Evaluation of teaching and learning at Universities of Distance Education in the Republic of the Union of Myanmar

Hiromitsu Muta[1]

[1]Institute of Human Culture Studies, Otsuma Women's University
12 Sanban-cho, Chiyoda-ku, Tokyo, 102-8357 Japan

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Abstract

A questionnaire survey was conducted in February to April 2017 of university graduates under the distance education program in 2016. Unlike students studying at university campuses in regular courses, the students at distance education universities have relatively flexible study times, which allow them to work while studying at the university. 49.6% of graduates worked prior to entering the universities; and this ratio increased during the time they were students, and reached 72.8 % after graduation.

The purpose of their choice of courses was rather clear such as acquisition of knowledge and skills, future promotions, obtaining a higher degree, and interest in the content of the study. Those, who had jobs before entering universities, tended to choose courses relevant to their work. They evaluated university education somewhat highly because they more or less understood the lectures, the content of the education was relevant to their interest, and they were satisfied with the education. In terms of the types of lectures available, the intensive course and the content and quality of the lectures were evaluated somewhat highly; and the respondents were satisfied and felt they were effective. They thought that the university education helped developed various capabilities to some extent, but development of creativity and an international perspective was rather weak.

In terms of general satisfaction with the university, the female respondents showed higher satisfaction than male respondents. In terms of employment, respondents who continued their education, respondents who had the same/similar work prior to enrollment, and graduates of the "Practical Arts" such as "English" and "Economics" course were generally more satisfied than respondents in other courses. The perceptual factors contributing positive satisfaction were the sense that "Lectures were useful and satisfactory," "The course was recommended/relevant to work," and "I had a clear purpose for choosing the course." The sense of "I had a difficulty in my studies" contributed negatively.

1. Purpose

If anyone passes the "Matriculation Examination" held in March each year, they are eligible to attend a university course in Myanmar. Passing the examination signifies graduation from the high school course and admission to a university. The number of passed in March 2017 was 242,736 including those who completed the high school course in previous years; and the passing rate was 33.89% among those who took examination. In contrast, there is a physical limitation for campus-based universities to accept all who wish to be enrolled. Thus, a large number of students, who have passed, are forced to choose the distance education course which does not have any acceptance limitations. It was said that there were 284,000 students enrolled in distance education universities who comprised about 60% of the total of 471,000 university students. Since the graduation rate at distance education universities was about 85%, approximately 60,000 students graduated annually [1].

The teaching methods at distance education universities consist of printing materials, assignments,

laboratory practices, intensive schoolings, TV and Radio. But, a study using ICT is starting to be used recently. It does not require daily commuting to universities, and the learning time is flexible. In contrast, a strong motivation to continue studying is necessary to graduate through distance learning. Seen in this light, an 85% graduation rate was rather high. This is also true for regular courses at campus-based universities, but understanding the present status of students enrolled at distance education universities through a survey is necessary in order to come up with an improvement plan; and a survey has not been done been carried out thus far.

The aim of this survey is to examine the current situation of graduates from distance education universities. The students were asked what their purpose of going to the university was, how they studied as students, what kind of abilities, knowledge and skills were developed, and how they used the knowledge and skills they developed. The results will be utilized to improve the distance education universities in future.

2. Method

2.1 Objects and Method of the Survey

The targeted respondents were those who graduated from the distance education universities (YUDE: Yangon University of Distance Education and MUDE: Mandalay University of Distance Education) in 2016 and obtained either a BA or BSc. The commencements were held in February, March or April 2017, about half a year later after the time of actual graduation. The questionnaires were distributed to graduates who attended the ceremonies. The number of responses was 5,844. If the number of those graduates who enrolled in the universities in 2012 or earlier was 60,000, about 10% of the graduates filled out the questionnaires. The students at distance education universities were registered at campus-based arts & sciences universities or at professional universities because they had to take intensive studies, undertake experiments, and examinations. The number of registered universities was 40 and the students came from all states and regions, which meant the total responses were a kind of national sampling.

A characteristic of distance education universities is that the graduates may have acquired other certificates or degrees from other universities. Thus, respondents were asked to fill out the questionnaire based only on their newly acquired BA or BSc from these distance education universities.

2.2 Questionnaire and the Method of Analysis

The survey questions were basically based on the 5-stage Likert scale. The questions are as follows

Part1: Basic information of respondent.

Part2: Evaluation of the education (reason to choose the course, attitude to study, satisfaction, etc.)

Part3: Expectations to the university, future ambitions.

Part4: After graduation (especially related to work).

As the scale is from 1 to 5, an average score for an answer can be calculated for each question. The respondents were classified into a few groups, and the average scores among the groups were compared.

Two major problems were found. The most serious problem was the strong “Yes tendency.” The Myanmar people, by nature, have a strong tendency to answer questions favorably. They mainly answered “5 Strongly agree,” or “4 Somewhat agree,” but rarely chose 1 Strongly disagree” or “2 Somewhat disagree.” It was important to know this tendency when an interpretation was made based on the average score.

Another problem may be due to the design of the questionnaire. In the questionnaire, similar sub-questions were placed together as a group; and the scale of choices was made the same for easy selection. Perhaps because the respondents were not familiar with this kind of format, they tended to choose the same answers for all sub-questions in a group. If there were 15 sub-questions, it is rare for all the answers to be the same, as in for example, “4 Somewhat agree.” However, in actuality, there were many such cases; and in these cases, the answers were treated as missing values to make the difference in the answer to each sub-question clearer, and to avoid careless responses when necessary. However, this treatment did not show much difference in the results because the phenomena happened often among similar sub-questions. The group variables, which was used to compare the average scores of questions, were the gender of respondents,

working status after graduation, and course of study (department) that may have affected the average scores.

3. Analysis Results

3.1 The Basic Information that Were the Axes in the Analysis

The basic information was analyzed first. Among the total 5,844 respondents, 4,076 (69.75%) were female and 1,768 (30.25%) were male. The ratio of female among the total who passed the matriculation examination is about 60% every year, and the rate of graduation and attendance at graduation ceremonies may be higher compared to the male counterpart, so it is not surprising that the ratio of female respondents was high. The age distribution is shown in Figure 1. The majority were between the age of 22 and 25, but a few were in their 30's. Unlike the regular course in campus-based universities, students can enter distance education universities at any time once they have passed the matriculation examination. Some enter the university as needed due to their jobs or condition of their family finances.

Figure 2 shows the number of respondents by course according to the number of respondents. More than half of the respondents were enrolled in the "Myanmar," "English," and "Philosophy" departments/courses.

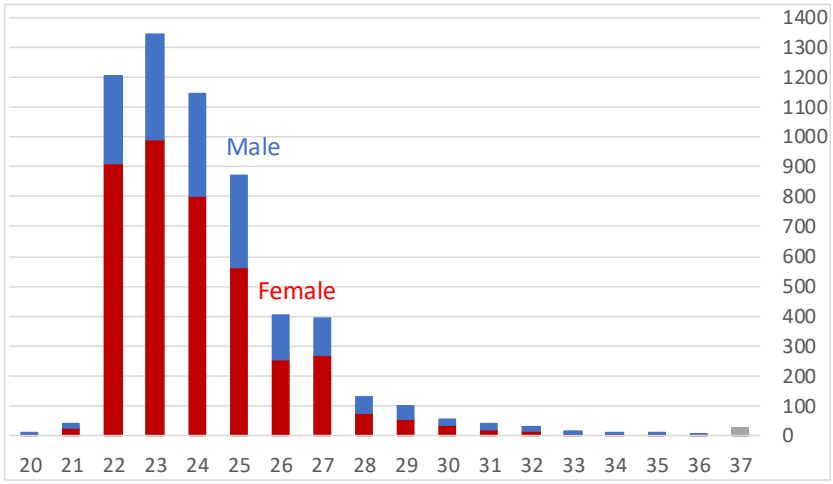


Figure 1 Distribution of Age

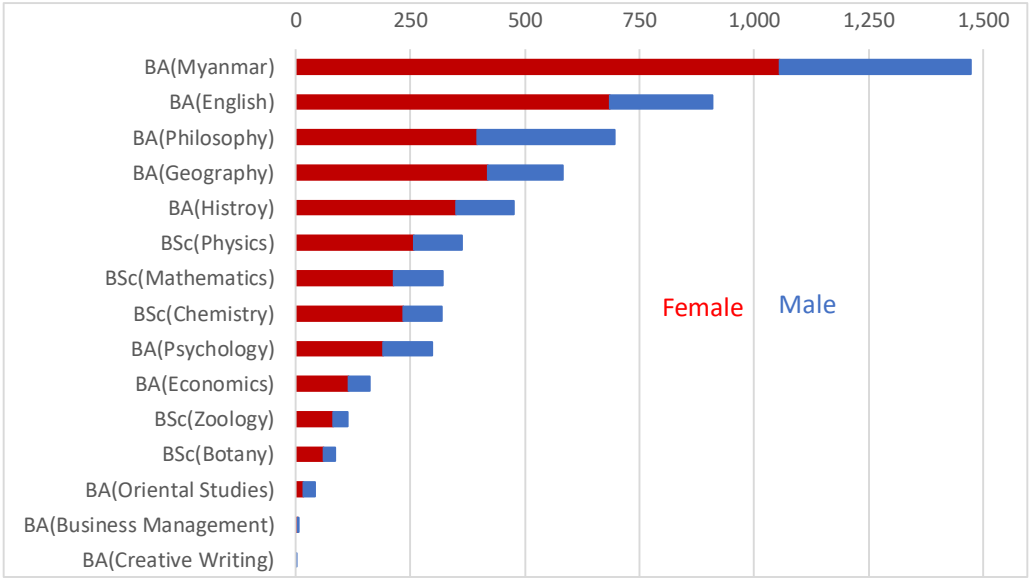


Figure 2 Number of Respondents by Course

There were other possible courses that were not listed in Figure 2 such as "Law," "Archaeology," "Home Economics," "Public Policy," "Myanmar Studies" and others, but there were no respondents in this survey. As there were so many courses to compare in one figure for, a limited number of course group was chosen for comparison later. For example, 4 course groups such as "Myanmar," "Practical Arts (English, Economics)", "General Arts (all other Arts)" and "Sciences (All Sciences)" courses were made considering the nature of courses and according to the number of respondents.

An important objective of university education is to ensure that the graduate to works in society using their abilities, knowledge, and skills acquired through their university education. Although the timing of the survey was about half a year after graduation, it was important to know how the graduates were doing after graduation. Table 1 summarized the working status of the graduates at different stages. Unlike the regular course at campus-based universities, many students (46% females and 59% males) had jobs even before entering the universities. Students quit working after entering the universities, but other students also started working. The ratio of working students increased after entering the universities; and 60% of the female and 69% of the male students worked during their time as students.

The ratio of students who were employed after graduation was 61% for female that included company employees, the self-employed (including family-run businesses) and other types of employment and 64% for male respondents. If the "Unknown" was omitted, the ratio was 71% for female and 76% for male respondents. The ratio of male who were self-employed, including family-run businesses, were higher compared to the ratio of female respondents. The ratio of graduates, who went on to pursue a higher degree or studies in other areas, was 2% for female and 1% for male respondents. If the final mark is excellent, a graduate can be admitted going to a Master's course at campus-based universities. The ratio was 4.3% among total, and the ratio was 19.8% among those who conducted further studies.

The similarity between their previous and current work was asked in another question. If the answer was "same," "similar" or "relevant," the new working category was considered to be "same/similar" and the rest was seen as "different." In combining the other answers with the different questions, a new variable named "current working status" was created and the result was listed at the bottom of Table 1. The categories were "same/similar work," "different work," "further status" was used to analyze several questions from the view point of how it related to work in the next section,

Table 1 Working Status among Respondents

Working classification		F	M	Total	% among Total F	% among Total M
Before entering the University	Worked	1,863	1,038	2,901	45.71	58.71
	Not	2,213	730	2,943	54.29	41.29
During the university student	Worked	2,453	1,215	3,668	60.18	68.72
	Not	1,623	553	2,176	39.82	31.28
Current	Employee	1,826	752	2,578	44.80	42.53
	Own Business*	497	336	833	12.19	19.00
	Further Study	93	23	116	2.28	1.30
	Looking for a job	855	316	1,171	20.98	17.87
	Not special	45	18	63	1.10	1.02
	Some work**	151	46	197	3.70	2.60
	Unknown	609	277	886	14.94	15.67
Total		4,076	1,768	5,844	100.00	100.00
Note: * It includes family business. ** The answer to this question is missing, but the answer to other question suggests working.						
Current working status	Same/similar work	1,244	609	1,853	30.52	34.45
	Different work	1,230	525	1,755	30.18	29.69
	Further Study	93	23	116	2.28	1.30
	None	900	334	1,234	22.08	18.89
	Unknown	609	277	886	14.94	15.67

Table 2 Current Working Status by Course

	Same/ similar work	Different work	Further study	Non	Total
BA(Myanmar, Creative Writing)	496	419	21	334	1,270
%	39.06	32.99	1.65	26.30	100.00
BA(English)	350	278	23	136	787
%	44.47	35.32	2.92	17.28	100.00
BA(Geograhpy)	169	186	11	151	517
%	32.69	35.98	2.13	29.21	100.00
BA(History)	139	115	1	109	364
%	38.19	31.59	0.27	29.95	100.00
BA(Philosophy)	199	227	14	164	604
%	32.95	37.58	2.32	27.15	100.00
BA(Psychology)	98	85	13	50	246
%	39.84	34.55	5.28	20.33	100.00
BA(Oriental Studies)	16	13	2	6	37
%	43.24	35.14	5.41	16.22	100.00
BA(Economics, Bsiness Management)	54	48	4	60	166
%	32.53	28.92	2.41	36.14	100.00
BSc(Chemistry)	82	108	11	66	267
%	30.71	40.45	4.12	24.72	100.00
BSc(Physics)	97	117	3	80	297
%	32.66	39.39	1.01	26.94	100.00
BSc(Mathematics)	120	94	6	55	275
%	43.64	34.18	2.18	20.00	100.00
BSc(Zoology)	13	46	5	12	76
%	17.11	60.53	6.58	15.79	100.00
BSc(Botany)	20	19	2	11	52
%	38.46	36.54	3.85	21.15	100.00
Total	1,853	1,755	116	1,234	4,958
%	37.37	35.40	2.34	24.89	100.00

but “unknown” was not used in further interpretation.

Table 2 shows work status by course. In the fields of “English,” “Oriental Studies,” and “Mathematics,” a larger ratio of graduates was engaged in “same/similar” work.

As the difference in the age of the graduates was large, the age and the employment rate were expected to have a high correlation. Figure 3 shows the ratio of the employed before entering the universities, their time as students, and their current status (about half a year after graduation) according to age. Since the number of graduates was small in some age categories, the figures showed an irregular trend in some of the ages, but generally the older students had a high employment rate. It was also clear that the employment rate was higher for students during their time at the university, in contrast to before their matriculation and higher after graduation in contrast to their time as students. Unlike regular course students, the students at distance education universities had flexible schedules during the weekday; and they appeared to take on work whenever it was available. After graduation, the employment rate was 70-80% regardless of age.

3.2 Evaluation of University Education (Reason to Choose Courses, Attitude for Study, Capacity Development, Satisfaction, etc.)

3.2.1 Reasons to Choose the Course

Figure 4 shows the reasons for choosing the course according to gender. The samples, in which all the answers to the sub-questions were the same, were omitted to make the difference between sub-questions clearer and only careful responses were considered. The same treatment was done for the following questions. The reasons from (1) to (4), which showed clear study objectives, were evaluated higher. The reasons from (5) to (8), which showed rather passive reasons, were evaluated lower. The reasons from (10) to

(11), which were relevant to work, and reason (9), which showed the matriculation examination score, were somewhat in the middle, but not very high.

Many answers to sub-questions were significantly higher for female respondents.

Figure 5 shows the reasons a course was chosen according to a student's current working status. Those who engaged in the same/similar work replied more frequently that the education was relevant to work. Those, who continued their studies, responded with clearer and more active objectives as seen in (1) to (4), and reasons such as having been advised by others were low. In contrast, those, who were not employed, had a relatively higher response that their reasons for studying was due to advice from others.

Figure 6 shows the average value of the response value based on the reasons for choosing the course according to course. The sub-questions that indicated a large difference in average scores among the courses were related to work, and the average scores for "Practical Arts" course was higher. Those, who majored in "Practical Arts" course tended to choose the same/ similar employment after graduation, and necessity seemed to be the stronger reason to choose these courses. The reason for choosing the course among those who majored in the Science courses, did not appear to be based on advice from others in comparison to those who majored in the Art courses.

3.2.2 Evaluation of University Education

Figure 7 shows the evaluation results about university education from several perspectives according to gender. The results were generally high, and the students were rather satisfied because the lectures were somewhat understandable and relevant to students. Those who were not satisfied were outnumbered by those who were.

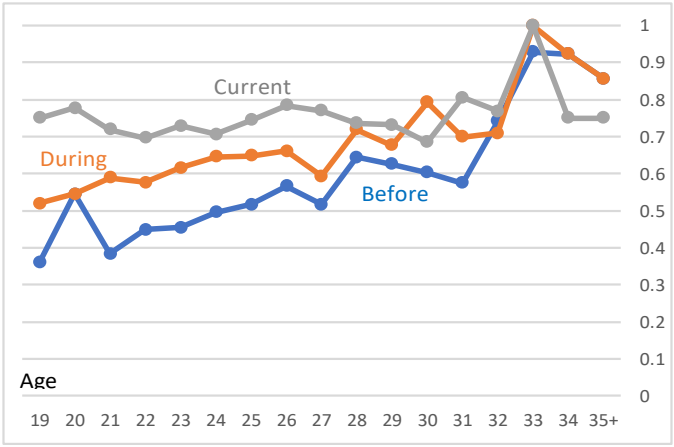


Figure 3 Employment Rate According to Time and Age

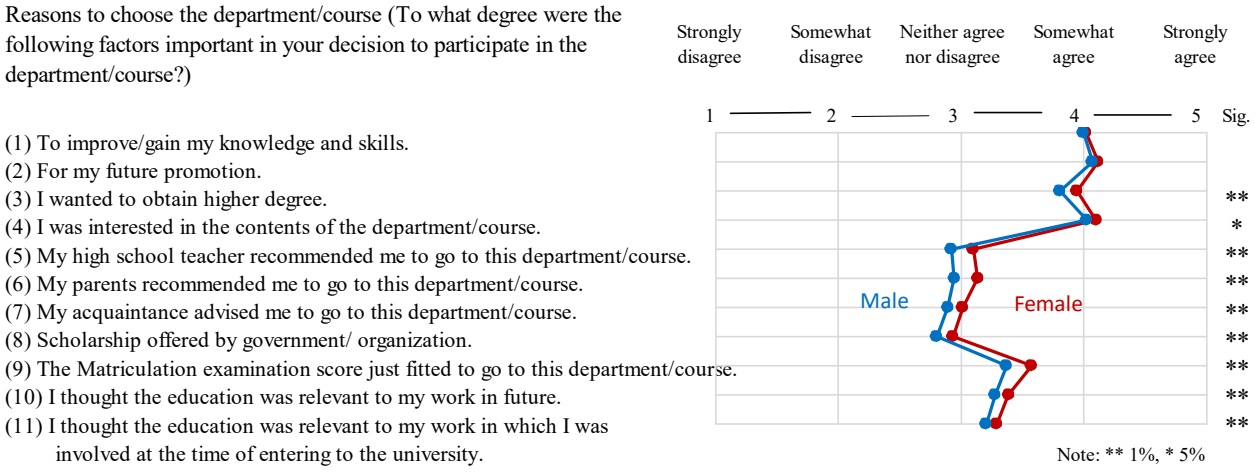


Figure 4 Reasons to Choose the Course (by Gender)

The number of respondents who asked to change their curriculum was less than half. The female respondents were more positive to all the sub-questions in contrast to the male respondents.

Figure 8 shows the same evaluation results according to working status. Only one sub-question indicated a significant difference according to working status, which was the achievement of initial objectives and goals through study. Those who enrolled in further studies or those who had the same/similar work showed higher average scores; and those who had different work showed a lower average score. These meant that those students who enrolled in further studies or those who had the same/similar work had clearer objectives to study and tended to study harder. As a result, evaluation of the university education was higher in general.

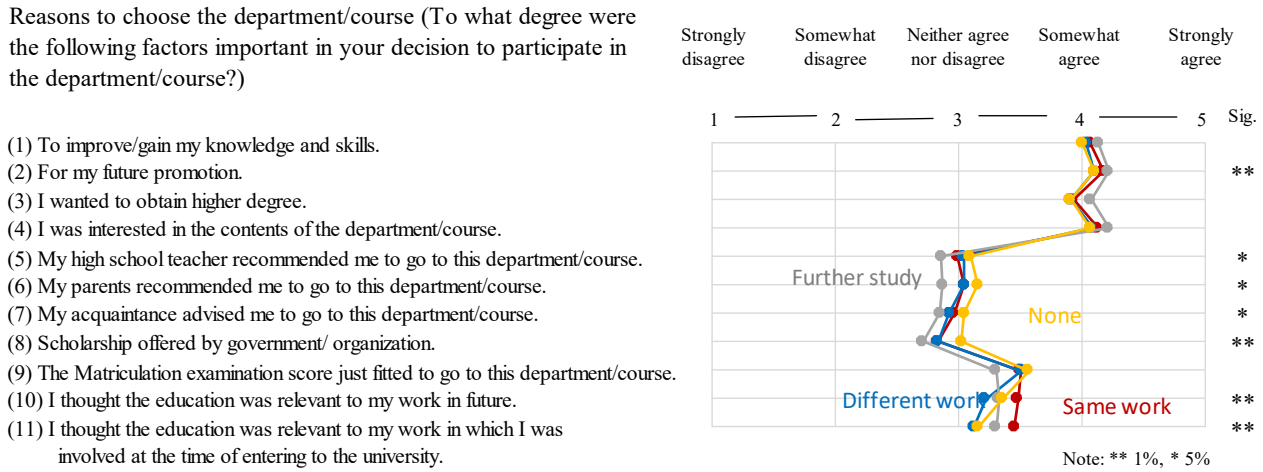


Figure 5 Reasons to Choose the Course (by Working Status)

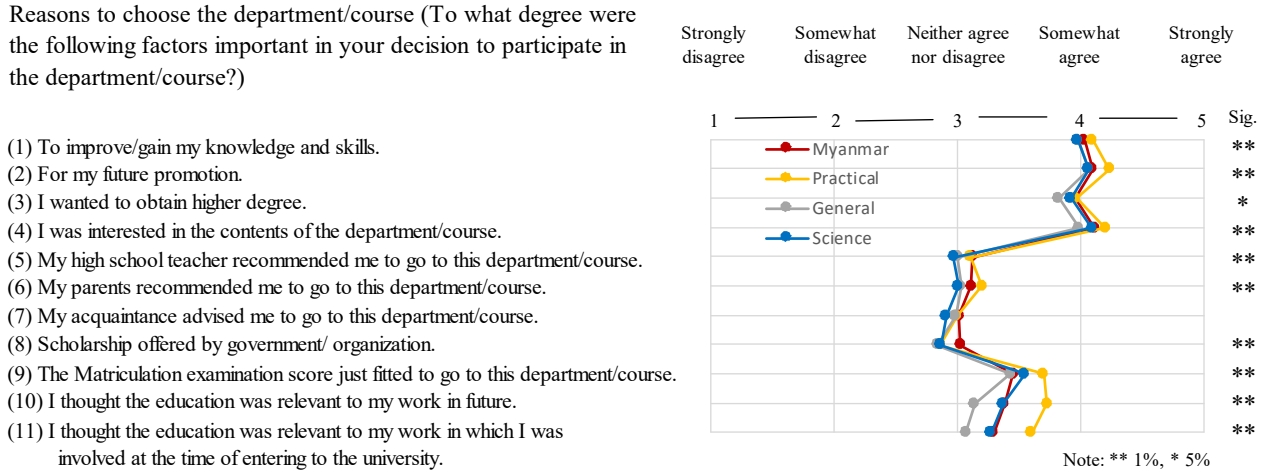


Figure 6 Reasons to Choose the Course (by Course)

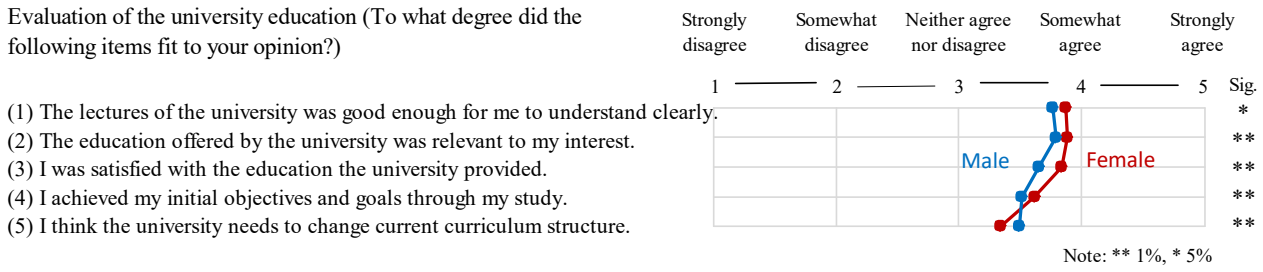


Figure 7 Evaluation of the University Education (by Gender)

Figure 9 shows the same evaluation results by course. All the sub-questions except changing the curriculum showed a significant difference. “Myanmar” course evaluated education the highest in terms of clear understanding, relevancy to interest, and satisfaction. “Practical Arts” course had the highest evaluation in achieving initial objectives through study. Considering the overall results shown in Figure 8, many students in “Practical Arts” course tended to choose the course because they thought that the study was helpful to their work.

Figure 10 shows the answer to the question about a difficulty in studying according to working status. All of the average scores exceeded 3.0, and it seemed students had difficulties in studying to some extent. Some tendencies were observed, such as students had

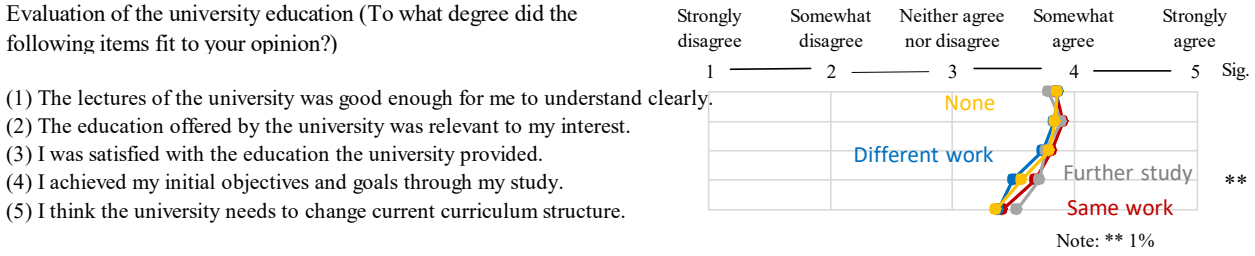


Figure 8 Evaluation of the University Education (by Working Status)

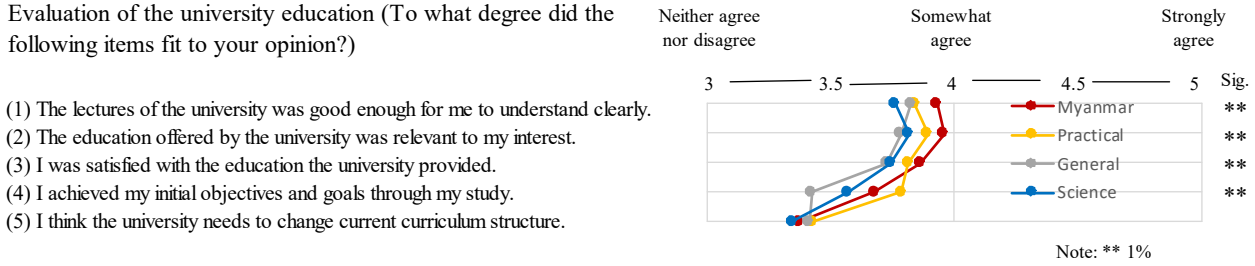


Figure 9 Evaluation of the University Education (by Course)

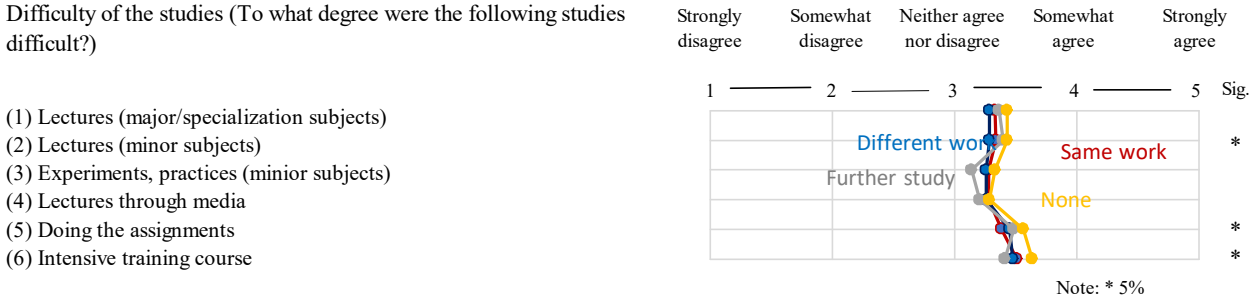


Figure 10 Studies Students Had Difficulties (by Working Status)

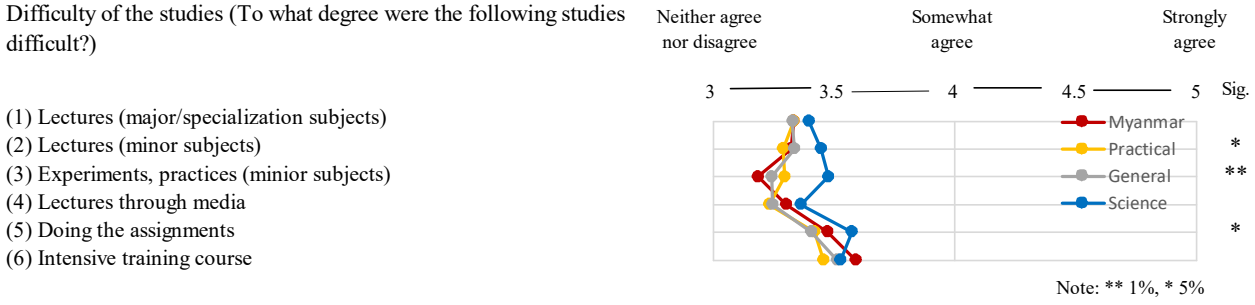


Figure 11 Studies Students Had Difficulties (by Course)

difficulties in intensive training courses or assignments, and those, who were not employed, were generally felt difficulties in studying. There were no sub-questions that showed a significant difference between male and female respondents, so the figure by gender was omitted.

Figure 11 shows the same results according to course. There were clear differences for several sub-questions according to course. The students had difficulties to study in "Sciences" course, which seemed to require a lot of work such as experiments. There appears to be a correlation between the nature of the course and course workload.

3.2.3 Satisfaction with the University Education from Several Perspectives

Students have to complete many studies for at least for four years to obtain their BA or BSc. Figure 12 shows the degree of satisfaction with several aspects of university education by gender. Most of the respondents were somewhat satisfied, with the exception about the quality of lectures through media. Lectures through media is unique to distance education universities and it must be evaluated highly to compete with conventional universities. It should be improved. Education through an intensive training course or contents of a lecture are expected to be the same as the regular course of campus-based universities, and students were somewhat satisfied in this area. In general, the female students were more satisfied than the male students.

Figure 13 shows the satisfaction with university education according to working status. There was a significant difference about the content and quality of lectures among employed students; and the "same/ similar work" group showed the highest satisfaction. Clear study objectives and relevancy of the study scored higher among these students. There was no significant difference among the 4 course classifications in terms of satisfaction level with university education.

The necessity of changing a curriculum was asked as sub-question (5) in Figure7 to Figure 9. Figure 14 shows the relationship between opinions on the necessity of changing a curriculum and satisfaction with the university education. The question about the necessity of changing a curriculum was a kind of negative question and it was easy to be misunderstood. So, only those who did not answer the same value to five sub-questions on the evaluation of university education, and to six sub-questions on the satisfaction with the university education were chosen, and the average scores were calculated to obtain certain answers. The number of samples was reduced, but uncertain answers were deleted. During this process, the number of those who answered the question, if he/she thought the university needs to change the current curriculum

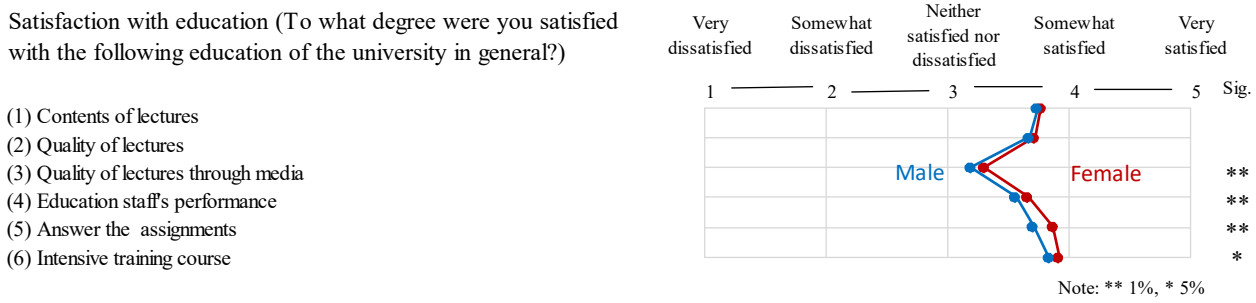


Figure 12 Satisfaction with the University Education (by Gender)

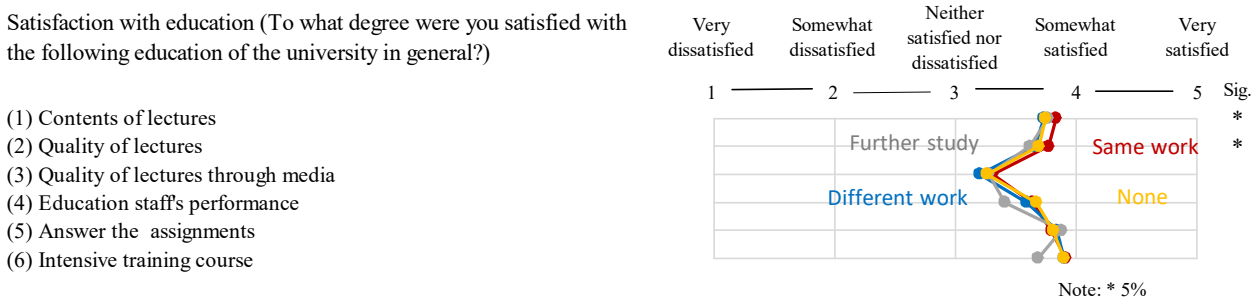


Figure 13 Satisfaction with the University Education (by Working Status)

structure, “Strongly disagree” was very small as 53. These responses were omitted to create Figure 14. According to Figure 14, it was clear that satisfaction with all the aspects of the education were lower except for lecture quality through media, when the graduates thought that the curriculum needed to be changed. The dissatisfaction with quality of lectures through media was commonly observed to be everybody.

3.2.4 Capacity Development through University Education

It is expected that diverse abilities, knowledge, and skills are developed at the university. Figure 15 shows the results to questions asking about what kind of abilities, knowledge and skills were developed according to gender. It was clear that the least developed capacity was creativeness and international perspectives. This may not be a problem of distance education universities, but for universities in general. The number of sub-questions were 15, and they were grouped into 3 classifications such as “concrete knowledge and skills” (1) to (5), “basic abilities” (6) to (10), and “sense and attitude” (11) to (15). This classification was confirmed by factor analyses. It was clear that “sense and attitude” were more developed in female students than in male students.

Figure 16 shows the results of capacity development according to working status. In general, those who had same/similar employment agreed that many of their abilities, knowledge and skills were developed. There was a significant difference among the groups such as speaking efficiently, problem-solving ability, and logical thinking in the “concrete knowledge and skills” area, leadership and collaborative skills in “basic abilities” area, and sense of work responsibility and international perspective in the area of “sense and attitude.” Figure 17 shows the results by course. The “Myanmar” course showed higher development in many abilities, knowledge and skills especially within the group on “concrete knowledge and skills.”

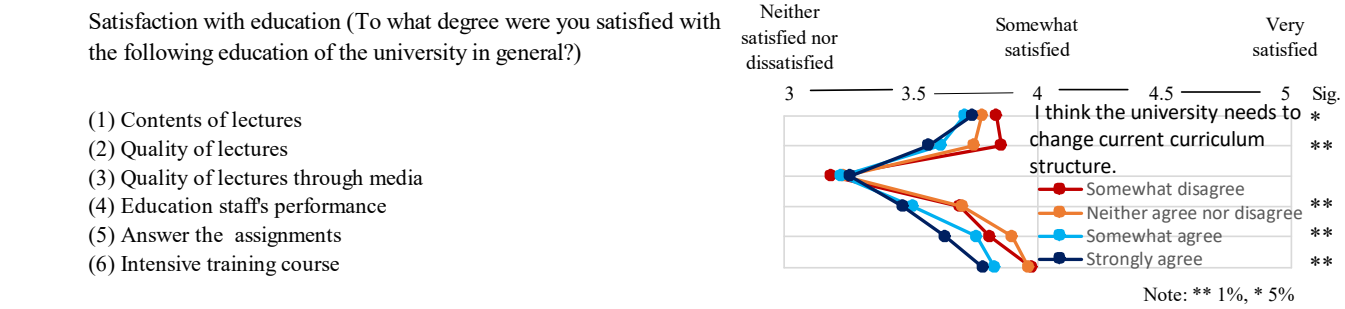


Figure 14 Satisfaction with the University Education (by Opinion on Curriculum Change)

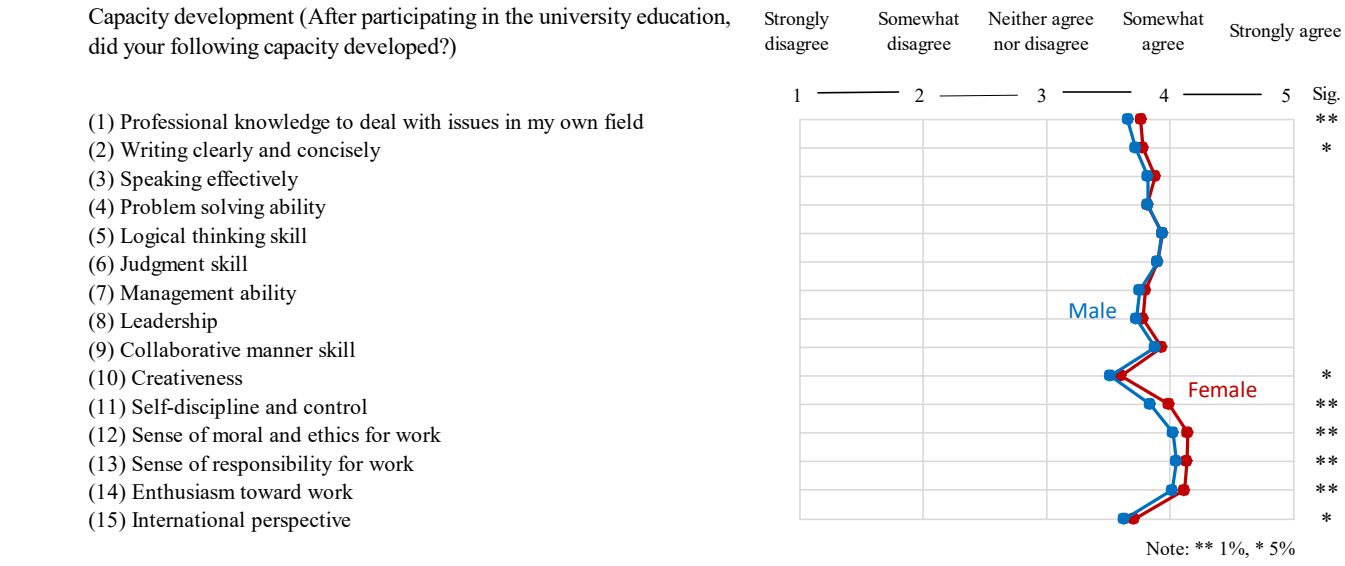


Figure 15 Capacity Development by Education (by Gender)

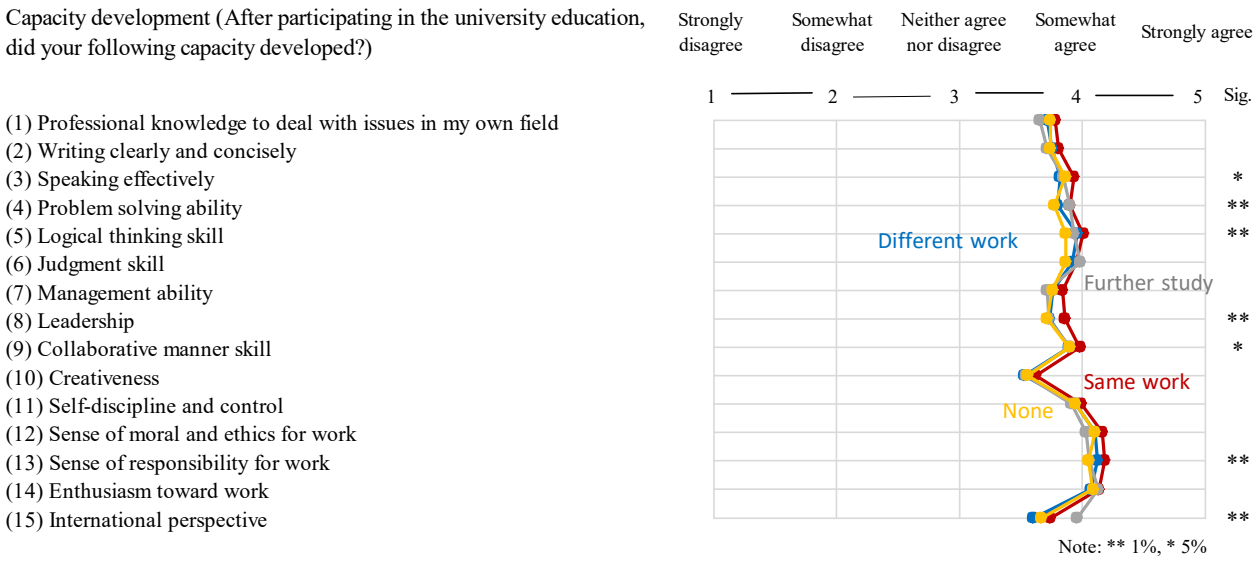


Figure 16 Capacity Development by Education (by Working Status)

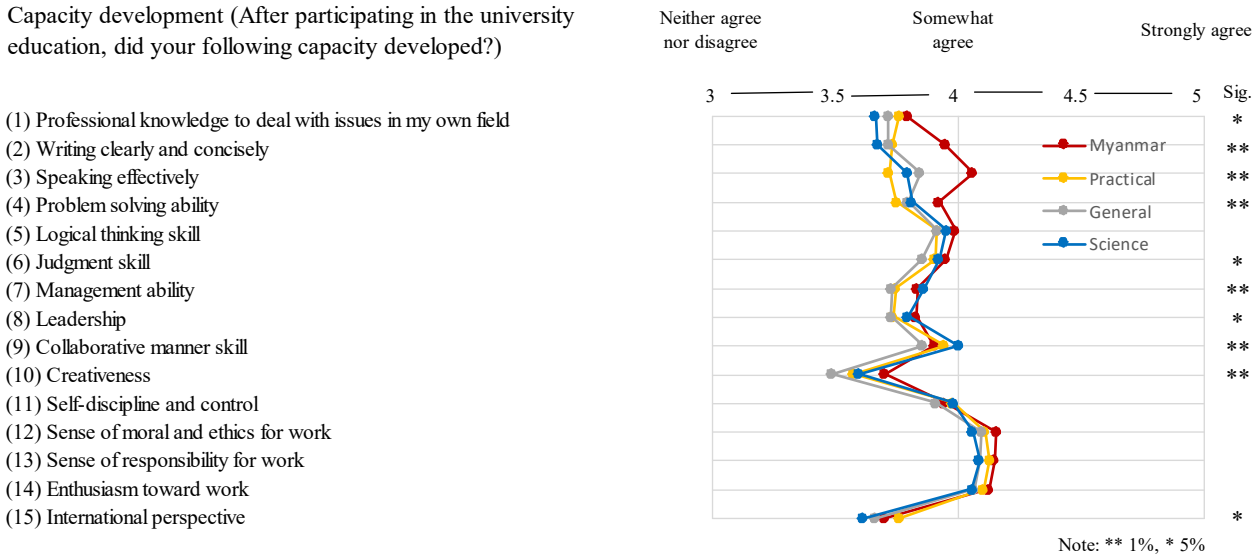


Figure 17 Capacity Development by Education (by Course)

3.2.5 General Satisfaction with the Course

The answer to the question "Would you recommend participation in this department/course to your friend?" shows a general satisfaction with the course. The total average was 2.98 and it was close to "3 Somewhat recommend." This value varied based on several groups. Regression analyses were conducted to find the significant explanatory factors as a whole. Table 3 shows how a personal variable such as an attribute of the respondents affects the willingness to recommend independently from other attributes. Since the independent variables are all dummy variables, a coefficient shows the value to be increased. For example, "female respondent" is 0.1028 point higher than "male respondent." Among the employed group, "further study" was the highest followed by "same/similar." The range shows the largest difference of coefficients among categories in a factor variable, and the course indicated the largest effect. "Practical Arts" course was the largest and "General Arts" course was the lowest among course classifications.

Then, what was the relationship between the willingness to recommend and to evaluate university education or degree of capacity development. Table 4 shows the result of this regression analysis. The dependent variable was the degree to which a course

was recommended to friends, and the independent variables were perceptual variables such as evaluation of universities and the recognition of capacity development. There were many variables related to evaluation and capacity development. The sub-questions in a large group were generally similar, and it was impossible to use all the sub-questions for regression because of multi-collinearity. So, factor analyses were conducted to find out the structure of variables and create a set of groups of variables. An average score of variables in a group was calculated and the score was used to represent the group. There were 9 group variables. According to Table 4, it was clear that the group variables such as "Lectures were useful and satisfactory," "The course was recommended/relevant to work," and "I had a clear purpose for choosing the course" contributed positively to the willingness to recommend the course to friends, and "I had a difficulty in my studies" contributed negatively.

3.3 Expectation to the University and the Hope in Future

3.3.1 Satisfaction of Life and the Contribution of Education

The average score to the answer to the question, "To what degree are you satisfied with your life now?" was 3.77 and slightly lower than "4 Somewhat satisfied." Satisfaction in life does not come only from a university education. The average score for the answer to the question, "To what degree is your satisfaction influenced by the result of university education?" was

Table 3 Personal Variables to Explain the "Willingness to Recommend to Friends"

Independent variables		Coef.	t	P>|t|	Range
Gender	Female	0.1028	3.07	0.002	0.1028
	Male	0.0000	-	-	
Working status	Same work	0.0969	2.44	0.015	0.1649
	Different work	0.0157	0.39	0.695	
	Further Study	0.1649	1.58	0.115	
	None	0.0000	-	-	
Course	Manmar	0.0525	1.14	0.253	0.2660
	Practical Arts	0.1985	4.03	0.000	
	General Arts	-0.0675	-1.57	0.117	
	Sciences	0.0000	-	-	
Constant		2.8697	56.65	0.000	
			Adj R-squared =		0.0125
			F(7, 4950) =		8.96
			Number of obs. =		4958

Table 4 Perceptional Variables to Explain the "Willingness of Recommendation to Friends"

Independent variables	Coef.	t	P>|t|	
I had a clear purpose for choosing the course	0.1156	3.84	0.000	Note 1
Course was recommended / relevant to work	0.1029	4.96	0.000	Note 2
Lectures were useful and satisfactory	0.2221	6.77	0.000	Note 3
Univ. needs to change curriculum structures	0.0115	0.69	0.491	Note 4
I had a difficulty in my studies	-0.0663	-3.34	0.001	Note 5
I was satisfied with the education	0.0631	1.75	0.080	Note 6
Knowledge and skills were developed	0.0790	1.78	0.076	Note 7
Basic abilities were developed	0.0436	0.95	0.340	Note 8
Useful senses and attitude were developed	0.0963	2.27	0.023	Note 9
Constant	0.3981	3.51	0.000	
	Adj R-squared =		0.1004	
	F(9, 5834)		73.42	
	Number of obs. =		5844	

3.15 and slightly higher than, "3 Somewhat influenced." When these two answers are combined, the degree of life satisfaction based on their university education can be calculated. Thus, the following indicator was calculated.

Degree of life satisfaction by university education =
(Life satisfaction - 3) * Contribution of education

The possible distribution of this value ranges from -10 to 10. This indicator was regressed by personal variables attributed to a person and perceptional variables.

Table 5 shows the contribution of personal variables to explain the degree of life satisfaction due to a university education. Working status showed the largest range. Same/similar work, or different employment showed a higher coefficient than those who did not work. The coefficient was higher for the female student in contrast to the male student. The course did not show a relatively large range compared to Table 3, but "Practical Arts" course showed the highest coefficient among the courses.

Table 6 shows the contributions of perceptional variables that explain "satisfaction of life by education." Unlike Table 4, "Lectures were useful and satisfactory," and "I was satisfied with the education" contributed very positively, and "University needs to change curriculum structures" or "I had a difficulty in my studies" contributed negatively.

Table 5 Personal Variables to Explain the "Satisfaction of Life by Education"

Independent variables		Coef.	t	P>|t|	Range
Gender	Female	0.5573	5.10	0.000	0.5573
	Male	0.0000	-	-	
Working status	Same work	0.9065	7.00	0.000	0.9065
	Different work	0.4973	3.81	0.000	
	Further Study	0.6251	1.83	0.067	
	None	0.0000	-	-	
Course	Manmar	0.1102	0.73	0.463	0.4577
	Practical Arts	0.2489	1.55	0.122	
	General Arts	-0.2088	-1.49	0.138	
	Sciences	0.0000	-	-	
Constant		2.1349	12.90	0.000	
			Adj R-squared =		0.0166
			F(7, 4950) =		12.97
			Number of obs. =		4958

Table 6 Perceptional Variables to Explain the "Satisfaction of Life by Education"

Independent variables	Coef.	t	P>|t|	
I had a clear purpose for choosing the course	-0.0600	-0.61	0.544	Note 1
Course was recommended / relevant to work	0.2218	3.27	0.001	Note 2
Lectures were useful and satisfactory	1.0653	9.92	0.000	Note 3
Univ. needs to change curriculum structures	-0.2497	-4.56	0.000	Note 4
I had a difficulty in my studies	-0.1672	-2.57	0.010	Note 5
I was satisfied with the education	0.5535	4.69	0.000	Note 6
Knowledge and skills were developed	0.1716	1.18	0.239	Note 7
Basic abilities were developed	0.2075	1.39	0.166	Note 8
Useful senses and attitude were developed	0.2814	2.02	0.043	Note 9
Constant	-4.9860	-13.42	0.000	
	Adj R-squared =		0.1102	
	F(9, 5834) =		81.39	
	Number of obs. =		5844	

3.3.2 Plan in Future

The respondents just graduated from universities about half a year ago, and they have a long life ahead of them. Figure 18 shows the difference in their future plans by gender. Many wanted to change to a better job in Myanmar or considered entering a university in Myanmar to obtain a higher degree. But, not many thought about going abroad to work or study. There were a few differences between the genders. The female respondents tended to want a higher degree in Myanmar than male respondents, and the male respondents tended to want to go abroad for work.

Figure 19 shows the difference in future plans according to working status. It was natural for those who continued to study further to respond they planned to obtain a higher degree in Myanmar or to go abroad to study. As Figure 20 shows, respondents in the "Practical Arts" course planned to obtain a higher degree in Myanmar, to go abroad to study, or to work abroad.

3.3.3 Abilities, Knowledge and Skills Useful to Life

After graduation, many realize what kind of abilities, knowledge and skills are helpful in life. Figure 21 shows the results according to gender; and abilities related to "sense and attitude," sub-questions from (11) to (15) were felt to be relatively helpful, and the female respondents had higher evaluations. Creativity and international perspective were relatively felt not to be helpful.

Figure 22 shows the results according to working status. The average scores for all the abilities, knowledge and skills for those with same/similar employment was high. The general awareness about their work may be high for them. There was a 1% significant difference among those employed in the area of "Writing clearly and concisely," "Problem solving ability," "Leadership," "Creativeness," and this difference may have stemmed from their work experience.

Figure 23 shows the results by course. The "Myanmar" course showed a higher average score in most of the sub-questions. The "Sciences" course showed a relatively high score in "Collaborative manner skill," but they were relatively lower for abilities on "sense and attitude." These may have been due to the different occupations of the graduates in the course.

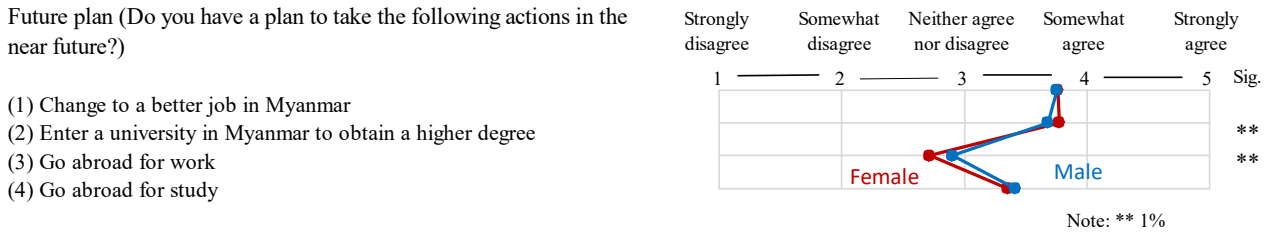


Figure 18 Plan in Future (by Gender)

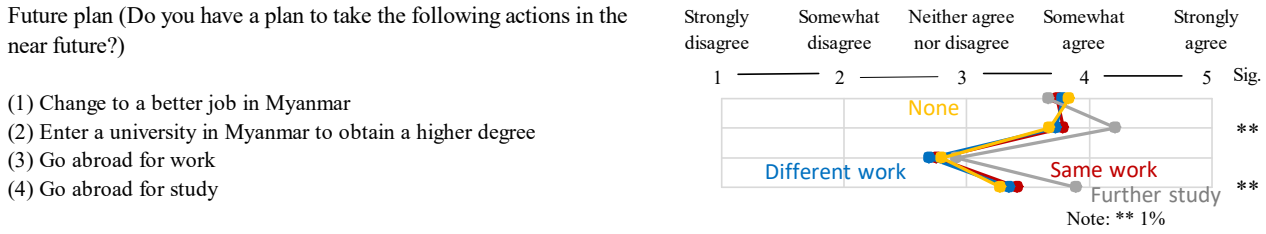


Figure 19 Plan in Future (by Working Status)

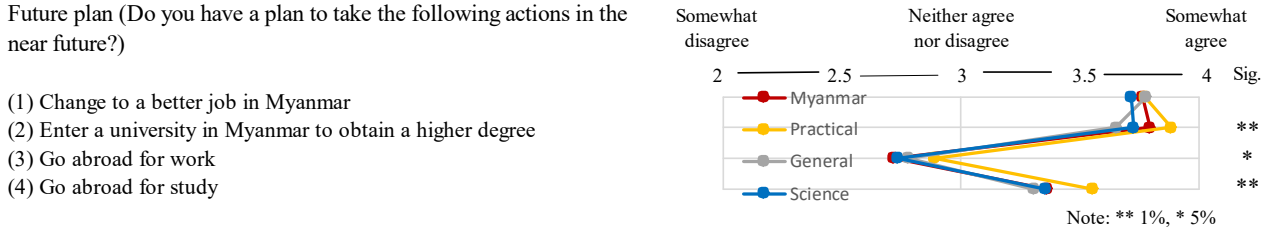


Figure 20 Plan in Future (by Course)

Useful abilities, knowledge and skills (How helpful are the following abilities, knowledge and skills in your life?)

(1) Professional knowledge to deal with issues in my own field
(2) Writing clearly and concisely
(3) Speaking effectively
(4) Problem solving ability
(5) Logical thinking skill
(6) Judgment skill
(7) Management ability
(8) Leadership
(9) Collaborative manner skill
(10) Creativeness
(11) Self-discipline and control
(12) Sense of moral and ethics for work
(13) Sense of responsibility for work
(14) Enthusiasm toward work
(15) International perspective

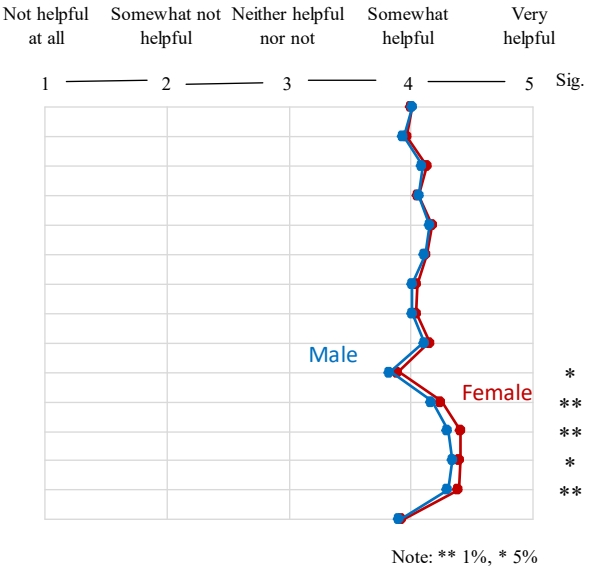


Figure 21 Usefulness of Abilities, Knowledge and Skills to Life (by Gender)

Useful abilities, knowledge and skills (How helpful are the following abilities, knowledge and skills in your life?)

(1) Professional knowledge to deal with issues in my own field
(2) Writing clearly and concisely
(3) Speaking effectively
(4) Problem solving ability
(5) Logical thinking skill
(6) Judgment skill
(7) Management ability
(8) Leadership
(9) Collaborative manner skill
(10) Creativeness
(11) Self-discipline and control
(12) Sense of moral and ethics for work
(13) Sense of responsibility for work
(14) Enthusiasm toward work
(15) International perspective

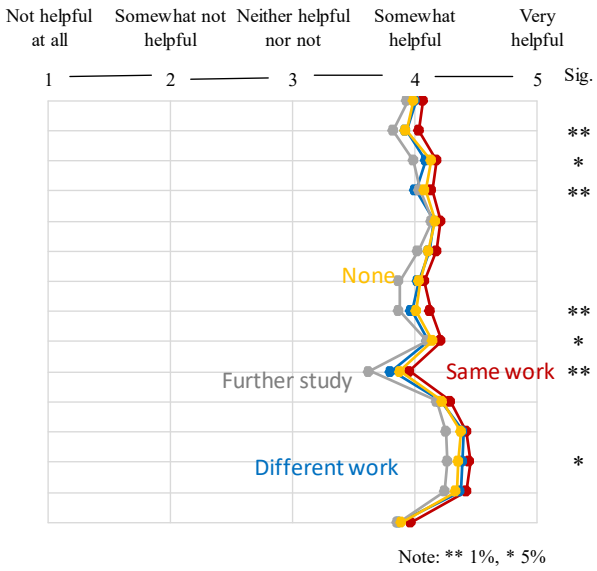


Figure 22 Usefulness of Abilities, Knowledge and Skills to Life (by Working Status)

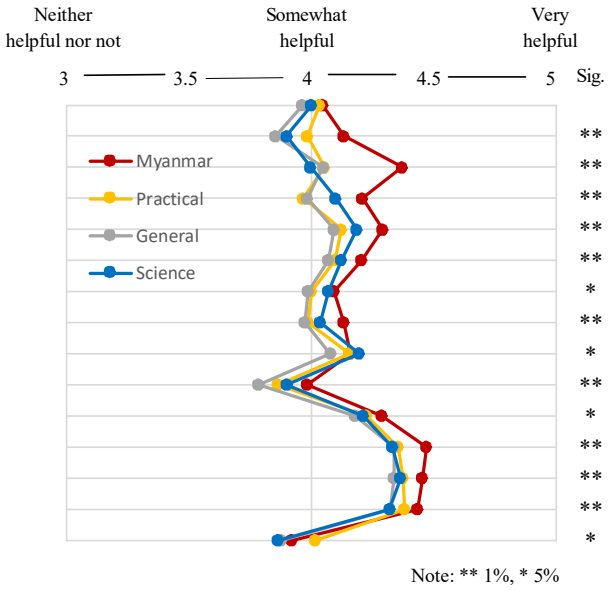
Recognizing how much the abilities, knowledge and skills are helpful in life may be due to the type of occupation, but it may also be due to how much of the abilities, knowledge and skills were developed through university education. Figure 24 shows the degree of help gained from the abilities, knowledge, and skills acquired through capacity development. In general, if they felt that the degree of capacity development was high, respondents recognized that the abilities, knowledge and skills were helpful in life. In addition, although respondents felt that their capacities were not developed very much, they recognized that they were helpful in their life. From the viewpoint of difference in recognition between “developed” and “helpfulness” of abilities, knowledge and skills, the difference was large for those who felt that their capacities were not sufficiently developed.

3.3.4 Abilities, Knowledge and Skills Which were Expected to be Developed by University Education

Then, what kind of abilities, knowledge and skills were expected to be developed by university education?

Useful abilities, knowledge and skills (How helpful are the following abilities, knowledge and skills in your life?)

(1) Professional knowledge to deal with issues in my own field
(2) Writing clearly and concisely
(3) Speaking effectively
(4) Problem solving ability
(5) Logical thinking skill
(6) Judgment skill
(7) Management ability
(8) Leadership
(9) Collaborative manner skill
(10) Creativeness
(11) Self-discipline and control
(12) Sense of moral and ethics for work
(13) Sense of responsibility for work
(14) Enthusiasm toward work
(15) International perspective

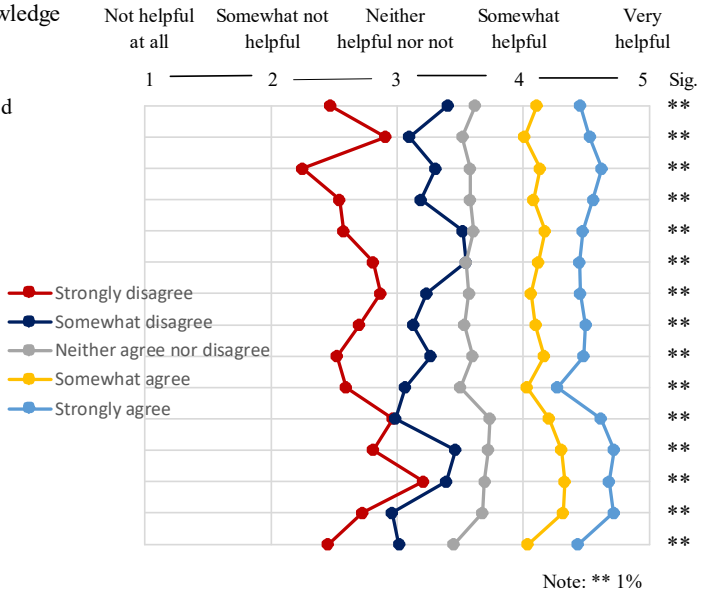


Note: ** 1%, * 5%

Figure 23 Usefulness of Abilities, Knowledge and Skills to Life (by Course)

Useful skills (How helpful are the following abilities, knowledge and skills in your life?)

(1) Professional knowledge to deal with issues in my own field
(2) Writing clearly and concisely
(3) Speaking effectively
(4) Problem solving ability
(5) Logical thinking skill
(6) Judgment skill
(7) Management ability
(8) Leadership
(9) Collaborative manner skill
(10) Creativeness
(11) Self-discipline and control
(12) Sense of moral and ethics for work
(13) Sense of responsibility for work
(14) Enthusiasm toward work
(15) International perspective



Note: ** 1%

Figure 24 Usefulness of Abilities, Knowledge and Skills to Life (by Capacity Developed)

Figure 25 shows the results according to gender. The total shape looked like Figure 21. The graduates seemed to expect that the capacity development gained through a university education to be useful in society. The average score on creativity and international perspective was rather low. The graduates may not have reached positions where these abilities were really needed. The average score of sub-questions on "sense and attitude" were relatively high; and female respondents showed higher scores than male respondents.

Figure 26 shows the same results according to working status. There were significant differences among the employed respondents in the areas of "Speaking effectively," "Sense of moral and ethics for work," "International perspectives," and others. Those who had the same/similar work generally showed a higher score, but those who went on to further study showed a higher score in sub-questions related to "sense and attitude."

Figure 27 shows the same results according to course.

Expectation of development (How do you expect that university education should emphasize its efforts to develop the following abilities, knowledge and skills?)

(1) Professional knowledge to deal with issues in my own field
(2) Writing clearly and concisely
(3) Speaking effectively
(4) Problem solving ability
(5) Logical thinking skill
(6) Judgment skill
(7) Management ability
(8) Leadership
(9) Collaborative manner skill
(10) Creativeness
(11) Self-discipline and control
(12) Sense of moral and ethics for work
(13) Sense of responsibility for work
(14) Enthusiasm toward work
(15) International perspective

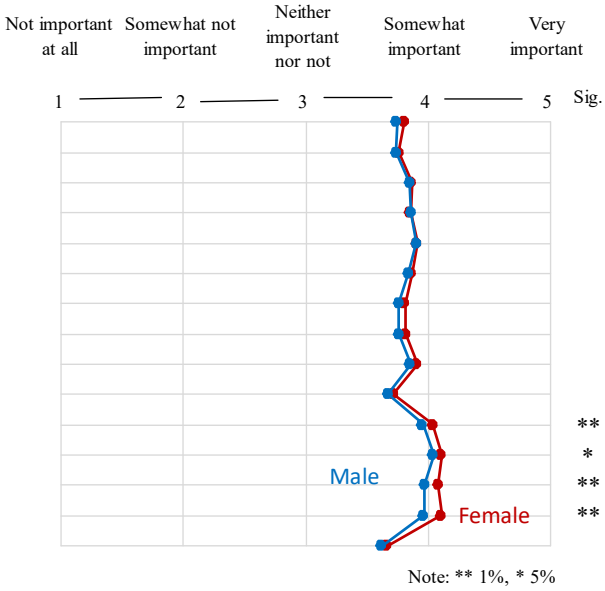


Figure 25 Abilities, Knowledge and Skills Expected to be Developed (by Gender)

Expectation of development (How do you expect that university education should emphasize its efforts to develop the following abilities, knowledge and skills?)

(1) Professional knowledge to deal with issues in my own field
(2) Writing clearly and concisely
(3) Speaking effectively
(4) Problem solving ability
(5) Logical thinking skill
(6) Judgment skill
(7) Management ability
(8) Leadership
(9) Collaborative manner skill
(10) Creativeness
(11) Self-discipline and control
(12) Sense of moral and ethics for work
(13) Sense of responsibility for work
(14) Enthusiasm toward work
(15) International perspective

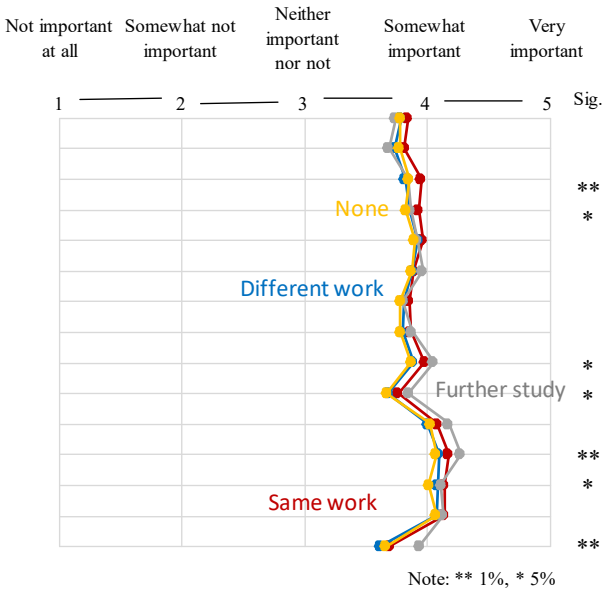


Figure 26 Abilities, Knowledge and Skills Expected to be Developed (by Working Status)

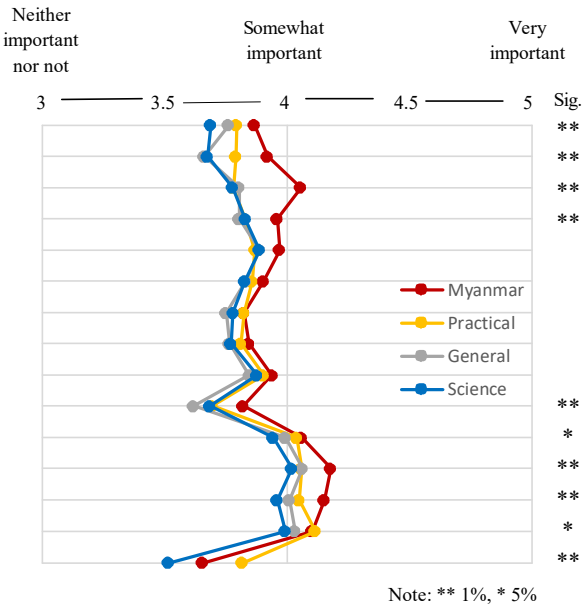
There were significant differences in the response to sub-questions related to “concrete knowledge and skills” and “sense and attitude,” but there were no significant differences in sub-questions related to “basic abilities.” The “Myanmar” course had a higher score in both “concrete knowledge and skills” and “sense and attitude.” “Sciences” course had lower scores in the area of “concrete knowledge and skills” and “sense and attitude.”

Figure 25 to Figure 27 resembled Figure 21 to Figure 23 in shape. On average, many graduates appeared to believe that their capacities had been developed during their time at the university and felt that these capacities were going to be effective in society. Thus, the value on the degree of usefulness in society subtracted from the degree of capacity development was defined.

If this value was negative, it signified that capacity was developed, but it was not very useful in actual life. If so, graduates may not expect the university to be of much help in their capacity development. If this value was positive, student capacities were not developed as was expected to be useful in society. In this case, some

Expectation of development (How do you expect that university education should emphasize its efforts to develop the following abilities, knowledge and skills?)

(1) Professional knowledge to deal with issues in my own field
(2) Writing clearly and concisely
(3) Speaking effectively
(4) Problem solving ability
(5) Logical thinking skill
(6) Judgment skill
(7) Management ability
(8) Leadership
(9) Collaborative manner skill
(10) Creativeness
(11) Self-discipline and control
(12) Sense of moral and ethics for work
(13) Sense of responsibility for work
(14) Enthusiasm toward work
(15) International perspective

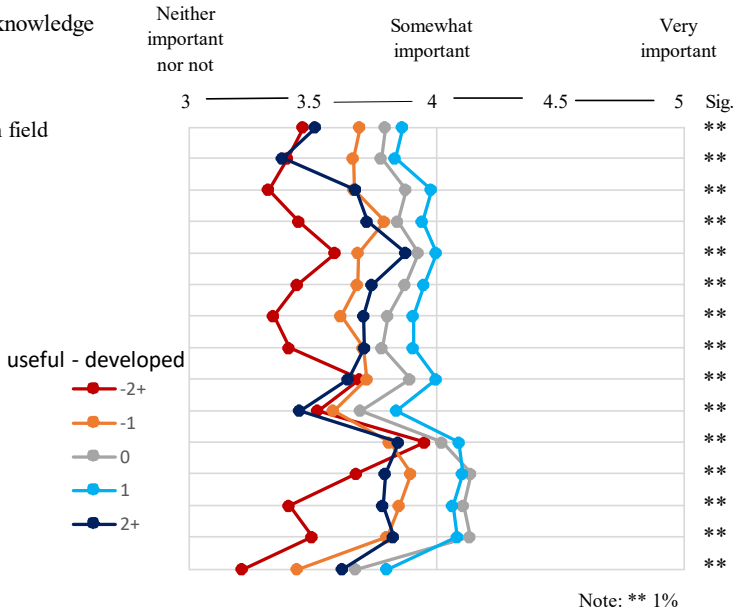


Note: ** 1%, * 5%

Figure 27 Abilities, Knowledge and Skills Expected to be Developed (by Course)

Usefulness and expectation of development (abilities, knowledge and skills)

(1) Professional knowledge to deal with issues in my own field
(2) Writing clearly and concisely
(3) Speaking effectively
(4) Problem solving ability
(5) Logical thinking skill
(6) Judgment skill
(7) Management ability
(8) Leadership
(9) Collaborative manner skill
(10) Creativeness
(11) Self-discipline and control
(12) Sense of moral and ethics for work
(13) Sense of responsibility for work
(14) Enthusiasm toward work
(15) International perspective



Note: ** 1%

Figure 28 Abilities, Knowledge and Skills Expected to be Developed by University (by Difference between Usefulness and Development Expected)

graduates may expect a university education to help develop their capacity, but they may also rely on sources other than the university to develop their abilities.

As the original scale was 1 to 5, this value includes the range of -4 to +4. But, as the actual distribution was centered at 0, large plus or minus values were rare. Values -4 and -3 were merged to -2, and 4 and 3 were merged to 2, so the range of values was from -2 to +2. Figure 28 shows the average value for the capacity value representing the expected capacity development gained at the university according to these values. When the value increased from -2 to 0, the expectation increased for all abilities, knowledge, and skills. When the value rose to 1, this expectation increased somewhat, but if the difference was 2, this expectation dropped without exception. If the degree of development was slightly lower than its anticipated usefulness, the graduates expected the university to help develop their abilities, knowledge and skills, but if the degree of development was much lower than expected, graduates seemed to

expect other agencies or opportunities to help develop their abilities.

3.4 After Graduation (Related to Employment)

3.4.1 Industries and Occupations

72.8% of respondents were employed, and Figure 29 shows the distribution of employment by industry. The majority were employed in "Health care and social assistance" and "Other services." A breakdown of the employment showed graduates to be engaged mainly as "Technicians, associate professional," "Service and sale workers," and "Clerical support workers" as Figure 30 shows. Although they graduated from universities, they were still young; and if their majors were not a professional course, then this employment distribution appears to be appropriate.

3.4.2 Reasons for Choosing Their Current Employment

The reasons for choosing their current employment are shown in Figure 31 to Figure 33, but future opportunities and salaries are not major reasons. The highest average score reflected the existence of an OB/OG who introduced them to their jobs. As shown in Figure 31, male respondents tended to consider the details about a company/organization. As Figure 32 shows, it was natural for those, who had the same/similar work before entering the university, to choose the reason, "Continuation of the work which I started before entering to the university," and "Relationship to the field of my major/specialization

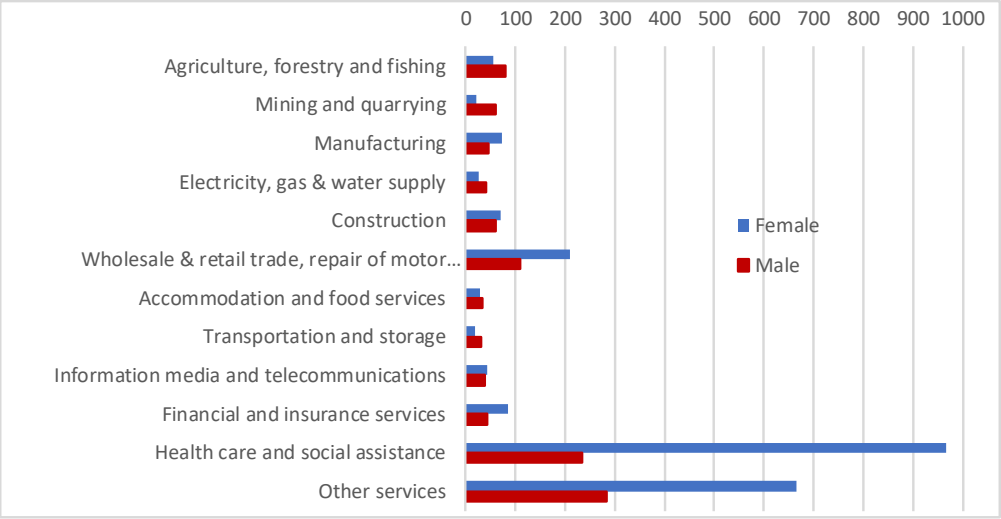


Figure 29 Employment by Industry (by Gender)

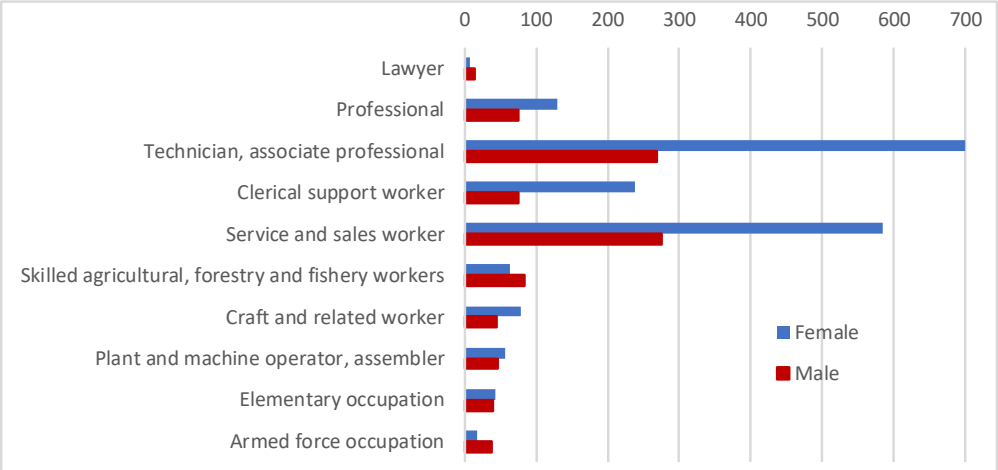
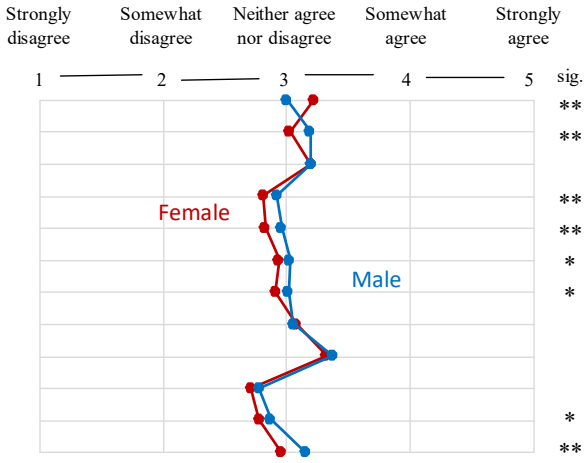


Figure 30 Employment by Occupation (by Gender)

Current work (What was the reasons you considered to have decided your current work?)

(1) Relationship to the field of your major/specialization subjects
(2) Kind of business
(3) Place of work
(4) Scale of the company/organization
(5) Familiarity/ image of the company/ organization
(6) Management policy
(7) Stability of the company/ organization
(8) Salary
(9) Existence of OB/OG
(10) Conditions of works such as working hour and/or welfare
(11) Family business
(12) Continuation of the work which I started before entering the university

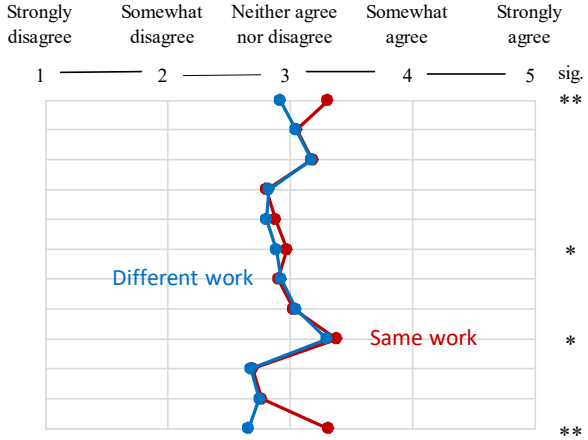


Note: ** 1%, * 5%

Figure 31 Reason to Choose the Current Work (by Gender)

Current work (What was the reasons you considered to have decided your current work?)

(1) Relationship to the field of your major/specialization subjects
(2) Kind of business
(3) Place of work
(4) Scale of the company/organization
(5) Familiarity/ image of the company/ organization
(6) Management policy
(7) Stability of the company/ organization
(8) Salary
(9) Existence of OB/OG
(10) Conditions of works such as working hour and/or welfare
(11) Family business
(12) Continuation of the work which I started before entering the university

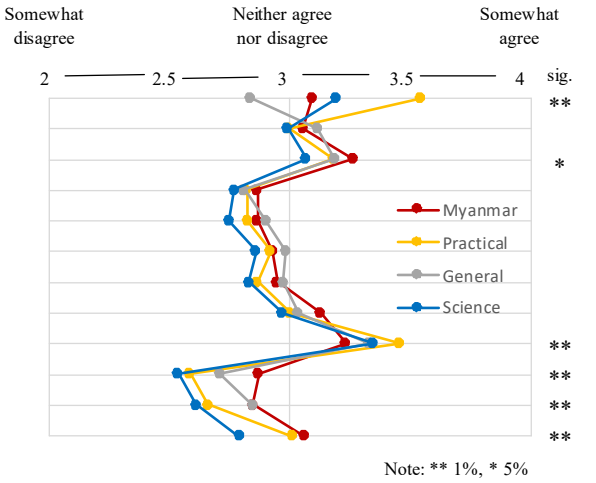


Note: ** 1%, * 5%

Figure 32 Reason to Choose the Current Work (by Working Status)

Current work (What was the reasons you considered to have decided your current work?)

(1) Relationship to the field of your major/specialization subjects
(2) Kind of business
(3) Place of work
(4) Scale of the company/organization
(5) Familiarity/ image of the company/ organization
(6) Management policy
(7) Stability of the company/ organization
(8) Salary
(9) Existence of OB/OG
(10) Conditions of works such as working hour and/or welfare
(11) Family business
(12) Continuation of the work which I started before entering the university



Note: ** 1%, * 5%

Figure 33 Reason to Choose the Current Work (by Course)

subjects" when selecting their course and to consider the effectiveness of the study to their jobs at the time.

Figure 33 shows the results according to course. The "Practical Arts" course had a stronger response to "Relationship to the field of major/specialization subjects," and the "General Arts" course had the

weakest response. The "Sciences" course showed a weaker response in "Condition of works such as working hour and/or welfare," "Family business," and "Continuation of the work which I started before entering university."

3.4.3 University Education Useful to Current Work (by Working status)

Then what was useful to the current work or job? Figure 34 shows the results according to working status. "Intensive training course," "Doing the assignment," "Content of lectures," "Quality of lectures" were evaluated relatively high, and "Education staff performance" or "Quality of lectures through media" were evaluated generally low. Similar questions were asked and answered in Figure 13, and the pattern of the answers was similar. The items evaluated as satisfactory were felt to be useful. From Figure 34, it was clear that those who had the same/similar work evaluated the content and quality of lectures more than those who took different jobs. This may be true because those who took the same/similar job tended to choose courses based on a correlation with their jobs. There was no significant difference among genders.

Figure 35 shows the results by course. The difference in the average scores among the courses were clear in the area of "Contents of lectures," "Quality of lectures through media," and "Intensive training course." The average score of "Intensive training course" for the "Sciences" course was relatively low, and it may indicate that continuous understanding by stages is important for the "Sciences" course.

4. Conclusion and Policy Implications

4.1 Conclusion

A questionnaire survey was conducted in February, March, and April 2017 to those who were graduated from distance education universities in 2016. Unlike the regular course students, the students at distance education universities had relatively flexible study times that allowed them to work. 49.6% of the graduates mentioned that they were employed before entering the universities, and this ratio increased during their time as students. The ratio reached 72.8 % after graduation.

The purpose for their choosing course was rather clear such as the acquisition of knowledge and skills, future promotions, obtaining a higher degree in future, and interest in the content of the study. Those who had

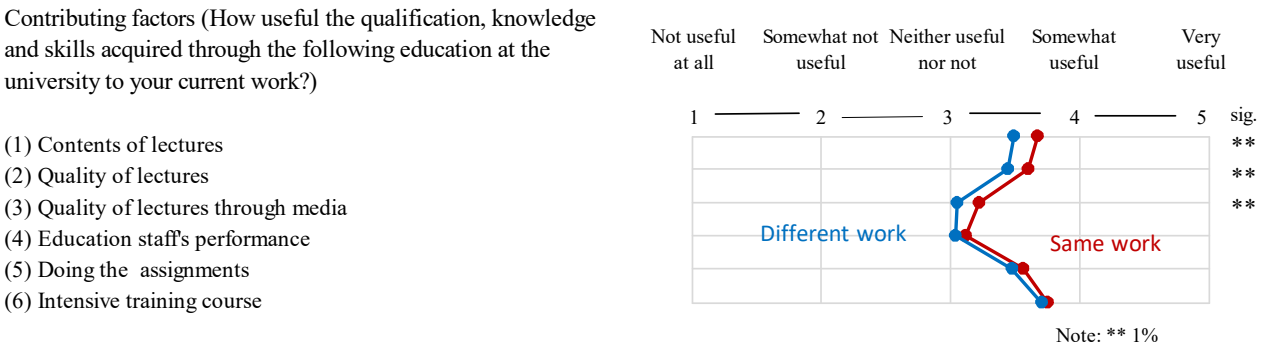


Figure 34 University Education Useful to Current Work (by Working Status)

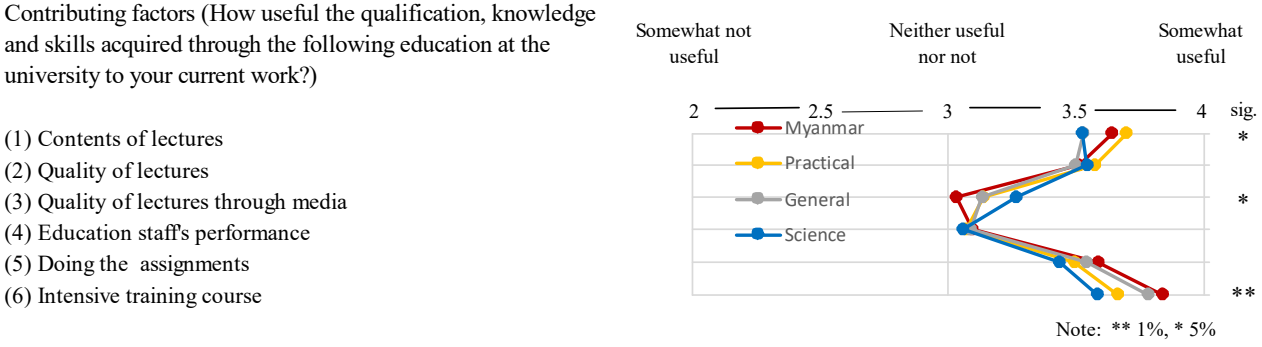


Figure 35 University Education Useful to Current Work (by Course)

jobs before entering the universities tended to choose courses that were relevant to their work.

They evaluated university education somewhat highly such as their ability to understand lectures, whether the contents of the education were relevant to their interests, and whether they were satisfied with the education. In terms of the lectures, the intensive course, the lecture content, and quality of the lectures were evaluated somewhat highly; and they were satisfied and felt the lectures had been effective.

The answer to the question, "How much do you want to recommend the course to your friends?" reflected general satisfaction with the university. Considering the basic characteristics of respondents, the female respondent was more satisfied than the male respondent, those who continued to study and who had the same/similar work were more satisfied than students with other types of working status, and graduates from the "Practical Arts" such as "English" and "Economics" course were more satisfied than graduates of other courses. If the same answer was regressed according to the perception of their university education, it was clear that "Lectures were useful and satisfactory," "Course was recommended/relevant to work," "I had a clear purpose for choosing the course" contributed positively to the overall satisfaction, and "I had a difficulty in my studies" contributed negatively.

In terms of the respondents who said their satisfaction with life was due to their university education, the sense that university education was useful, and satisfaction with their university education contributed positively, and "I had a difficulty in my studies" contributed negatively.

Respondents admitted that the university education had developed various abilities, knowledge and skills to some extent, but creativity and the international perspective were not developed fully compared to other abilities.

After graduation and along with their life experiences, the students may begin to adequately understand what kind of abilities, knowledge and skills were useful in actual life. Abilities related to "sense and attitude" were considered to be more important than other abilities, and female respondents felt this more strongly than male respondents. Creativity and international perspectives were not considered very useful at the time of the survey.

4.2 Limitations of This Survey

One of the limitations of this survey was obtaining answers from those who attended the graduation ceremony. There was no other way to distribute questionnaires to the graduates of distance education universities because the universities did not have any other useful access to graduates. According to previous research, the graduation rate of distance education universities was about 85% [1]. About 15% of those who did not graduate were not targeted in this survey. In addition, attendance at the graduation ceremony was not compulsory. Only those who felt favorable to the universities and were happy about graduating attended the ceremony.

That limitation may have biased the answers positively. However, this kind of evaluation of distance education universities are rare; and the results contained many findings that contributed to understanding the current situation in order to improve education in future.

4.3 Policy Implications

A couple of policy implications can be drawn from this study.

1) Improvement of educational content and method by media

Although satisfaction with the university education was generally high, it was clear that satisfaction with the lectures through media was very limited. Many graduates also felt that it was not useful for their work. The merit of distance education universities compared to regular campus-based universities is the element of flexibility. However, lectures through media, which is the most distinctive feature of distance education, was given a low evaluation. This indicated that improvements were needed.

2) Improvement of educational content

The development of creativity and international perspective was given a relatively low evaluation and they were not considered useful in the jobs of the graduates. This may not be a problem unique to distance education universities, but of universities in general.

It may also be a problem of an organization or society where the graduates work. Many national leaders and experts express the importance of these abilities as

crucial to the development of the nation; and they should be emphasized and expanded. Additional surveys should be conducted for further information on how to manage this issue.

Acknowledgments

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References

[1] Hla Tint. *Perspectives of Open and Distance Learning in Myanmar,* mimeo. 2012.

Note

Note 1 Average of the following "**reason why I chose the department/course**."
(1) To improve/gain knowledge and skills.
(2) For my future promotion.
(3) I wanted to obtain a higher degree.
(4) I was interested in the content of the department/course.

Note 2 Average of the following "**reason why I chose the department/course**."
(5) My high school teacher recommended I enroll in this department/course.
(6) My parents recommended I to attend this department/course.
(7) My acquaintance advised me to enroll in this department/course.
(8) Scholarship was offered by the government/ organization.
(9) The matriculation examination score met the requirements of this department/course.
(10) I thought the education was relevant to my work in future.
(11) I thought the education was relevant to my work in which I was involved in at the time of I entered the university.

Note 3 Average of the following "**how I thought the education of my university**."
(1) The lectures at the university was good enough for me to understand clearly.
(2) The education offered by the university was relevant to my interests.
(3) I was satisfied with the education the university provided.
(4) I achieved my initial objectives and goals through my studies.

Note 4 Average of the following "**how I thought the education of my university**."
(5) I think the university needs to change its current curriculum structure.

Note 5 Average of the following "**how I had a difficulty in my studies**."
(1) Lectures (major/specialization subjects). (2) Lectures (minor subjects).
(3) Experiments, practices (minor subjects). (4) Lectures through media.
(5) Doing the assignments. (6) Intensive training course.

Note 6 Average of the following "**how I was satisfied with the education**."
(1) Contents of lectures. (2) Quality of lectures
(3) Quality of lectures through media. (4) Education staff's performance.
(5) Doing the assignments. (6) Intensive training course.

Note 7 Average of the following "**evaluation of the developed capacity**."
(1) Professional knowledge to deal with issues in my own field.
(2) Writing clearly and concisely. (3) Speaking effectively.
(4) Problem solving ability. (5) Logical thinking skills.

Note 8 Average of the following "**evaluation of the developed capacity**."
(6) Judgment skills. (7) Management ability.
(8) Leadership. (9) Collaborative skills.
(10) Creativeness.

Note 9 Average of the following "**evaluation of the developed capacity**."
(11) Self-discipline and control. (12) Sense of moral and ethics for work.
(13) Sense of responsibility for work. (14) Enthusiasm toward work.
(15) International perspective.

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Abstract（Japanese）

2016年に遠隔教育大学を卒業した学生を対象に，大学教育の評価を中心に，2017年2～4月にアンケート調査を実施した．遠隔教育大学の学習はキャンパスベースのレギュラーコースの学生の学習と異なり，学習時間が比較的柔軟である所から，入学前から仕事を持っていた者は49.6%と多く，在学中にも就業率は上昇し，卒業の半年後では就業率は72.8%と比較的高い．

大学に進学した目的は，知識，技能の獲得，将来の昇進，将来の高位学位取得，コースの内容に興味があるなど，選択目的が明確である．入学前から仕事を持っていた者は，その仕事に関連するコースを選ぶ傾向が強い．大学の評価に関しては，講義はおおむね理解できた，教育内容は自分の関心と関連がある，教育にある程度満足している，と答えている．様々な形態の授業に関しては，インテンシブ・コースや講義の内容，質については比較的満足度が高く，有効であったと感じられている．様々な能力の開発に関しては，大学教育によってある程度は開発されているが，創造性，国際的視野に関する能力の開発程度は弱い．

このコースでの学習をどの程度友人に推薦したいかという質問は，そのコースへの全般的な満足度と同じと考えられる．回答者の属性では，性別では女性，就業状況別では継続して学習している者，入学前と同一・類似の仕事に就いている者，コース別では実用的アートコース（英語，経済学）が全般的に高い評価をしている．大学教育への評価結果との関連から見ると，大学の教育が役に立ったと感じた，自分の仕事に関係があると考えたり，推薦された，コースに興味をもって意欲をもって入学した，などがプラスに寄与し，勉強に困難を感じた事はマイナスに寄与している．

Key words：遠隔教育，卒業生調査，教授学習，大学評価

Hiromitsu Muta
Present post: Senior Chief Researcher, Institute of Human Culture Studies, Otsuma Women's University

Education: Graduate School of Education, The University of Tokyo，Ph.D.（Tokyo Institute of Technology）.
Major: Evaluation studies, Comparative and Sociology of Education.
Current interest: Studies related to the Educational Reform in the Republic of the Union of Myanmar.