

## Questionnaire survey results in FY2021

### ◇ Questions related to Preliminary production stage

1. In the first activity of Carrier Educational Program, you understood that animation production needed the involvement of many people and was a hectic job even completing one film.			
n = 82			
1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all
68	13	0	1
The sum of 1 and 2		The sum of 3 and 4	
81		1	
The result of Exact Probability Test by comparing the sum of 1 and 2 with the one of 3 and 4			
Two-tailed test: p=0.0000    ** (p<.01)			
It indicated that the sum of 1 and 2 achieved statistical significance in the two-tailed test.			

2. When the expert on animation production visited, you understood that it was necessary to draw surprisingly a lot of pictures for making one animation film.			
n = 82			
1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all
60	20	2	0
The sum of 1 and 2		The sum of 3 and 4	
80		2	
The result of Exact Probability Test by comparing the sum of 1 and 2 with the one of 3 and 4			
Two-tailed test: p=0.0000    ** (p<.01)			
It indicated that the sum of 1 and 2 achieved statistical significance in the two-tailed test.			

3. When you made clay animation for the first time, you understood that making animation with your hands was hard work.			
n = 82			
1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all
66	15	1	0

The sum of 1 and 2	The sum of 3 and 4
81	1
The result of Exact Probability Test by comparing the sum of 1 and 2 with the one of 3 and 4	
Two-tailed test: $p=0.0000$ ** ( $p<.01$ ) It indicated that the sum of 1 and 2 achieved statistical significance in the two-tailed test.	

4. When you made clay animation for the first time, you thought that it was difficult to make it but also fun once you could do it.			
n = 81			
1. Thought well	2. Thought a little	3. Not think well	4. Not think at all
37	31	12	1
The sum of 1 and 2		The sum of 3 and 4	
68		13	
The result of Exact Probability Test by comparing the sum of 1 and 2 with the one of 3 and 4			
Two-tailed test: p=0.0000    ** (p<.01)			
It indicated that the sum of 1 and 2 achieved statistical significance in the two-tailed test.			

Regarding above all 4 question items related to Preliminary production stage, according to comparison between the sum of the positive choices “1. Understood well or 1. Thought well” and “2. Understood a little or 2. Thought a little” and the sum of the negative choices “3. Not understand well or 3. Not think well” and “4. Not understand at all or 4. Not think at all” by Exact Probability Test, statistically significant difference at  $p<.01$  that inclined to the side of the sum of the positive choices was found. By the way,  $p<.01$  means that a possibility that will overturn the result of statistically significant difference that inclined to the side of the sum of positive choices is less than 1 time even same question is asked 100 times.

◇ Questions related to Planning stage

5. For the first time when the activity of making a proposal for planning was held, you understood that completing your own planning was difficult and a hectic job.
n = 82

1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all
53	26	3	0
The sum of 1 and 2		The sum of 3 and 4	
79		3	
The result of Exact Probability Test by comparing the sum of 1 and 2 with the one of 3 and 4			
Two-tailed test: p=0.0000    ** (p<.01)			
It indicated that the sum of 1 and 2 achieved statistical significance in the two-tailed test.			

6. When you listened to other members' proposals for planning in your group, you understood that each of them had a different story.			
n = 82			
1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all
47	25	10	0
The sum of 1 and 2		The sum of 3 and 4	
72		10	
The result of Exact Probability Test by comparing the sum of 1 and 2 with the one of 3 and 4			
Two-tailed test: p=0.0000    ** (p<.01)			
It indicated that the sum of 1 and 2 achieved statistical significance in the two-tailed test.			

7. You understood that selecting only one planning in your group was a difficult job with disputes and troubles.			
n = 82			
1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all
49	19	10	4
The sum of 1 and 2		The sum of 3 and 4	
68		14	
The result of Exact Probability Test by comparing the sum of 1 and 2 with the one of 3 and 4			
Two-tailed test: p=0.0000    ** (p<.01)			
It indicated that the sum of 1 and 2 achieved statistical significance in the two-tailed test.			

8. You understood that it was necessary to discuss and collaborate with everyone in your group on deciding important issues such as a theme for your film.			
n = 82			
1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all
52	28	2	0
The sum of 1 and 2		The sum of 3 and 4	
80		2	
The result of Exact Probability Test by comparing the sum of 1 and 2 with the one of 3 and 4			
Two-tailed test: p=0.0000    ** (p<.01)			
It indicated that the sum of 1 and 2 achieved statistical significance in the two-tailed test.			

9. When the planning presentation was held and you got advices from the expert on animation production, you understood that which part of your group's proposal for planning was necessary to be revised.			
n = 82			
1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all
47	27	7	1
The sum of 1 and 2		The sum of 3 and 4	
74		8	
The result of Exact Probability Test by comparing the sum of 1 and 2 with the one of 3 and 4			
Two-tailed test: p=0.0000    ** (p<.01)			
It indicated that the sum of 1 and 2 achieved statistical significance in the two-tailed test.			

Regarding above all 5 question items related to Planning stage, according to comparison between the sum of the positive choices "1. Understood well" and "2. Understood a little" with the sum of the negative choices "3. Not understand well" and "4. Not understand at all" by Exact Probability Test, statistically significant difference at  $p<.01$  that inclined to the side of the sum of the positive choices was found.

◇ Questions related to Production stage

10. You understood that animation production (storyboard and materials making and film shooting) was a very difficult job to complete without collaboration among members in your group.

n = 82

1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all
59	22	1	0
The sum of 1 and 2		The sum of 3 and 4	
81		1	

The result of Exact Probability Test by comparing the sum of 1 and 2 with the one of 3 and 4

Two-tailed test:  $p=0.0000$  \*\* ( $p<.01$ )

It indicated that the sum of 1 and 2 achieved statistical significance in the two-tailed test.

11. You understood that shooting your film could not proceed smoothly if disputes or troubles happened among members in your group.

n = 82

1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all
49	22	10	1
The sum of 1 and 2		The sum of 3 and 4	
71		11	

The result of Exact Probability Test by comparing the sum of 1 and 2 with the one of 3 and 4

Two-tailed test:  $p=0.0000$  \*\* ( $p<.01$ )

It indicated that the sum of 1 and 2 achieved statistical significance in the two-tailed test.

12. You understood that film shooting could proceed smoothly if role sharing worked well in your group and each member completed his/her job.

n = 82

1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all
44	28	9	1
The sum of 1 and 2		The sum of 3 and 4	
72		10	

The result of Exact Probability Test by comparing the sum of 1 and 2 with the one of 3

and 4
Two-tailed test: $p=0.0000$ ** ( $p<.01$ ) It indicated that the sum of 1 and 2 achieved statistical significance in the two-tailed test.

13. You understood that it was necessary to hold on to the last to complete your film even while you were pressed for time.			
n = 82			
1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all
64	16	2	0
The sum of 1 and 2		The sum of 3 and 4	
80		2	
The result of Exact Probability Test by comparing the sum of 1 and 2 with the one of 3 and 4			
Two-tailed test: p=0.0000    ** (p<.01)			
It indicated that the sum of 1 and 2 achieved statistical significance in the two-tailed test.			

14. You understood that you were very happy when you completed your film that you devoted to.			
n = 82			
1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all
47	24	8	3
The sum of 1 and 2		The sum of 3 and 4	
71		11	
The result of Exact Probability Test by comparing the sum of 1 and 2 with the one of 3 and 4			
Two-tailed test: p=0.0000    ** (p<.01)			
It indicated that the sum of 1 and 2 achieved statistical significance in the two-tailed test.			

Regarding above all 5 question items related to Production stage, according to comparison between the sum of the positive choices “1. Understood well” and “2. Understood a little” and the sum of the negative choices “3. Not understand well” and “4. Not understand at all” by Exact Probability Test, statistically significant difference at  $p<.01$  that inclined to the side of the sum of the positive choices was found.

◇ Questions related to Posteriori production stage

15. You thought that you felt great when you finished your film completely and introduced it in the screen party even though there were difficulties and hardships.			
n = 82			
1. Thought well	2. Thought a little	3. Not think well	4. Not think at all
48	25	5	4
The sum of 1 and 2		The sum of 3 and 4	
73		9	
The result of Exact Probability Test by comparing the sum of 1 and 2 with the one of 3 and 4			
Two-tailed test: p=0.0000    ** (p<.01)			
It indicated that the sum of 1 and 2 achieved statistical significance in the two-tailed test.			

16. You thought that you were glad when you received professional advice to your completed film from the expert on animation production in the screen party.			
n = 81			
1. Thought well	2. Thought a little	3. Not think well	4. Not think at all
42	31	7	1
The sum of 1 and 2		The sum of 3 and 4	
73		8	
The result of Exact Probability Test by comparing the sum of 1 and 2 with the one of 3 and 4			
Two-tailed test: p=0.0000    ** (p<.01)			
It indicated that the sum of 1 and 2 achieved statistical significance in the two-tailed test.			

17. You thought that animation films that other groups produced had a variety of ingenious attempts and ideas when you saw them in the prototype edition presentation or the screen party.			
n = 80			
1. Thought well	2. Thought a little	3. Not think well	4. Not think at all
63	16	1	0

The sum of 1 and 2	The sum of 3 and 4
79	1
The result of Exact Probability Test by comparing the sum of 1 and 2 with the one of 3 and 4	
Two-tailed test: $p=0.0000$ ** ( $p<.01$ ) It indicated that the sum of 1 and 2 achieved statistical significance in the two-tailed test.	

Regarding above all 3 question items related to Posteriori production stage, according to comparison between the sum of the positive choices “1. Thought well” and “2. Thought a little” and the sum of the negative choices “3. Not think well” and “4. Not think at all” by Exact Probability Test, statistically significant difference at  $p<.01$  that inclined to the side of the sum of the positive choices was found.

#### Consideration

As an overall consideration with regard to the result of the questionnaire survey, in the same way as previous years, the sum of the positive choices apparently exceeded the sum of the negative ones in every single question item. Even as statistical results, significant difference between them that inclined to the side of the sum of the positive choices was found in every question item.

Statistical significance can only show which side of the sum of the positive choices or the sum of the negative ones slopes. Therefore, it is impossible to make an assertion about learning outcomes expected in each question items were approved in entire classes. However, we can say that there was a trend that most of students approved theses learning outcomes.