought by the tutees were on programming-related subjects. After a tutoring session, tutees must fill out the questionnaire (A4 1 page) regarding the level of satisfaction. The questionnaire consists of 7 items using 4 point Likert Scale and 3 items for free description. Figure 1 shows the results of 7 items of using 4 point Likert Scale. The questions 1, 2, and 3 are about tutors’ basic attitude (listening, friendliness, and easy-to-understanding). More than 97.4% of the tutees answered ‘strongly agree’ or ‘agree’ to these questions. The question 4 is relatively low, but the total of the answers ‘strongly agree’ and ‘agree’ are 93.4%. This can be said that the tutees’ satisfaction on problem-solving is generally fulfilled. The questions 5 and 6 are about tutees’ receiving hints on learning skills from tutors. Both questions, more than 90.1% tutees answer ‘strongly agree’ or ‘agree’. More than 90.1% of the tutees answer ‘strongly agree’ or ‘agree’ to question 7 concerning the achievement of MLL’s mission. To the extent of tutees’ satisfaction and each tutoring skill, the learning support provided by MLL is highly evaluated. The result shows the tutor’s training incorporating ITTPC is functioning and it is reflected in improving support skills and tutors’ awareness.

Figure 1 Result of questionnaire by tutees (AY 2017-2018 / 274 responses)

	Q1: Does tutor listen your consaltaion and understand problems?	Q2: Do you feel friendliness to tutor and easy to conversation?	Q3: Does tutor explained comprehensivel y and useful for you?	Q4: Do you understand and solve the problem through tutoring?	Q5: Do you acquire any hints or cues as to self regulating learning, whether your problem is solved or not?	Q6: Do you understand learning resources for your self learning, through tutoring session?	Q7: Does tutor provide enough learning support that you need, through session?
strongly agree	235	227	211	168	181	144	187
agree	37	42	56	88	84	105	80
disagree	2	5	7	17	9	24	7
strongly disagree	0	0	0	1	0	1	0
total	274	274	274	274	274	274	274

Reported by

Yoshihito Tsuji

Michiko Nakamura

Atsuko Tominaga

Mio Tsubakimoto

Satoko Mitobe

2. Preparatory Education

2-1. Preparatory Education in English

Program description

The Pre-enrolment English course is provided for students who have successfully taken the Admissions Office (AO) or Suisen entrance exam. Its primary aim is to help students maintain their English language skills in the four or five months between the exams and the start of lectures. Because it is an online course, it also enables students to experience e-learning, communicate with each other, and learn about the university. The course consists of a mixture of communicative and individual study activities. Rather than provide study material that students passively work through individually, we have attempted to create an environment in which students make their own content in self-introduction and other discussion forums. They interact with and learn from each other by reading or responding to forum posts.

Overview of AY2017 activity

The 2018 course consisted of the following:

- a self-introduction forum,
- a series of 11 sections, each containing a discussion forum and a mini survey. These were designed to give students an opportunity to use English to communicate with each other, and to learn about themselves as a group
- an Oxford Bookworm graded reader "The Coldest Place on Earth", with online comprehension quizzes,
- access to the English Foundations course, where students were encouraged to study grammar each week,
- an online exchange, in English, with a class of 2017 Communication 4 students, with the theme "Welcome to FUN",
- a series of informative PDFs about the FUN campus and facilities, and
- a database of videos, which students were encouraged to watch, review and contribute to.

Explanations and descriptions in the course were provided in both English and Japanese.

The 2017 course did not generate much activity, and many students in the survey commented that they did not know what to do in the online part of the course. In order to rectify this situation a number of design changes were made to the course, as well as the creation of a 20-page handbook which described, in Japanese, the aims of the course, how to benefit from it, and detailed login instructions.

In late December the course handbook and the graded reader *The Coldest Place on Earth* were sent to the students. A short explanation of the course, including an invitation to allow students to access it from school, was also sent to each student's homeroom teacher at the same time.

Students accessed the course until early April. During Orientation Week a brief event will be held in which an overview of the course will be given and students can meet each other for the first time as participants. They will also completed a survey which asks for their opinions of and suggestions for the course.

Outcomes

- Of the 103 students enrolled in the course, 97 accessed it at least once.

- Students accessed the course on average once a week.
- On average each week, 40 discussion posts were created, to which there were 24 replies.
- 71 students accessed and attempted quizzes in the English Foundations course.

Participation in the 2018 iteration of the course was vastly improved over the previous year, with notable increases in discussion forum participation and completion of English Foundations activities. As it is most students' first experience in using English as a communication tool, some reluctance to contribute is expected, however as a group they created ample content for reading and discussion. A new aspect of the course design encouraged students to reply to forum posts, and this resulted in a greatly increased number of forum replies each week.

While the results of the end-of-course survey were not available at the time of writing, it is clear that students responded positively to this year's course, and no major changes are anticipated for the 2019.

Reported by

Adam Smith

2-2. Preparatory Education in Math

Program description

The basic skill of math is one of the fundamental abilities we require of students who wish to enter FUN. Although we expect incoming students to have knowledge of high school math III (differentiation and integration) connected with math study at University, even in general entrance exam entrants there are many students who did not understand math III enough. In AO and Recommendation entrants, there are students who did not study more fundamental math II and math B enough. The math ability of AO and Recommendation entrants tends to be lower than that of general entrance examination entrants at the point of admission. This is particularly notable in AO entrants. Preparatory Education in math has been carried out for such AO and Recommendation entrants under the following objectives.

- Have students re-recognize importance of high school math so that they review fundamental math II and math B
- Have students learn the basic of learning attitude not to leave problem unclear and to write the answer with clear words for readers.
- Have students brace for studying at the University by a glimpse into the university-level math and have students learn to study continuously and proactively.

Overview of AY 2017 activity

Schedule and objectives of assignments

① Assignments No.1

- Schedule: Assignment No.1 was sent on December 20 and due on January 15 (Assignment No.1 will be returned to students with the assignment No.2)
- Contents: Actual exam questions used for AO and Recommendation
- Aim: Make students review fundamental math II and math B, especially contents required immediately after entering university (complex number and equation, trigonometric function, exponential function and logarithmic function, differentiation, integration, numerical sequence). By review the contents of high-school math, students can overcome their lack of ability before they enter the University.

② Assignment No.2

- Schedule: Assignment No.2 was sent on February 1 and due on February 28 (Assignment No.2 will be returned with the assignment No.3)
- Contents: Review math II and math B at high school
- Aim: Make students review fundamental math II and math B, especially contents required immediately after entering university (complex number and equation, trigonometric function, exponential function and logarithmic function, differentiation, integration, numerical sequence). By review the contents of high-school math, students can overcome their lack of ability before they enter the University.

③ Assignment No.3

- Schedule: Assignment No. 3 was sent on March 9. ※ The answers of assignment No.3 will be given out after students enter the University.
- Contents: Preparation for taking a class of “Analysis I”
- Aim: By experiencing actual FUN’s lecture contents, make students realize that the contents of high-school math connected with study at the University. They also realize that fundamental Math skill at high school is important. By bracing for studying at the University by a glimpse into the university-level math, they are expected to study conscientiously and subjectively not to avoid a situation that they cannot catch up with the math class after they enter the University.

Outcomes

The contents and the schedule of the three assignments are almost the same as last year’s.

This year’s assignments are added fundamental high school math. We make tasks of fundamental math II and math B, especially contents required immediately after entering University.

The number of this year’s registrants is 103 (/103). The answer sheets of assignment No.1 and No.2 were submitted from all 103 registrants and 100(/103) registrants respectively.

Reported by

Yuichi Katori

3-1. Supplementary Lecture for Math (Math II B, Math III)

Program description

As supplementary lectures for Analysis I and Analysis II, which are compulsory subjects of 1st year students, we carried out exercise style lectures of math III and math II B. These lectures have been supplied to students in these several years.

Overview of AY 2017 activity

① Math III supplementary lecture

Objective: Open for all students who take Analysis I & II

Period: 8 times from May to July, 7 times from October to November (one and a half hours per lecture)

Venue: R791

Attendees: Average of 96 students in Spring semester and 62 students in fall semester

Lecturer: Mr. Suzuki (teacher of Hakodate High School)

② Basic information on Math II B supplementary lecture

Objective: Registrants of Analysis I and II who are assigned by a faculty member. For spring semester, faculty members in charge of Analysis I conducted basic math II B exam. Based on the result of the exam, students who couldn't reach criteria had to attend the Math II B supplementary lecture. Depending on the grades of spring semester or the score of the basic scholastic exam, the attendees for fall semester were determined.

Period: 8 times from May to July, 7 times from October to November (one and a half hours per lecture)

Registrants: Spring semester - 45 students / fall semester - 37 students

(Some members were changed during spring semester.)

Lecturer: Mr. Konno (The former teacher of Kakodate Ryohoku High School)

<Activities>

- Prof. Katori coordinated the contents of each session with the lecture, adjusting to the students' progress in Analysis I & II.
- Students were informed that the attendance at math III supplementary lecture will affect their grades in Analysis I & II.
- At the beginning of the year, we purchased math III textbooks for math III supplementary lecture.
- Exams of math II B supplementary lecture were marked by students (self-assessment), and teacher did final check. Attendance management was done by Prof. Katori.
- For utilizing the result to other compulsory math subject, students' scores of supplementary lectures were shared every time with all faculty members in charge of math subjects.

Outcomes

- Though math II B supplementary lecture is only for designated students, the attendance rate was basically good except for students who didn't register math classes. It seems meaningful that the supplementary lecture was provided for those who didn't study math enough at high school.
- Since the math III supplementary lecture was basically open to all students, the attendance rate was very high. While 240 students registered for Analysis I and II, 96 students and 62 students attended Math III

supplementary lecture during spring semester and fall semester respectively. It is meaningful to provide math III supplementary lecture for students not only with a low level but also with a middle level. This contributes to raising the standards of FUN students' math abilities

Reported by

Yuichi Katori

3-2. Connections Café

Program description

Connections Café is an open space outside Room 529 that provides FUN students with opportunities to communicate in English and learn about other cultures through various activities. Although student participation is in principle voluntary, first and second-year students who attend regularly can get a grade for it in their VEP courses. In addition, participation is a requirement of some teachers' Communication courses.

Students are introduced to Connections Café in Orientation Week. During this time, they receive a copy of the Japanese version of the FUN English Resources Booklet which contains detailed information about it.

The 2017 spring and autumn Moodle courses for Connections Café are at:

- <http://vle.c.fun.ac.jp/moodle/course/view.php?id=534>
- <http://vle.c.fun.ac.jp/moodle/course/view.php?id=523>

A FUN Moodle account is required to access them (all students have one).

Connections Café provides four main types of activities:

- Small Group Sessions

These were created as a place for students to practice speaking and listening to English in a low-stress environment. The sessions are offered seventeen times a week. Each lasts 40 minutes, can have a maximum of eight students, and are led by a facilitator fluent in English. Activities done during the sessions vary widely and can include free talk, focused discussions, and games.

- Special Events

These are held during lunchtime. Events include:

- English presentations about Western holidays (e.g. Easter, Halloween, Christmas)
- English presentations about student-interest themes (e.g. fireworks, music media)
- Japanese presentations by FUN faculty about living/researching abroad
- Japanese presentations by FUN students about traveling overseas
- Ping pong tournament
- Christmas tree decorating party

Special events began in earnest in 2013. There are typically five to seven events each semester.

- Movie Club

English movies with Japanese subtitles are shown six times a semester. Movies that have had a cultural impact from a wide variety of genres and time periods are chosen. For copyright reasons, only VEP students can attend this and there is a limit of 12 students each session. By watching the movie, participating in a discussion afterwards, and passing a short online quiz, students can gain credit for the Connections Café unit of the VEP course.

- TOEIC

Connections Café also offers the TOEIC test once per semester (twice if there is enough demand). Connections Café staff administer all aspects of the test, including setting the date, advertising, accepting

applications, invigilating, and distributing the results to students.

Overview of AY2017 activity

Attendance data for the spring and autumn 2017 is summarized in Table 1. As shown, 214 students attended a total of 1102 sessions (867 in small-group sessions and 235 in special events) in the spring of 2017. 151 students attended a total of 744 sessions (593 in small-group sessions and 151 in special events) in the autumn of 2017. The average number of sessions attended was 5.1 and 4.9 in the spring and autumn semesters respectively. The number of students who attended a total of five or more sessions was 88 and 56 for the spring and autumn semesters respectively.

	Spring 2017	Fall 2017	2017 Total
Small-Group Session Student Count	867	593	1,460
Special Events (+Movie Club) Student Count	235	151	386
Total Sessions Count	1,102	744	1,846
Unique Students	214	151	365
Average # of Sessions Attended	5.1	4.9	5.1
Max Total Sessions Attended by 1 Student	28	28	56
Students Attending 5+ Sessions	88	56	144

Table 1: Attendance data for Connections Café in the spring and autumn of 2017

Table 2 shows a summary of the attendance data for the past six years.

	2012 Total	2013 Total	2014 Total	2015 Total	2016 Total	2017 Total
Small-Group Session Student Count	760	910	854	871	1,424	1,460
Special Events (+Movie Club) Student Count	0	199	353	348	431	386
Total Sessions Count	760	1,109	1,207	1,219	1,855	1,846
Unique Students	312	359	452	336	318	365
Average # of Sessions Attended	2.4	3.1	2.7	3.6	5.8	5.1
Max Total Sessions Attended by 1 student	82	52	84	106	163	56
Students Attending 5+ Sessions	26	61	47	64	98	144

Table 2: Summary of attendance data from 2012-2017

As shown, the total number of sessions has been maintained or increased each year since 2012. Compared with 2012, the number of sessions attended in 2017 has more than doubled (760→1846). Furthermore, the past two years (2016 and 2017) have seen a marked increase in attendance. This increase is believed to be the result of a number of factors including:

- Increased / improved advertising of special events
- An English resources guide provided to 1st year students during Orientation week explaining how to utilize Connections Café (as well as FUN's graded readers system and FUN's online autonomous grammar study course)
- An increased number of lunchtime presentations / events both by students and teachers
- Regular attendance by ten 3rd year Project Learning students who were preparing to attend an overseas workshop

Also of note is the fact that the number of students who attended five or more sessions during a semester increased markedly from 98 in 2016 to 144 in 2017. This shows that the students that do attend are attending more frequently.

Thirteen lunchtime events were held in 2017, including:

- Two new presentations in English (“Hiking Around the World” and “Important Drinks in History: Part 1”)
- Two presentations by 3rd year Project Learning students describing their experiences at an international design workshop in Singapore. The presentations were in English.
- A presentation in Japanese by students who traveled to Uganda as part of an ongoing project to assist in helping improve a local school.
- A presentation in Japanese by two students who presented their 4th year projects at a conference in Austria.
- The three-day ping pong tournament
- The Christmas tree decorating party

Additional activities relating to the administration of Connections Cafe:

- The English Resources booklet was updated and distributed to all 2017 1st year students during Orientation week. This booklet explains the details of three FUN English programs: Connections Cafe, English Foundations, and Graded Readers.
- Creation and maintenance of the spring and autumn 2017 Connections Café Moodle courses. They are used to keep student attendance records (which are available to students) and provide event information.
- A new Connections Café facilitator was interviewed and hired in February 2018 to begin in April 2018.
- Japanese language courses for international students were held weekly.

Reported by

Andrew Johnson

Adam Smith



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Center for Meta-Learning

Meaning of CML logo: Double circles represent the relation of “Learning)
Meta-Learning”. Shape of a face or a cup is the images of an open plaza.

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(March 2018)