

Chapter 1

This report is composed of following the tracks of career educational activities that are called “NAKAHARA Animation” through professional animation production that Mitaka Municipal Nakahara Elementary School implemented in FY 2015. Learning achievements of NAKAHARA Animation were collected with multiple methods of evaluation and analysis making the best use of learning records known as “an externalizing card” that the students who participated in these activities wrote down. This chapter will introduce information on the basic outline of NAKAHARA Animation that Nakahara Elementary School implemented in FY 2015.

◇ Background

In the background of NAKAHARA Animation activities that have been implemented for 11 years including this fiscal year, Nakahara Elementary School joined in “Career Educational Project that makes the best use of regional autonomy and private companies” promoted by Ministry of Economy, Trade and Industry, Japan in FY 2005 and it became a turning point to start these activities.

Though the project itself was completed in three years and after that the activities continue receiving support and collaboration from Mitaka Municipal Government, Mitaka Network University and local animation production companies. At the present day, while further strengthening collaboration with animation production companies, Nakahara Elementary School keeps these educational activities autonomously. For your reference, so far “Studio Pierrot”, “Studio Ghibli” and “Telecom Animation Film” that represent the Japanese animation industry have been collaborating with these activities.

◇ Basic information

2 sixth grade classes and 64 students joined in FY 2015 NAKAHARA Animation (actually 63 students except one student who was absent for long periods of time). As the implementation period, around 40 school hours (1 school hour = 45 minutes) were spent from the beginning of September, 2015 until the end of February, 2016. Regarding the form of activity, the production activities at a group unit are standard, 4

members (or 3 members) formed 1 group and 16 groups in 2 classes were established. Depending on each fiscal year, there were also some cases that 5 members formed 1 group. In this fiscal year's case, as the result of decision by the teachers in charge who wished to put much value on how hard each student could dedicate himself/herself to jobs, a system with 4 members (or 3 members) per one group was selected.

Regarding the content of the activities, even the number of members per one group was decreased, each group was regarded as a temporary corporate organization as same as the past and assigned to produce one original short animation film as a responsible job.

Regarding the content of films, it basically depends on the students and they could choose any kinds of themes freely on condition that it should be an original story, not imitate previous films and not offend public order and morals. In other words, because there was no introduction about a fixed theme, a story setting or a sample film from the teachers or outside lecturers in advance, the students literally needed to create a story and characters by their own brains.

As an activity place in the school, an empty room reserved by declining birth rates has been utilized for a single purpose of animation production. Each class room was used in the beginning of NAKAHARA Animation, however because it required quite additional work to reset all production equipment such as moving a full set of camera equipment each time and fixing camera tripods with packing tape, nowadays making the best use of the empty room, the students can use it exclusively as a production studio. For your reference, it took at least 15 minutes to move all equipment among class rooms and set it up before and eventually precious time for production was deprived by only this kind of preparatory work every time.

◇ Schedule

Though every year there are a few fixes and changes, a standard schedule table is bellow for your reference. The production activities are basically divided by 4 stages. At first Preliminary production stage is composed of learning a process of animation production as an occupation and basic knowledge of making clay animation. Then Planning stage consists of making an original story and writing up a proposal for an animation film based on it. Production stage is composed of actually creating characters and background pictures and shooting a film with them. Posteriori production stage consists of introducing a completed film to an audience in a screen party, receiving social evaluation by third persons and reflecting what the students did in the whole activities by themselves.

Especially Production stage is composed of two parts, the first part consists of analog jobs such as creating characters with clay and painting background pictures by their hands and the second one consists of digital jobs such as shooting created materials with a web camera connected to a laptop PC and film editing.

Regarding the pace of activity, NAKAHARA Animation used to be held once a week regularly using 2 school hours (45 minutes x 2 times = 90 minutes) in the past. Nowadays considering a schedule for all sorts of school events such as an athletic festival, the teachers in charge have taken measures that the activities would be held more than twice in succession depending on each week. The measures could let the students concentrate on the production activities more than before. While some school events were held and NAKAHARA Animation activities were temporally stopped in this fiscal year, the students could voluntarily try homework to watch their favorite animation film once again and research what kinds of visual expression techniques were used in it. Though it depended on each student to try it and it was natural that they usually tended to concentrate on the content of the film, it could expect to turn their eyes to visual expression techniques too and let them find useful information to refer as much as possible when they challenged animation production by themselves.

The studio was opened not only in the regular time slots for activities above mentioned but also a morning time slot before starting a class, a break time slot, a lunch break time slot and an evening time slot after school after the middle of Production stage and opportunities to work overtime were proposed at the decision of each group arranging these kinds of extra time slots among 2 classes. Previously the students could work overtime around the final stage of the production activities. In this fiscal year, the studio was opened after the middle of the production activities and especially a morning time slot was provided for the first time from this fiscal year. It totally depended on the students' decision to use these extra time slots for working overtime.

Stage	Number of hours	Title of activity	Content of activities
Preliminary production	1	Orientation; What is animation production as an	<ul style="list-style-type: none"> - Discuss words associated with animation and occupation in a class - Become aware of the truth that animation is made by many people through watching the end roll of a TV animation film

		occupation?	
	2	Process of making animation	<ul style="list-style-type: none"> - Learn the process of making animation through inviting an expert - Ask the expert about his/her occupation including pleasure or bitter stories
	3	Grouping	<ul style="list-style-type: none"> - Make a group based on jobs from now on
	4	Trial of clay animation	<ul style="list-style-type: none"> - Get used to software for clay animation - Learn basic camera technique from the expert
	5	What is a proposal for planning?	<ul style="list-style-type: none"> - Learn why a proposal for planning is necessary - Learn key issues for writing a proposal for planning
Planning stage	6	Writing a proposal for planning individually	<ul style="list-style-type: none"> - Make a story - Consider a title, theme, character, scene setting, catch copy and so on
	7		
	8	Planning discussion and selecting one planning	<ul style="list-style-type: none"> - Present each proposal for planning and story in a group - Write about what you felt sympathy for and wanted to know more on a memo and past it - Select one proposal for planning in a group
	9		
	10	Making a storyboard	<ul style="list-style-type: none"> - Learn the role of a storyboard - Receive instruction about how to make a storyboard and actually make it
	11		
	12	Preparation for presentation	<ul style="list-style-type: none"> - Learn how to make a presentation - Show a title, theme, character and etc. with craft paper - Assign who is responsible for which part of presentation and exercise
	13		
	14	Planning presentation	<ul style="list-style-type: none"> - Present each group's planning to the expert - Write what you felt sympathy for and wanted to know more on a memo and past it
	15	Revising a proposal for planning	<ul style="list-style-type: none"> - After the presentation, make sure of what the expert advised and outline them - Revise the proposal for planning if necessary
	16		
	17	Making a storyboard	<ul style="list-style-type: none"> - Make a storyboard based on the revised proposal for planning
	18		

			<ul style="list-style-type: none"> - Write a more detailed story and deepen mutual understanding about it inside a group
Production stage	19	Making materials	<ul style="list-style-type: none"> - Make and prepare characters, background pictures, properties for an animation work based on the storyboard and practically shoot them with a camera
	20		
	21	Making animation with software for clay animation 1, 2	<ul style="list-style-type: none"> - Divide members into a director, assistant director, animator, cinematographer and editor and start to work - Director: Total progress management and writing a job sheet
	22		
	23	Making animation with software for clay animation 3, 4	<ul style="list-style-type: none"> - Assistant director: Supporting most of production activities and schedule management - Animator: Making main characters and creating stages for animation - Cinematographer: Shooting a film with software for clay animation
	24		
	25	Making animation with software for clay animation 5, 6	<ul style="list-style-type: none"> - Editor: Film data management and editing recorded roles as a single film - Add sound effects as an additional work - Hold a rehearsal
	26		
	27	Making animation with software for clay animation 7, 8	<ul style="list-style-type: none"> - Make a publicity brochure in case there are some members without a job or groups that have already finished every job earlier - Consider publicity for a prototype edition presentation
	28		
	29	Prototype edition presentation	<ul style="list-style-type: none"> - Present the prototype edition films before completion with each other in a class and hold mutual evaluation - Receive advices from the expert - Revise the film based on the received advices and complete it better than before
	30		
	31	Revising based on	<ul style="list-style-type: none"> - Revise the film conclusively based on the advices in the prototype edition presentation and exercise
	32		

		advices 1, 2	in presentation.
	33	Revising	
	34	based on advices 3, 4	
Posteriori production stage	35	Screen party	<ul style="list-style-type: none"> - Hold a screen party for mainly guardians in an open school day - Receive comments on each work from the expert - Take a popularity poll and open the result to the public later
	36	for a completed edition in an open school day for guardians	
	37	What is	<ul style="list-style-type: none"> - Discuss words associated with animation and occupation in a class - Find differences as compared with the first trial
	38	animation production as an occupation?	
	39	Reflection as a	<ul style="list-style-type: none"> - Reflect memos up to the present and consider what you learned - Through a reflective presentation, share the result of reflection that each group concluded in the whole grade or class
	40	group	

◇ Production process

Regarding a production process, Nakahara Elementary School has adapted a learning model that was called a simulated experience type that follows a professional animation production process as precisely as possible. As the basic procedure, the school tries to realize an animation production process that is conducted by professionals as much as possible. The process starts with making a proposal for planning based on an original story and then it continues with creating materials including characters and background pictures, shooting them in order, editing a film and adding sound effects.

Regarding the simulated experience type model, currently most of career educational activities implemented in public schools consist of mainly field experience through visiting workplaces in neighboring companies and students work there for a couple of days or one week, however these kinds of activities have a drawback that how to deal

with the students completely differ in each company and it totally depend on companies' preparation for receiving them. On the other hand, Nakahara Elementary School has adapted the simulated experience type model and chosen a method to make the best use of a school as a steady learning setting through bringing a workplace to a classroom instead of visiting there.

Regarding a basic process for film shooting, it starts with setting a character created with clay or paper in advance on a background picture drawn by hand, then it continues with moving it in millimeter, shooting incremental differences before and after the moving with a web camera and continuing the same process until completing a film. Software named CLAYTOWN on the market is used for this series of film shooting that is called as stop motion (frame-by-frame recording). Every year 10 frames (10 pictures) per 1 second are set up to shoot a film with this software (some fiscal year tried 12 frames per 1 second). A general goal in this fiscal year was set on making a film with 2 minutes (120 seconds) duration that required every group to shoot 1200 pictures (10 frames x 120 seconds) at least.

◇ Production equipment

Regarding production and editing equipment, 1 laptop PC and 1 web camera per 1 group was prepared. In fact 1 set per 2 groups in 2 classes was assigned, however there was no chance for 2 classes to implement the production activities simultaneously, actually each group could use the equipment freely and exclusively. In case some of them are out of order, a couple of more laptop PCs and web cameras are prepared besides.

For your reference, web cameras that have been used currently have 120 mega pixels (300 mega pixels for still picture). Though there are some cameras that possess higher image pixels in a market, the software (CLAYTOWN) for shooting and editing a film can only deal with Standard Definition (SD) image quality (640 x 480). Eventually there is a dilemma that it is difficult to make the best use of its performance even a camera with higher image pixels is prepared.

Regarding materials that are necessary for clay animation production, 1 clay package with 8 colors on the market was distributed to each group and drawing papers for background pictures and magic markers were also prepared. In principle, other materials should be gathered by the students at the decision of each group. For example, cardboard for a film set or materials such as woolen yarn and cotton for a variety of stage effects were prepared by themselves.

On the other hand, because it is necessary to make an original film, utilizing ready

made goods for example a figure or doll of famous character directly for shooting is prohibited. However, it is no problem to make a character or stage properties without using clay. Especially in this fiscal year, there were some groups that never used clay but drew characters on paper or made stage properties with cutout pictures.

◇ Shooting method

Regarding a film shooting method, not only the steadiest method that shoots an object (character) from straight above but also the other one that shoots it from the side making it as a three dimensional object are recommended. Actually it depends on each group to decide which angle to shoot. In this fiscal year, there were many groups that shot a film from a variety of angles according to scenes and storylines.

For your reference, as compared with shooting a character on a flat background picture, shooting from the side in three dimensions is quite difficult more than imagined because a character made with clay has a weakness for its strength and it is necessary to make it stand in front of a background picture. Especially when you try a human type character, putting a toothpick or wire into clay as the framework is necessary, nevertheless making the character stand firmly and act finely in millimeter are still quite hard jobs. Whenever hands or feet of human type character are detached in the middle of shooting, urgent situations to fix them will happen frequently.

Moreover, every year film shooting was held during midwinter and air was dry severely so that it cracked dolls made with clay. Every group was forced to deal with the difficulty. Reserving materials made with clay in a vacuum packed plastic bag was recommended, however their drying deteriorated mercilessly during film shooting.

As the basic rule of film shooting, in the same way as animation production by professionals, it is recommended that a film should be divided as small as possible at a cut (roll) unit. Because if a film is shot from start to finish at once and a problem is found in the middle, in the worst case it is necessary to shoot again from the beginning. As long as dividing a film at a cut (roll) unit, it should be enough to shoot a specific cut that has a problem again. Therefore, even depending on scenes, a decision that 1 cut (roll) should be around 5 seconds (50 frames) at most and the number of cuts should be increased as much as possible was made in this fiscal year. With this kind of decision, even if there is a problem in a cut, it will be enough to shoot 49 frames at most again thought it is easier to shoot it from the beginning.

It is true that more cuts (rolls) will require more time and effort to edit them, however there are merits that a risk as mentioned above will be reduced and more dynamic and rich expression can be expected. It was 10 seconds at most per 1 cut (roll) in the past.

After it was changed to 5 seconds per 1 cut (roll) as a new challenge in this fiscal year, films with more rich character's action and expression than before were produced.

◇ Production system

Regarding a production system, in the same way as a workplace for animation production by professionals, division of labor with role sharing inside a group is fundamental. One group is composed of 1 director, 1 assistant director, 1 animator and 1 cinematographer and each of them will take a responsibility for work based on owe role and fulfill each job. For your reference, in some fiscal years there were 5 members per group. In that case the role of an editor was added. Expected jobs per each role are mainly as follows.

1. Director

A director is fully in charge of the whole animation production and has a right to decide the content of film and production procedure. In particular he or she is expected to decide a proposal for planning, the content of storyboard and adjust human deployment (placing the right person in the right jobs) and workload balance. He or she is also expected to take accountability for production process and report it to producers (the teachers in charge) timely.

2. Assistant director

An assistant director supports a director and is expected to be occasionally in charge of the production activities instead of the director if he/she is absent. The assistant director is also expected to help any kinds of actual jobs related to animation production if necessary. Moreover, if a trouble happens in a group, he or she is expected to take the initiative to mediate it. He or she also takes a role to negotiate with other groups such as exchange clay or giving instruction in shooting techniques.

3. Animator

An animator is in charge of actual jobs related to animation production. In particular preparing a storyboard especially pictures in it, creating characters and background pictures and maintaining them are his/her main jobs. During shooting an animation film, he or she is expected to prepare the next scene in advance while watching the procedure.

4. Cinematographer

A cinematographer is in charge of shooting an animation film with a camera. In particular he or she takes a picture of a character on a background one frame by one frame while moving it. Until the beginning of shooting job, he or she collaborates with an animator and make characters and background pictures. At that time, he or she is expected to pay attention to distant relationship between a character and a background picture (the laws of perspective) through the lens of a camera while collaborating.

5. Editor

An editor is in charge of saving and maintaining the filmed data of an animation work. In particular he or she saves new film data (roll) in a USB memory disk every time after film shooting was done. If some filmed data are erased accidentally, he or she is expected to recover from the accident through retrieving saved same data from the USB memory disk. During a period between making a storyboard in Planning stage and film shooting, he or she is also expected to figure out relationship between the number of pictures (the number of frames that are shot at a roll unit) and the number of seconds spent in film shooting (time that was spent in shooting a film actually) including calculation of running time for a film as a whole. Moreover, every time just before each production activity was done, he or she makes sure of the externalizing cards that members in his/her group described including typographical errors, no name, no date and no MKG data on them. If he or she finds a trouble that may affect production procedure such as confrontation among members on description of the externalizing cards as a work report, he or she will take the responsibility of reporting it to all members and urge them to deal with it.

Because there are many jobs that cause labor shortage during the production activities, actually it is necessary to deal with them flexibly beyond the boundaries of 4 or 5 types of roles mentioned above, nevertheless action and decision according to sufficient awareness of own role are always required. In other words, it is strictly forbidden to throw out jobs related to own role and take another ones related to other roles unless it is a decision as a group (or by a director).

Animation production by professionals is implemented with absolute division of labor and collaborative work. NAKAHARA Animation is also implemented in the form of collaborative work that means allocating a variety of jobs in a group and working with mutual cooperation rather than joint work that means approaching same job altogether. In accordance with the simulated experience type model mentioned above, realizing situations that are similar to professional ones as much as possible is also tried in this regard.

◇ Production goal

Regarding a production goal, because of making a film as a part of work, the primary goal is set on how to receive higher evaluation from an audience that means being accepted socially on the premise that an animation film should be completed by the date of delivery. In other words, it is different from artistic activities in a general sense. Even the students make a good looking film with a high level of completion, unless it has a story or expression that catches the eye of an audience, it does not meet this goal. Moreover, even how great a film is, if it cannot meet a deadline, it will not be accepted in principle.

As an opportunity to evaluate completed films, a screen party is implemented inviting the students' guardians and experts on animation production. Every year some films that an audience or experts could not understand the content of and were puzzled by received a harsh lesson as social evaluation.

In the screen party every completed film is introduced and a popularity poll for each film by the students' guardians, experts and the students themselves (on condition that they need to chose other group's film except own one) in the same way as audience rating of TV program is held and the voting results from top to bottom is fully opened to the public.

The detail of social evaluation will be described later. As a measure to accomplish the goal mentioned above, Mr. Kohei Ito as a producer of Telecom Animation Film Co., Ltd. that produced a very famous series of "Lupin the Third" collaborated and gave professional advice to the students' films from Planning stage in this fiscal year too.

◇ Production procedure

Regarding a production procedure, though there are some strict deadlines and the teachers in charge make sure of work progress at each juncture in a work process, basically how to proceed totally depends on each group. Because a work process itself is adapted from animation production by professionals, of course a nonsensical production procedure such as deciding sound effects suddenly before making a proposal for planning is never allowed.

The teachers in charge will not give a warning during the production activities unless the students commit to something that has no relationship with the career educational activities behaving unproductively or bother other groups (other companies). Even a quarrel or trouble happens, the teachers will not intervene in it except for some extraordinary reason and the students are expected to solve it by themselves.

Basically a student who is a director or assistant director is in charge of a production procedure and especially an assistant director (sometimes editor) is expected to make sure of progress in the production activities each time as a timekeeper.

Because every year most of participating students had no experience to try professional level animation production ever before, they needed to learn by mistake continuously in the first half of film shooting so that it was tend to be a very slow pace. However, in the second half the situation was changed completely and it was normal that they were forced to be pressed for time and run a business on a hand to mouth basis. Considering the simulated experience type learning model mentioned above, this point is also similar to the truth of animation production by professionals. However, in this fiscal year activities, even learning by mistake continuously, most of groups advanced with great enthusiasm from the first half of film shooting so that they could complete their films at a very early stage.

◇ Teachers' position

As one of features that the career educational activities implemented in Nakahara Elementary School have, at the early stage of these activities the declaration of amateur by the teachers in charge is presented. As a matter of fact, teachers are a professional in teaching not ones in animation production. Moreover, when a program for career education is planed, it is premised on borrowing a theme and knowledge related to it from a society outside of a school. Like a proverb "One should go to specialists for the best results", we can expect to make a more practical learning program through borrowing knowledge related to animation production from experts of the field.

As mentioned above, Mr. Kohei Ito of Telecom Animation Film Co., Ltd. as an expert of animation production collaborated in this fiscal year too and started with instructing basic knowledge of animation production process and basic techniques of how to make a clay animation at Preliminary production stage and then continued with commenting on proposals for planning that each group submitted at Planning stage, commenting on prototype films in a prototype edition presentation at Production stage and commenting on and evaluating (voting) completed films in a screen party at Posteriori production stage.

If necessary, the students can ask an expert more information on shooting techniques or expression methods timely. The reason why the declaration of amateur can work is that receiving support from an expert is available from the beginning to the end during the production activities.

Actually the declaration of amateur is enacted from the beginning so that some

students seem confused for a while and still wish to ask their teachers for their advices even after the declaration. However, as long as the declaration of amateur is enacted, the teachers in charge will tell them only their thoughts or impressions absolutely from the perspective of one audience and basically never teach them what the detail of content should be or how they should proceed with jobs.

For the students, it totally depends on each group whether it accepts opinions from their teachers as one of audiences or not. If some group accepts opinions from outsiders, it should bear the result and take the responsibility too. Even it adapts their teachers' opinion and eventually an audience does not show a good response to its film, it cannot shift the responsibility to others except itself.

During the period of the production activities, the teachers take a stance as a producer who is in charge of public relations and a role to manage relationship outside of a school. Because there is a director in each group, they will not directly involve in the content of film. On the other hand, the teachers strictly manage the schedule of production. In the background, the teachers request experts on animation production to watch proposals for planning or completed films and their professional advices on each of them as mentioned above. However, because these kinds of support are conducted based on social relationship of mutual trust and professional animation production is one of very busy occupations, the teachers are not allowed to extend a deadline for proposals or films for their own convenience.

In other words, in usual learning activities the teachers can decide to extend a deadline to submit homework for example, however in NAKAHARA Animation, their one-sided decision to extend is not allowed because of contractual relationship with outside of a school even it is based on a verbal agreement. Not only the students are asked to keep the date of delivery strictly but also the teachers are asked to keep the social contract surely. If the contractual relationship is neglected, the career educational activities themselves that borrow a theme and knowledge from outside of a school cannot keep their existence.

Therefore, though measures were changed slightly in each fiscal year considering the circumstance of the whole grade, in most cases if some group could not meet a deadline even one minute, it was scolded by their teachers more or less because it could not fulfill its social responsibility. As the reason, not only the group that delayed the date of delivery needed to take the responsibility but also the teachers as a producer in charge of public relations had to take the responsibility.

On the other hand, during the production activities the teachers do not need to take a position of teaching knowledge of animation production so that it enables them to spend

much more time on observing how the students make efforts to advance the production activities. In ordinary lessons, a reality in school education is that they cannot afford much time to observe how each student or group advances the activities from behind them while teaching the students various learning materials from a platform. However, as it will be introduced in Chapter 2, because the declaration of amateur increases chances for the teachers to observe, they can afford to verify blooming or demonstrating a variety of abilities and skills in the students nearby. Moreover, while observing continuously the teachers can praise the students well for their bloomed or demonstrated abilities or skills from behind so that the students can get confident in what he/she is doing or they are doing as a group.

As a matter of fact, though external experts are professional in the field, ordinarily they are not professional in teaching and there is no one else who knows much about each student's character, the feature of classroom and the tendency of the whole grade without teachers. In other words, it is obviously too much to ask the experts to teach figuring out these kinds of internal conditions of each student or classroom. Once again like a proverb "One should go to specialists for the best results", it is the time for the teachers to deal with definitely these kinds of tasks.

Furthermore, while the teachers confirm each student's and group's status through observation, it will be easier for them to figure out the overall course of the activities. It will be also possible for them to ask the experts to adequately adjust how to lead in advance considering the overall course of the activities.

For example, as the tendency of the whole grade in this fiscal year, because the teachers in charge had already figured out the very strong bond of solidarity established among the students in advance and many groups that demonstrated highly organized role-sharing from an early stage of the career educational activities were actually observed, they decided to aim animation production at a higher level through requesting experts to make professional comments more severe than usual from the stage of planning presentation. On the other hand, in such a case that some grade is difficult to deal with group activities, teachers can ask experts to lead the students in a manner that gives priority to collaborating together and completing films by themselves while promoting their interest. In a sense it is a chance for the teachers in charge to demonstrate their professional skills through dealing with this kind of adjustment at least in the career educational activities implemented in Nakahara Elementary School.

◇ Learning goal

Though it seems contradictory to the production goal mentioned above, Nakahara

Animation activities do not take fostering of human resources that will engage in creative jobs such as an animator into consideration and only regard animation production as a theme for the career educational activities. Therefore, the activities do not request to improve drawing or craft skills in a visible way. Consequently if drawing or craft skills are bloomed through the career educational activities and there are some students who will choose a creative job in the future, it is regarded as delightful side effects.

On the one hand, the production goal is an aim on the side of “career” (responsible working activities) in “career education”. On the other hand, the learning goal is an aim on the side of “education” (learning activities). Both of them are very important aims and the students are expected to devote themselves to achieve both of them.

The learning goal of Nakahara Animation follows one that Mitaka city holds up and the city requests to acquire 7 abilities that lead to a zest for living mentioned bellow. On the other hand, for example even “1. Ability to communicate” consists of a variety of sub categories such as an ability to make a presentation or to keep silent depending on a situation, therefore each of these abilities is vague. As it will be described in detail in Chapter 2, Nakahara Elementary School sets a goal that these abilities and related skills will be bloomed and fostered in each student through the career educational activities in a more detailed way.

1. Ability to communicate
2. Ability to gather and find information
3. Ability to understand self-other
4. Ability to understand and recognize a role
5. Ability to carry out a plan
6. Ability to solve problems
7. Ability to understand occupations

Moreover, Nakahara Elementary School does not assume that all these abilities or a part of them will be intentionally nurtured. The school persistently premises that theses ones will be bloomed and demonstrated autonomously during the activities. On the other hand, it regards that what kinds of abilities actually will be bloomed depends on each student.

Though it is difficult to explain somewhat, in the background of setting this kind of premise, NAKAHARA Animation follows an animation production process for professionals as precisely as possible and produces films as an occupation as mentioned

above. Therefore, situations and scenes that require these abilities frequently happen. When the students face these kinds of scenes, it depends on them to judge if they cannot deal with necessary jobs unless they make sure of the type or level of required abilities and try to learn or demonstrate them. In other words, it means that the teachers do not specify which ability should be developed from the beginning.

It seems that it heavily relies on students' autonomy, however from past experience blooming a variety of abilities on demand from each situation or scene can be surely expected more than making a program in order to acquire a specific ability and instructing in accordance with it by teachers. The actual proof will be described in later chapters. It is true that a wide variety of abilities and skills have been bloomed until now beyond the framework of 7 abilities mentioned above.

◇ Social evaluation

On condition that as long as animation production is implemented as an occupation, the result should be evaluated socially. The career educational activities in Nakahara Elementary School regard opportunities for social evaluation as important as the animation production activities themselves. As an overlapping part of the learning goal mentioned above, on the one hand blooming or demonstrating various abilities and skills rely on autonomous activities by the students, on the other hand a scheme for social evaluation is effectively used as ideal opportunities to promote blooming or demonstrating them.

Furthermore, social evaluation is closely related to reflective activities by the participating students and affects with each other such as two sides of a coin. In other words, Nakahara Animation activities put greatly emphasis on how the students can accept social evaluation and what kinds of things they can learn from it. For your information, 7 different types of opportunities for social evaluation implemented in this fiscal year are as follows.

1. Planning meeting to select one proposal

This meeting is held in Planning stage to choose only one proposal for planning about an animation film including an original story and character setting from ones that each member in a group prepared. Each member tries to appeal own proposal for planning to other members and receives comments from them. Every year a furious presentation contest happened regularly inside a group because only one proposal for planning was adapted and realized as an animation film. Through the process to select one proposal, most of students directly receive severe social evaluation from other

members so that they can start to notice that it is impossible to implement animation production just for fun and recognize that they need to produce a film as a part of work. Moreover, this meeting is the first opportunity for the students to know what kinds of opinions about animation production other members who will work together from now on have.

2. Planning presentation

After each group selected one plan and set an original story and characters, a planning presentation is held. Every year each group presented their proposal for planning in front of an expert of animation production, Mr. Kohei Ito who is a producer of Telecom Animation Film Co., Ltd and he judged if each proposal deserved to be actually realized as an animation film. Most of proposals for planning received severe comments from him and not a few groups were asked to rewrite their whole proposals. There was no room for soft social evaluation in here only because they were children. On the other hand, he tried to explain as simply as possible chewing each technical word and make a comment coordinating with the students' cognitive development stage as much as possible.

This planning presentation becomes a precious opportunity for the students to know the reality of society outside of a school including sharp and severe comments and momentum to let the students try Nakahara Animation activities with a professional sense.

3. Prototype edition presentation

When a prototype edition of animation films was made in this fiscal year's activities, each group presented own film and indicated good points and improvements to it with each other in a class. The presentation enabled the students to obtain precious information on good points and improvements from all of them except members in own group and reflect own film that they were making. Moreover, as a new trial one class conducted a popularity poll in the presentation and the result was opened to the public.

Before a prototype edition presentation was not held and only a screen party for a completed edition was done. At that time the students strongly wished to have a chance to improve their films based on social evaluation that they received and precious knowledge that they obtained from the evaluation. A prototype edition presentation started to be held considering their wish.

Usually Mr. Kohei Ito of Telecom Animation Film Co., Ltd. watched a prototype edition and gave advice to each film. In this fiscal year every group had already

completed their films before they received his advices because they engaged in the production activities enthusiastically with incredible speed.

At first most of groups carefully consider how they can improve their films based on information on social evaluation that they obtained through the prototype edition presentation and then they dedicate themselves to fix their films in a visible way within a time frame by a screen party for a completed edition. On the other hand, even there are some proposals in social evaluation that seem very useful for improving, if the students conclude that it is impossible for them to realize them within a certain period of time or they do not have enough ability to realize them, it is necessary to choose other feasible proposals in that case.

4. Screen party for a completed edition

Every year a screen party was opened at the beginning of the third semester. An audience such as mainly the students' guardians, Mr. Kohei Ito of Telecom Animation Film as an expert of animation production, a guest from Mitaka Municipal Government who was in charge of Independent Animation Festival mentioned bellow and the author were invited and it was a big moment for the students.

After every film was shown, an audience, expert and guest voted for one their favorite film. An audience's vote was given 1 point per person and an expert's and guest's vote was given 10 points per each of them. Each student could vote and give 1 point to one his/her favorite film without own group's one. Then every point was summed including ones from an international judge mentioned bellow who voted for 6 films and give 5 points to each of them and a ranking based on the result of popularity vote was opened to the public later. Especially top 4 films in the ranking had the honor of being shown in a big event, Independent Animation Festival that Mitaka Municipal Government hosted mentioned bellow as special entries.

This kind of popularity vote and announcement of ranking have been done as a part of social evaluation as same as an announcement of TV program rating. Every year it was natural that there was a huge gap in the score between films in a higher rank and ones in a lower rank. In the background, an audience tended to vote for a film that they were moved by or amused by purely following their feeling. In other words, even how hard the students try the production activities, it is difficult for them to obtain high social evaluation unless the film itself can attract an audience.

Though it should be a very bitter experience for groups in a lower rank, the career educational activities implemented in Nakahara Elementary School put a high value on how decidedly the students can face this kind of hard reality as a part of a zest for living

mentioned above. For your reference, even some groups eventually belonged to a lower rank, there was another chance for them to redeem their honor through a reflective presentation mentioned below.

A conference room was used for the screen party in this fiscal year. As a measure to let the students firmly grasp an audience's reaction to each film, chair arrangement was done with a creative idea that an audience sat in the center of the venue and the students sat surrounding them. Through this kind of measure, the students could observe an audience's reaction that was glad and sad by turns closely and directly check if an audience really understood their films and how much their films won the heart and mind of an audience before knowing the result of popularity poll mentioned above.

As a new challenge in this fiscal year, each group assessed difference between a prototype edition and a completed one by themselves before presenting their films in the screen party, put the assessed result together as a booklet and distribute it to an audience. This challenge gave the students an opportunity to evenly reflect how far they could reach by themselves or where was the limit after they experienced professional animation production for the first time. As mentioned above NAKAHARA Animation does not aim to foster young persons who will work in creative industries in the future. However, the students can make sure that they feel a good response or a lack of ability to deal with professional work in their own way so that it can expect to promote an realistic appreciation of having a job in the future among them.

5. Reflective presentation

Regarding social evaluation related to “career” in career education, every year severe evaluation was given by third persons such as an audience and experts through the planning presentation, prototype edition presentation and screen party for a completed edition mentioned above. However, all evaluation mentioned above does not mean everything in the career educational activities implemented in Nakahara Elementary School. The students can analyze what they learned through a series of production activities once again from the side of “education” in career education thoroughly at a group unit using the data of the externalizing cards mentioned below, try self evaluation and present the result in the whole class or grade at the end of NAKAHARA Animation activities.

The result of analysis and self evaluation at a group unit in detail will be introduced in Chapter 4. This challenge itself is one of features that the career educational activities implemented in Nakahara Elementary School have. Every year reflective activities were held using 2 school hours. However, an opportunity to present the

result of analysis and self evaluation done by each group in front of the whole grade was arranged and totally 6 school hours including a time for the presentation were prepared in this fiscal year.

If some groups that unfortunately received low social evaluation in a screen party for a completed edition can precisely analyze the reason of low evaluation and reflect their production activities in a way that everyone can understand, it will be highly evaluated from the side of “education” in NAKAHARA Animation activities. Especially if they can introduce the result of excellent self evaluation based on detailed analysis in a place for a reflective presentation, they can receive high praise from the students in the other groups and the teachers in charge at least. Above all they can feel a sense of accomplishment or fulfillment of what they achieved in themselves once again.

On the other hand, if some groups that received high social evaluation in a screen party for a completed edition cannot firmly analyze the cause of victory, the high evaluation may be a result from an accident in a strict view and they cannot expect the same result next time they try animation production. In a reflective presentation if they present self evaluation based on inaccurate and unaccountable analysis, they will be laughed at by other groups and lose the honor obtained in a screen party.

6. Additional screening party

Additional screen parties were implemented for the students of other grades in this fiscal year too though they were done several times before. In some fiscal years, the students of other grades were directly invited to a screen party for a completed edition and kindergarten students (new 1st graders) who would enter into a school from now on were also invited. In this fiscal year, 6th graders managed additional screen parties by themselves to introduce their films to the students of other grades using a lunch break.

In the background of this kind of challenge, not only there is an aim to pass NAKAHARA Animation activities on to the next generation but also there is a possibility to receive different reaction or evaluation from one that adult gave because additional screening parties target the same elementary school students as an audience segment as compared with the screen party for a completed edition mentioned above that was basically for adults such as experts and guardians. Especially it is true based on learning through long experience that there were some films that students could understand easier because they were same children. Therefore, social evaluation in additional screening parties is not always as same as one in a screen party for a completed edition. For example, in Planning stage the students needed to decide an audience segment and most of groups targeted the same generation of elementary

school students on this occasion. In that context, receiving any responses from other graders as social evaluation was definitely meaningful for 6th graders.

7. Independent Animation Festival

This event is a film festival hosted by Mitaka Municipal Government and animation studios located around the city and a gateway to success for vocational school students and young animators who are expected to play a key role in animation industry from now on. Every year high quality films were gathered from all over the country and some excellent films were selected among them. Besides ones for the final selection, every year 4 student groups' films that received the highest social evaluation in the screen party for a completed edition were introduced on a big screen at the event site. It is a precious opportunity for the students who produced the selected films to know how a lot of audiences react to their films once again through this kind of special opportunity. For your reference, an official site for the event is in the following URL.

Independent Animation Festival

<http://www2.m-sohot.com/iafesta/>

<http://www2.m-sohot.com/iafesta/schedule.html>

◇ Internationalization

Every year new trials to improve NAKAHARA Animation activities have been implemented and in this fiscal year as a part of social evaluation mentioned above, a trial related to internationalization was held following the last fiscal year. Mr. Fred Wang who is one of organizers for the Hong Kong International Film and TV Market “FILMART” that is one of the world leading film festivals and the top of film company that represents the Hong Kong film industry picked up his favorite 6 films after he watched all completed ones as same as Mr. Kohei Ito of Telecom Animation Film mentioned above. The films that he chose could get extra points at the time of social evaluation in a screen party. It became a very precious opportunity for the students to know how their films were evaluated from an international perspective.

For your reference, Salon Films Ltd that Mr. Fred Wang owns is one of film companies that represent Hong Kong. Since the company collaborated with Hollywood on shooting a movie for the first time in the Asian region, it keeps producing numerous blockbusters such as old premier movies including “Apocalypse Now”, “Crouching Tiger, Hidden Dragon” that received the Academy Award or films that big name stars including Jackie Chan and Jet Li performed in.

He also actively supports “Education for Sustainable Development” that UNESCO promotes and right now superintends following UNESCO Salon Video Competition collecting video expression that the youth produced from all over the world. In the background, he promotes fostering young creators who work in media content industries including animation production that are expected to play a part of new economic system friendly to global environment that Education for Sustainable Development aims.

When the competition was opened for the first time two years ago, one of films produced in NAKAHARA Animation activities was exhibited and had a record with being in a shortlist. Currently target participants in a screening criterion of the competition are university students or at least high school ones and unfortunately films produced by elementary school ones are not collected.

UNESCO Salon Video Competition

<http://en.unesco.org/greencitizens/salon-youth-video-competition>

Moreover though it is under negotiation at the time of writing this report, without the film competition that targeted university and high school students mentioned above, it is expected to develop an educational program based on Education for Sustainable Development for the younger generation than high school students and NAKAHARA Animation is also recommended for the purpose. He requested the author to develop a program that enables international co-production among Asian children including Japanese ones. Right now he works on making the proposal for planning.

◇ Meaning to continue animation production

At this point a question about NAKAHARA Animation that is always asked will be answered in advance. It is that “Why is making animation implemented in career educational activities?”. A simple answer to the question is that as the name of “Career Educational Project that makes the best use of regional autonomy and private companies” mentioned above suggested, collaboration with local industries was a precondition for this project and the world-class animation industry that Mitaka city can be proud of was at the head of candidates for collaboration.

Of course with not only this reason, animation production has been implemented for 11 years. There is another appropriate reason. Animation production is only one of themes borrowed from outside and fostering experts such as animators or scriptwriters is not the purpose of these activities.

On the other hand, as mentioned bellow because it can be expected that a variety of abilities that will lead to strength necessary for living autonomously are demonstrated in front of our eyes literally and newly bloomed in the participating students through trying jobs as same as ones for professionals, these activities have been implemented.

For your information, so far in Nakahara Elementary School, commercial production (NAKAHARA CM) making the best use of a program that a big advertising agency prepared and design T-shirts production (NAKAHARA collection) under a collaboration with a high status designer were implemented as a part of the career educational activities except animation production. Even contents and themes were different from animation production, the basic parts of the activities mentioned above were almost untouched and a variety of bloomed abilities were observed as an achievement in each activity.

◇ Structure of this report

As the structure of this report, in this chapter basic information on NAKAHARA Animation was introduced. In Chapter 2, categorizing a variety of abilities bloomed through animation production and the result are explained tracking learning records that the participating students described on a Post-it called as “an externalizing card”.

In Chapter 3, the result of a questionnaire survey that was implemented in order to figure out learning achievements in the career educational activities from the point of view of the whole class or grade are introduced. In Chapter 4, utilizing description on the externalizing cards mentioned above and a tool called as SAKANA system that supported reflective activities at a group unit, results of self evaluation based on the students’ analysis of what kinds of things they learned as a group are introduced. In Chapter 5, learning achievements in FY 2015 collected from each chapter is considered once again.

◇ Complementary information

It can be said that an externalizing card is the most important tool to support the reflective activities in NAKAHARA Animation and it has been adapted for a long time as a method to track learning results that the participating students achieved through the career educational activities in Nakahara Elementary School. At this point the detail of this card will be explained.

Though the name sounds somewhat exaggerated, it is also called as “a reflective card” in Nakahara Elementary School. The card itself is a Post-it that is available anywhere on the market. The size is around 7.5 x 5 cm. Depending on the fiscal year, there

were some cases that the size was changed. Though it is a simple and common Post-it, the meaning of externalizing is to tell directly what comes up to your mind or what you feel in your heart through experience to the rest of the world (third persons).

Since the beginning of implementing the career educational activities, as a method to record learning results an externalizing card has been adapted. It was created by Professor Toshibumi Kariyado of Department of Social Informatics, Aoyama Gakuin University who made a plan of this learning program.

Regarding how to basically use an externalizing card, all participating students are asked to describe what they learned, felt, found or noticed freely in each activity using 5 or 10 minutes just before the end of each session. There is no rule on the content and the volume of description. Even one sentence or many ones described on the other side of a card are acceptable. On the other hand, recording what they learned in writing definitely is regarded as a responsible job as same as implementing animation production.

After every student described an externalizing card, their teachers retrieve all of them and post them on a bulletin board or corridor within a few days. In the same way as most of occupations that are making the best use of what each worker learned for the entire organization through an operational record, writing an externalizing card is supposed to be beneficial not only to a student him/herself who wrote it but also to the whole class or grade.

As compared with an ordinary essay style record, implementing this kind of reflection every time has the huge advantage of obtaining information on what the students learned at the time and spot. Because most of essays are described in the final stage that every activity has already been completed, it is necessary for students to try to remember their experience that they have already forgotten. On the other hand, an externalizing card can record their experience that is still alive though it is restricted to itemization.

There is not only a space for free description but also one for additional information on 3 indicators including “Learning Type”, “Emotional Type” and “Effort Type” in an externalizing card. The students are asked to fill out the indicators too. In Nakahara Elementary School it is called MKG picking up the first letter of each indicator. * Manabi in Japanese means learning, Kimochi in Japanese means emotional and Ganbaru in Japanese means effort or working hard. “Learning Type” is set to categorize each externalizing card according to what kinds of learning contents are included in it. There are 5 response alternatives for the indicator including “1. Change in Self-Affirmative Tendency”, “2. Change in Self-Discovery Tendency”, “3. Change in

Role Grasp and Recognition”, “4. Change in Occupation Understanding” and “5. Change in Communication”. The students can pick up 2 of them at most at the same time.

“Emotional Type” is set to categorize each externalizing card according to what kind of emotional status a student had when it was written. There are 8 response alternatives for the indicator including “1. Glad”, “2. Happy”, “3. Interesting”, “4. Easy”, “5. Sad”, “6. Angry”, “7. Painful” and “8. Difficult”. The students can pick up 2 of them at most at the same time.

“Effort Type” is set to evaluate the degree of self contribution for group activities. There are 5 response alternatives for the indicator including “1. Quite Insufficient”, “2. A Little Insufficient”, “3. Tried”, “4. Tried Hard” and “5. Tried Hard Enough” . The students can pick up only 1 of them at once per one card.

In the background of requesting the students to describe the externalizing cards and enter the indicators mentioned above on it every time, it is assumed that these data will be utilized not only for promoting reflection in each production activity among the students but also for the reflective activities with self evaluation at a group unit that will be explained in Chapter 4.

In the FY 2015 career educational activities, 2 classes and 64 participating students (actually 63 ones) described around 1200 externalizing cards and the author confirmed and regarded all of them as analysis subjects for this report.

Chapter 2

This chapter will introduce a variety of abilities that were bloomed or demonstrated among the participating students based on the record of the externalizing cards that were described during NAKAHARA Animation activities. In previous reports, various abilities according to the practical field of the production activities were introduced. However, listing or categorizing those abilities was not implemented intentionally and they were introduced along with a time axis for a series of production processes because all sorts of abilities demonstrating or blooming more or less depended on a situation in which each student was involved.

This kind of way to introduce abilities along with a time axis was adapted for a long time. However, since a report that was made 3 years ago, regardless of a situation or time axis, listing and categorizing all sorts of abilities that were demonstrated during the production activities subjectively was tried still focusing on the 7 types of abilities that Mitaka city holds up to seek through career education. This fiscal year's report also tried to apply the relevant externalizing cards to a series of categorization.

As described in previous reports, the aim of categorization is definitely to prove the existence of various abilities. Therefore, there is no intention to add a value on the result of categorization and there is no classificatory criterion without the 7 types of abilities mentioned above. Basically if the author admits a feature more or less based on a subjective judgment and even only one externalizing card was found, it was accepted as a subcategory in the 7 types of abilities.

Furthermore, though each subcategory overlaps or contradicts each other in some parts of them, from the perspective of accepting the diversity of abilities according to situations or scenes, a principle that creates subcategories as much as possible still setting the 7 types of abilities as a primary criterion for categorization is adapted.

Here are 59 types of abilities that were categorized including newly added one. Essentially what kind of ability is demonstrated or bloomed deeply depends on a situation in which each student or group is involved. For example, we can point out that the content of production including a story or expression style differs in each group and eventually production process including actually making characters and shooting a film with them also differs in each group in the background.

Because of this kind of background, what kind of situation or scene that each group faces actually depends on activities that each one is involved in. In other words, it is impossible to precisely predict when, where and what kind of ability will be bloomed or demonstrated. Furthermore, there are some abilities or skills that will be perceived

through reflecting specific situations later. Therefore, it is true that actually many more abilities should exist that were never described on the externalizing cards.

Moreover, there should be a lot of abilities or skills that the author overlooked even they were described on the externalizing cards. It should be mentioned in advance that categorization was done by the author's subjectivity and there was a limit in it anyway.

On condition that there is no sample film to refer and the students need to produce an original film by their own hands, because it eventually depends on a situation or scene, one of features that career education in Nakahara Elementary School has is that blooming or demonstrating necessary abilities for each situation or scene is inevitably required instead of leadership by teachers to promote the activities. In this chapter, the author tried to confirm and categorize abilities as much as his subjectivity could recognize.

Because various abilities were confirmed more than expected during categorization, they were listed once again along with a series such as "A. Subjectivity series" in "1. Ability to communicate".

1. Ability to communicate

The number of subcategorized item: 17

A. Subjectivity series

1.1 Ability to appeal own opinion

1.2 Ability to give a presentation

1.3 Ability to lead a group

1.4 Ability to persuade others

B. Receptivity series

1.5 Ability to listen to others' opinions

1.6 Ability to adjust opinions

1.7 Ability to examine opinions

1.8 Ability to gather opinions openly

1.9 Ability to keep unpleasant things to oneself

1.10 Ability to keep watching a situation

C. Group series

1.11 Ability to confirm with each other

1.12 Ability to dedicate to own group

- 1.13 Ability to build collaborative relationships
- 1.14 Ability to mediate confrontation
- 1.15 Ability to create ideas like a chain reaction
- 1.16 Ability to build a consensus
- 1.17 Ability to keep communicating

A. Subjectivity series

Subcategories from 1.1 to 1.4 belong to a series of abilities related to subjective action. If we regard playing catch as communication, it is on the side of throwing a ball.

1.1 Ability to appeal own opinion

During NAKAHARA Animation activities, according to a current working situation, there are scenes to require thorough discussion among members in a group regardless of whether one likes it or not. At that moment, how much you can tell your own opinion to other members is the essence of this ability.

Following 1.1.1 case shows that a student who left the externalizing card could strongly appeal sales points that his/her proposal for planning had during a discussion about selecting one proposal in a group.

1.1.1

Class: 6-2, Date: 2015-10-24, Course: 6-2-15-10-24

Group: 6-2-2, Role: Assistant director

Content of externalizing card: Today it was good that I could appeal advantageous points that my proposal had. Other members' proposals were also interesting.

Learning Type: 1. Change in Self-Affirmative Tendency, none

Emotional Type: 3. Interesting, none

Effort Type: 3. Tried

1.2 Ability to give a presentation

Though this ability is similar to above mentioned "1.1 Ability to appeal own opinion", it targets mainly other members in a same group, on the other hand, this ability targets third persons without own members. For example, the students try to appeal their own story that they planned or characters that they designed to an expert on animation production as much as possible in a planning presentation.

Following 1.2.1 case describes that a student who left the externalizing card could firmly give a presentation to an expert on animation production when his/her group announced their plan.

1.2.1

Class: 6-1, Date: 2015-11-06, Course: 6-1-15-11-06

Group: 6-1-4, Role: Assistant director

Content of externalizing card: Today it was good that we could clearly speak out what each of us needed to appeal in the presentation. I would like to fix what Mr. Ito suggested.

Learning Type: 4. Change in Occupation Understanding, 5. Change in Communication

Emotional Type: 8. Difficult, none

Effort Type: 3. Tried

* Mr. Ito is a producer, working in a neighboring animation studio and for a long time collaborating with NAKAHARA Animation.

1.3 Ability to lead a group

This ability can be replaced by a word “leadership” and requires how to lead all members to a direction to efficiently use of human resources as long as it is necessary to create a film with other members making the best use of strength as a group.

In following 1.3.1 case, we can read that a student who left the externalizing card could initiatively move into action as a director and definitely lead to a direction to solve a problem when other members were in trouble. Through dealing with this kind of experience continuously, he/she can keep developing self-confidence as a director.

1.3.1

Class: 6-2, Date: 2015-10-27, Course: 6-2-15-10-27

Group: 6-2-2, Role: Director

Content of externalizing card: I think that I could fulfill a role as a director in today's session. When other members were in trouble, I could help them. I think that I should keep working hard as a director.

Learning Type: 1. Change in Self-Affirmative Tendency, 3. Change in Role Grasp and Recognition

Emotional Type: 6. Angry, 8. Difficult

Effort Type: 5. Tried Hard Enough

1.4 Ability to persuade others

This ability overlaps above mentioned “1.1 Ability to appeal own opinion” but this one focuses on not only appealing own opinions in a group but also how to convince other members.

Following 1.4.1 case is a typical example that a student who left the externalizing card could not persuade other members in his/her group and it describes that they did not show the understanding of his/her proposal for planning during discussion about selecting one proposal in a group.

1.4.1

Class: 6-2, Date: 2015-10-24, Course: 6-2-15-10-24

Group: 6-2-6, Role: Director

Content of externalizing card: Today I knew the difficulty of appealing. Even I knew what I wanted to say but I could not lead other members to understand it. However, I will work hard with Mr. H's plan.

Learning Type: 4. Change in Occupation Understanding, none

Emotional Type: 8. Difficult, none

Effort Type: 4. Tried Hard

B. Receptivity series

Subcategories from 1.5 to 1.10 belong to a series of abilities related to accepting others' opinions. If we regard playing catch as communication, it is on the side of receiving a ball.

1.5 Ability to listen to others' opinions

Ability to communicate simultaneously requires ability to listen to each opinion closely in concert with ability to definitely tell your opinion and lead others to understand it as explained above in the section of “1.1 Ability to appeal own opinion”.

Following 1.5.1 case suggested that a student who left the externalizing card could closely listen to other members' proposals for planning and find features and advantageous points in each of them. Like this case, how to accept the truth that others' opinions or ideas usually tends to be different from yours is a basic premise to let this ability bloom.

1.5.1

Class: 6-2, Date: 2015-10-24, Course: 6-2-15-10-24

Group: 6-2-3, Role: Animator

Content of externalizing card: Today we appealed own animation plan one by one. I thought that each of us had different plans to appeal. It was interesting to hear other opinions that were different from mine.

Learning Type: none, none

Emotional Type: 3. Interesting

Effort Type: 4. Tried Hard

1.6 Ability to adjust opinions

In comparison with other abilities that will be mentioned later, it is holistically true that ability to communicate is more strongly requested to demonstrate among the students who are a director or assistant director above all else as its nature. They are different from other roles such as an animator or cinematographer who is requested to carry out specific jobs including creating characters with clay or shooting a film one by one frame. It is safe to say in the background that making human relations based on mutual trust and building a cooperative structure in a group as soon as possible while adjusting opinions or ideas among members are main jobs that directors or assistant directors need to deal with.

Following 1.6.1 case shows that discussion in a group was held smoothly. Of course it should be a problem if discussion totally misses the right direction, however like this case, if discussion actively continues even the subject of conversation starts to turn away more or less, it is true that every member can satisfy with making a speech and they can adjust opinions more easily after that.

1.6.1

Class: 6-1, Date: 2015-10-30, Course: 6-1-15-10-30

Group: 6-1-2, Role: Animator

Content of externalizing card: Today it was good that we could discuss smoothly. Because sometimes our conversation was turned away, we should pay attention to it next time.

Learning Type: 4. Change in Occupation Understanding, none

Emotional Type: 2. Happy, none

Effort Type: 4. Tried Hard

1.7 Ability to examine opinions

In activities that require creativity, there are few cases that good ideas are created from the beginning. It is more common that good ones come up while a variety of and numerous ideas are exchanged. Therefore, as the title of this ability suggests, it is necessary to foster ability to find something truly valuable among a lot of opinions and ideas.

In following 1.7.1 case, we can read that a student who left the externalizing card could examine each good proposal for planning and narrow down to one during discussion to select one proposal. From the other perspective, going through this kind of process will work like a filter to select better ones.

1.7.1

Class: 6-1, Date: 2015-10-24, Course: 6-1-15-10-24

Group: 6-1-4, Role: Assistant director

Content of externalizing card: It was difficult to narrow down to one because ideas that other members made were excellent. I would like to make the selected one become a better film.

Learning Type: 5. Change in Communication, none

Emotional Type: 8. Difficult

Effort Type: 3. Tried

1.8 Ability to gather opinions openly

While “1.7 Ability to examine opinions” mentioned above puts emphasis on examining the content of idea or opinion, the feature of this ability is to broaden the scope of a search in order to seek more possibilities through gathering opinions or ideas once again when no ones can convince all members in a group.

1.8.1 case shows that members in a group could actively exchange opinions and ideas to further deepen the content of a selected plan.

1.8.1

Class: 6-2, Date: 2015-10-24, Course: 6-2-15-10-24

Group: 6-2-3, Role: Director

Content of externalizing card: It was nice that all members could discuss good points about every plan that each member proposed. It was difficult for me to appeal sales points that my plan had.

Learning Type: 5. Change in Communication, none

Emotional Type: 8. Difficult, none

Effort Type: 4. Tried Hard

1.9 Ability to keep unpleasant things to oneself

While working together with other members as a group, sometimes a serious clash of opinion about a production course among members happens. Even facing that kind of severe situation, it is necessary to handle a conflict at some point or another as long as making a film as a part of occupation. At the time though it is ideal to find a solution that can convince all members, some cases in which a few member is forced to accept opposing opinions regardless of his/her will actually exist.

Following 1.9.1 case describes while film shooting was fully in progress that a group was forced to start over making a film from the almost beginning because not only the entire work did not proceed as intended but also a shooting style itself was changed abruptly without a firm agreement among members. We can read that a student who left the externalizing card tried to move film shooting forward as much as possible even he/she felt a frustration in this kind of unreasonable situation. We can easily guess that he/she was worried that film shooting would be more delayed if he/she intentionally disturbed the situation.

1.9.1

Class: 6-1, Date: 2015-11-27, Course: 6-1-15-11-27

Group: 6-1-7, Role: Animator

Content of externalizing card: This time it was very difficult. Shooting a film did not proceed as expected and it frustrated us. However, I kept working hard. Because we could not shoot a film smoothly and the style of shooting background pictures was abruptly changed, we needed to restart film shooting from the almost beginning. It was so called OK because we tried to work as swiftly as possible.

Learning Type: 2. Change in Self-Discovery Tendency, 4. Change in Occupation Understanding

Emotional Type: 6. Angry, 8. Difficult

Effort Type: 4. Tried Hard

1.10 Ability to keep watching a situation

When we try to define ability to communicate, we tend to have only two selections that are self-assertion and listening to others' opinions. As the phrase of strategic withdrawal straightly suggested, there are some cases that stepping away intentionally is the most ideal action on the scene. This ability definitely belongs to a part of strategic withdrawal.

Following 1.10.1 case was described by a student who was a cinematographer while making materials. Like this case, sometimes we have no way without still watching other members' working. If human resource is enough in your group, the most suitable choice on the scene is being patient and keeping a strong will to work fully once your group needs your commitment.

1.10.1

Class: 6-1, Date: 2015-11-10, Course: 6-1-15-11-10

Group: 6-1-6, Role: Cinematographer

Content of externalizing card: Because I could not help other members today when we made a storyboard and background pictures, I will definitely try hard when shooting a film starts.

Learning Type: 2. Change in Self-Discovery Tendency, none

Emotional Type: 8. Difficult, none

Effort Type: 2. A Little Insufficient

C. Group series

Subcategories from 1.11 to 1.17 belong to a series of abilities that are expected to demonstrate in a group as an aggregation rather than individual ones.

1.11 Ability to confirm with each other

Even good friendships are established among members and agreement is always reached in a group, human cognitive performance has its own limits and in reality it is impossible to realize perfect communication in a group. Only we assume that we share common perception, once a reality is revealed, it is rather common that difference in perception comes out more or less.

Moreover, when common perception is wrong, we feel more disappointed and it tends

to become the flash point of confrontation. Therefore, to bear in mind that difference in perception will always happen and to confirm things that we take for granted once again in a group in each case if necessary are essential to this ability.

Following 1.11.1 case is a typical example that a student who left the externalizing card noticed the importance of confirmation. We can read that the student strongly recognized while shooting a film one by one frame in 1000 units that it was quite difficult to take only one picture in which his/her hand was also photographed once again when he/she failed to check a film on site and found it after shooting was finished.

1.11.1

Class: 6-1, Date: 2015-10-09, Course: 6-1-15-10-09

Group: 6-1-5, Role: Cinematographer

Content of externalizing card: Today how to shoot a film was the most important job for me. Though shooting a film continuously was almost what I needed to do, I felt scared when I made a shot and was slow to check it on site.

Learning Type: 3. Change in Role Grasp and Recognition, 2. Change in Self-Discovery Tendency

Emotional Type: 3. Interesting, 8. Difficult

Effort Type: 3. Tried

1.12 Ability to dedicate to own group

Though this ability means literally as its name, of course it is completely different from sacrificing oneself for the nation in old times. When personal wish to contribute oneself to own group with actual actions is entirely shared in a group and realized, we can expect the maximization of working efficiency. Behind actual actions, it is necessary to have no compulsion by someone else and it should be done by personal autonomous will.

If this autonomous will is ignored, a feeling of being forced by someone else starts to hang in the air and it is difficult to expect not only positive and constructive actions but also opportunities to make good ideas based on free thinking.

Following 1.12.1 case shows that a student who left the externalizing card devoted all his/her energy to the production activities until the last phase. Because this kind of dedicated member exists in a group, needless to say it can complete an animation film. Of course ability to create stories or characters that can attract an audience is necessary, at the same time strong will to dedicate oneself to group activities and showing it with

actual actions continuously is also necessary.

1.12.1

Class: 6-1, Date: 2015-12-24, Course: 6-1-15-12-24

Group: 6-1-7, Role: Animator

Content of externalizing card: Today was the last day for NAKAHARA Animation and I dedicated all my energy to it. Because our group was significantly left behind our class, we still started today's activities from shooting a film. Somehow we could finish a credits roll, add sound effects on some important scenes and enhance the quality of our film. Though there were some scenes that were difficult to understand, anyway it was nice that we could complete shooting a film.

Learning Type: 2. Change in Self-Discovery Tendency, none

Emotional Type: 2. Happy, 8. Difficult

Effort Type: 5. Tried Hard Enough

1.13 Ability to build collaborative relationships

This ability is closely related to "1.12 Ability to dedicate to own group" mentioned above. Because a wish to dedicate oneself to own group that exists independently at first starts to be united with each other as a group, it turns to be a driving force that promotes collaborative work.

In following 1.13.1 case, a student who left the externalizing card pointed out that collaborative structure had already been built firmly inside his/her group as the reason why his/her group could work on jobs smoothly without a problem even one member was absent. This case straightly indicates that the more a critical situation deepens, the more human beings hold together.

1.13.1

Class: 6-2, Date: 2015-11-16, Course: 6-2-15-11-16

Group: 6-2-4, Role: Director

Content of externalizing card: Today I made materials and prepared for shooting a film. Most of them were completed and we can start shooting a film. Though today one member was absent, we could complete what we needed to do. I think that it is the proof of our collaboration.

Learning Type: 4. Change in Occupation Understanding, 5. Change in Communication

Emotional Type: 3. Interesting, none

Effort Type: 5. Tried Hard Enough

1.14 Ability to mediate confrontation

During NAKAHARA Animation activities, the conflict of opinion or altercation frequently happens even among good friends and there are chances to see the unexpected side of friend. It is rather strange if there is no conflict more or less considering different personalities, the different types of strong or weak abilities and different capabilities that each member has.

Therefore, on condition that difference or disparity definitely appears, how to overcome a conflict as soon as possible is essential to this ability. If this ability demonstrates at the right time, it will lead to keeping solidarity as a group. If this ability misses the timing, it will lead to continuous conflicts responding to every difference or disparity nervously.

Following 1.14.1 case describes that different opinions were proposed in a group and a student who left the externalizing card as a director could smoothly handle a situation that might turn to be a conflict among members.

1.14.1

Class: 6-1, Date: 2015-11-10, Course: 6-1-15-11-10

Group: 6-1-8, Role: Director

Content of externalizing card: At last we could start making materials for animation. I enjoyed it very well because I loved handicrafts. Though our opinions about a character were divided, I could deal with them smoothly.

Learning Type: 5. Change in Communication, 1. Change in Self-Affirmative Tendency

Emotional Type: 2. Happy, 3. Interesting

Effort Type: 5. Tried Hard Enough

1.15 Ability to create ideas like a chain reaction

Having a good idea contains a perverse part more or less and nobody can predict when and where it will come up. If everybody can predict it anytime, it is likely to be well-known information.

As for more perverse parts that having a good idea contains, there are many cases that even one person cannot have a good idea as a perfect shape by any means, on the other hand we can point out that each member gives a piece of own idea, mixes them or

combines fragmentary ones and it frequently turns out to be a good one in an unexpected way. This kind of combination can be called a product of chance and it is quite difficult to predict what will combine with which part and how it will transform into in advance.

Following 1.15.1 case shows that a variety of ideas and opinions were created like a chain reaction in a group. As the result of Emotional Type on the externalizing card directly suggested, we can actually feel pleasure or interested in group activities especially in this kind of moment. Furthermore, we can feel that not only a lot of ideas are coming up but also work is moving forward or momentum as a group is increasing.

1.15.1

Class: 6-1, Date: 2015-11-05, Course: 6-1-15-11-05

Group: 6-1-6, Role: Assistant director

Content of externalizing card: Today when we did painting and had a rehearsal for presentation, it was good that a lot of ideas were proposed, for example “I want to do like this”.

Learning Type: 3. Change in Role Grasp and Recognition, 5. Change in Communication

Emotional Type: 2. Happy, 3. Interesting

Effort Type: 4. Tried Hard

1.16 Ability to build a consensus

In connection with “1.11 Ability to confirm with each other” mentioned above, the feature of this ability is to lead to building an agreement in a group steadily one by one regarding important items that require a further consensus as a group among mutually confirmed issues.

Following 1.16.1 case was described on an externalizing card while selecting one proposal for planning and it shows that a consensus to select one proposal was built in a way that satisfied every member in a group. Actually there was a possibility that the group would face a contrary position because nobody could predict what kinds of proposals for planning would be proposed until the very day of a planning discussion.

1.16.1

Class: 6-2, Date: 2015-10-24, Course: 6-2-15-10-24

Group: 6-2-3, Role: Assistant director

Content of externalizing card: It was good that we could decide one animation plan that every member satisfied. It was a little difficult for me to appeal my own plan.

Learning Type: 5. Change in Communication, none

Emotional Type: 8. Difficult, 2. Happy

Effort Type: 5. Tried Hard Enough

1.17 Ability to keep communicating

Animation production as an occupation is not simple like working continuously without a word once a group could reach an agreement on each job. Even how much we prepare or make a plan in advance, it is rare that things are moving forward as expected. It is rather common that the content or type of job that we need to do next tends to be changed moment by moment and the number of job is increasing. Therefore, even issues that have already been agreed in advance will not work efficiently in the next moment and scenes that newly require confirmation and agreement adapting to each situation will happen frequently.

Following 1.17.1 case describes that discussion about preparing for a planning presentation inviting an expert on animation production was done over and over in a group. As same as “1.15 Ability to create ideas like a chain reaction” mentioned above, under the agreement of making a better film, a situation where every member in a group thoroughly keeps discussing tends to bring a sense of fulfillment such as enjoyment or interest as the result of Emotional Type on this case suggests.

1.17.1

Class: 6-1, Date: 2015-11-05, Course: 6-1-15-11-05

Group: 6-1-2, Role: Assistant director

Content of externalizing card: Today we pursued the way of appeal that could convince Mr. Ito. Once again we talked about whether what we made was interesting or not confirming the nature of our characters and our story.

Learning Type: 1. Change in Self-Affirmative Tendency, 5. Change in Communication

Emotional Type: 2. Happy, 3. Interesting

Effort Type: 4. Tried Hard

2. Ability to gather and find information

The number of subcategorized item: 5

A. Cognition series

2.1 Ability to acknowledge advantages that others have

2.2 Ability to accept social evaluation with sincerity

B. Analysis series

2.3 Ability to examine information in a calm way

C. Application series

2.4 Ability to find a clue from various information

2.5 Ability to adapt ideas and inventions

A. Cognition series

2.1 and 2.2 subcategories belong to an ability to find wisdom that society or others have and acknowledge its value.

2.1 Ability to acknowledge advantages that others have

As long as knowledge or experience regarding animation production is limited, finding ideas to enhance the degree of completion of a film or ways to improve working efficiency by only members in own group is also limited. On the other hand, most of companies are supposed to not only refer to advantages that competitors have but also adapt ideas that other companies or organizations have without hesitation even there is no direct connection with them as long as they are beneficial to the company more or less.

In NAKAHARA Animation, unless a group copies the whole story or characters from other ones, it is no problem to positively adapt techniques or knowledge that other ones are using efficiently. However, there are some cases that strictly ban the students from going to work places in other groups and obviously sneaking a peek at their production activities.

During NAKAHARA Animation activities, there are opportunities such as a planning proposal or a prototype edition presentation to mutually make sure of the content of plans or films that other groups proposed and this ability to acknowledge advantages that others have is expected to demonstrate especially at that moment.

In following 2.1.1 case that was an externalizing card described when a planning presentation was held, we can read that a student who left the externalizing card admitted features that other groups' plans had and tried to draw out valuable information from them. Gathering valuable information as much as possible like this case will eventually lead to enhance the result of own film.

2.1.1

Class: 6-2, Date: 2015-10-24, Course: 6-2-15-10-24

Group: 6-2-2, Role: Cinematographer

Content of externalizing card: Everyone was thinking about a variety of things and it was very interesting to watch them. I tried hard to listen to others' presentation and consider what kinds of good ideas were invented.

Learning Type: 1. Change in Self-Affirmative Tendency, 2. Change in Self-Discovery Tendency

Emotional Type: 3. Interesting, none

Effort Type: 3. Tried

2.2 Ability to accept social evaluation with sincerity

In this fiscal year's NAKAHARA Animation, 4 opportunities were prepared to evaluate work performance by third persons including a planning presentation, a prototype edition presentation, a screen party for a completed edition and additional screen parties that targeted the other grades' students. In these opportunities, each group appealed their own film or proposal for planning to an expert or audience including their guardians, the other groups' students and the other grades' students and received their evaluation directly. Moreover, in this fiscal year Mr. Fred Wang who is one of leading figures in the Hong Kong movie industry also judged their completed films.

Following 2.2.1 case describes that a group that a student who left the externalizing card belonged to received severe comments from a professional on animation production in a planning presentation and changed its bitter experience into a chance to enhance their film literally. Receiving an advice from a professional itself should be a precious opportunity for the students. Therefore, even some comments are hard to accept, like this case it is better to move on through bringing out valuable information from them instead of disappointing.

2.2.1

Class: 6-2, Date: 2015-11-06, Course: 6-2-15-11-06

Group: 6-2-8, Role: Assistant director

Content of externalizing card: Today Mr. Ito and Mr. Asakawa came here. I thought that it was good though I was very strained. Though many points that should be

improved were indicated, I would like to make the best use of them.

Learning Type: 5. Change in Communication, none

Emotional Type: 8. Difficult, 2. Happy

Effort Type: 5. Tried Hard Enough

B. Analysis series

2.3 subcategory belongs to an ability to analyze and confirm necessities among a number of complicated information.

2.3 Ability to examine information in a calm way

This ability is expected to work together with above mentioned “2.1 Ability to acknowledge advantages that others have”. It is necessary to assess really valuable information among many gathered sources as soon as possible. Of course assessing itself is not the end goal of this ability and time to spend for it is limited while tons of things to do are waiting. Therefore, how efficiently the students can examine information and draw out precious opinions or ideas and how much they can adapt them for their own film will become a difference between success and failure in this ability.

In Following 2.3.1 case, we can read that a group that a student who left the externalizing card belonged to examined a lot of opinions and comments on their film gathered in a prototype edition presentation and assessed how much they could amend their film considering time remaining for production from now on. As mentioned above, even there are great ideas or advices, unless assessing whether it is possible to realize them or not, a film may be fixed incompletely and eventually the result and quality of film will be decreased.

2.3.1

Class: 6-1, Date: 2015-12-16, Course: 6-1-15-12-16

Group: 6-1-2, Role: Director

Content of externalizing card: Today I felt happy that we could make an end credit roll and exchange various ideas with all members. Based on memos, we amended some parts that we could try. Though there were some parts that we could deal with and other ones that we could not, we tried to amend them as much as possible.

Learning Type: 3. Change in Role Grasp and Recognition, 4. Change in Occupation Understanding

Emotional Type: 2. Happy, 3. Interesting

Effort Type: 5. Tried Hard Enough

C. Application series

2.4 and 2.5 subcategories belong to an ability to adapt valuable information and make use of them.

2.4 Ability to find a clue from various information

For example, proposals for planning that each group prepared receive a variety of advices from an expert on animation production in a planning presentation, it requires the students to hungrily adapt advices that were given to not only own group but also to other groups if they seem useful for own proposal.

During NAKAHARA Animation activities, ability to find what is really necessary or valuable information is essential. At that moment, needless to say as the title of this ability suggests, the more scope to gather information is broadened when time allows, the more useful information to refer is gathered.

Following 2.4.1 case is an externalizing card that was described in a planning presentation and shows that a student who left the externalizing card could definitely find a clue to amend his/her group's proposal for planning after receiving advices from an expert on animation production. How much advices from a professional will be used totally depends on decisions by the students in each group. Like this case, how many practical clues they can find will become a difference between success and failure.

2.4.1

Class: 6-1, Date: 2015-11-06, Course: 6-1-15-11-06

Group: 6-1-6, Role: Animator

Content of externalizing card: Today our presentation was judged and we received good advices. I found many points that I would like to amend. I thought that I would like to work hard to make a good animation film.

Learning Type: 2. Change in Self-Discovery Tendency, none

Emotional Type: 2. Happy, none

Effort Type: 4. Tried Hard

2.5 Ability to adapt ideas and inventions

As one more step forward from above mentioned “2.3 Ability to examine information in a calm way”, how to actually utilize examined information is essential for this ability. If your main job is information analysis, probably examining is good enough to do. However, if your job is animation production, you will be required to adapt information that you judged as useful to your film or production process.

Following 2.5.1 case shows that a group that a student who left the externalizing card belonged to could make the best use of advises that it received in a prototype edition presentation actually to amend its film. If “2.3 Ability to examine information in a calm way” mentioned above is demonstrated, good ideas are examined carefully and they are actually adapted, it leads to increasing the quality and the result of a film.

2.5.1

Class: 6-2, Date: 2015-12-18, Course: 6-2-15-12-18

Group: 6-2-1, Role: Animator

Content of externalizing card: This time job was adding sound effects. At first it was jumpy but after receiving advices, it was good because it worked smoothly.

Learning Type: 1. Change in Self-Affirmative Tendency, none

Emotional Type: 3. Interesting, none

Effort Type: 2. A Little Insufficient

3. Ability to understand self-other

The number of subcategorized item: 4

A. Understanding others series

3.1 Ability to recognize others' specific character

3.2 Ability to try to learn others

B. Understanding oneself series

3.3 Ability to reflect oneself through others

3.4 Ability to reflect oneself through experience

A. Understanding others series

3.1 and 3.2 subcategories belong to a series of abilities to try to know others through admitting others' capabilities.

3.1 Ability to recognize others' specific character

This ability interprets “2.1 Ability to acknowledge advantages that others have” mentioned above from the side of “3. Ability to understand self-other”. Though both of them almost same, if it is necessary to show a difference between them, “2.1 Ability to acknowledge advantages that others have” admits proper abilities that each member demonstrates corresponding to a situation on the spot, on the other hand “Ability to recognize others' specific character” admits his/her excellent natural gifts or virtue that each member is inherent in from deeper perspective.

Following 3.1.1 case was described by a student who was a director and shows that he/she admired other member's skill in his/her group.

3.1.1

Class: 6-1, Date: 2015-11-13, Course: 6-1-15-11-13

Group: 6-1-3, Role: Director

Content of externalizing card: Today we made characters with clay. I recognized that Mr. H was very good at making properties.

Learning Type: 2. Change in Self-Discovery Tendency, none

Emotional Type: 2. Happy, 4. Easy

Effort Type: 4. Tried Hard

3.2 Ability to try to learn others

Through “3.1 Ability to recognize others' specific character” mentioned above, even a class mate whom you are not familiar with because he/she is basically incompatible with you until that time, once you can find obviously his/her good point, it will make you see him/her in a different way. This ability to try to learn others will be fostered when you start to have interests in him/her through this kind of cognitive change. Moreover, while fostering this ability, simultaneously it will lead to demonstrating “3.3 Ability to reflect oneself through others” as we will see later.

Following 3.2.1 case shows that a student who left the externalizing card noticed that there was a member who worked hard to clear up unnecessary equipment to secure sufficient time for shooting a film without being seen while film shooting entered the final stretch. It can be sure that this kind of self-devoted action itself will be evaluated highly and lead other members to admire his/her character.

3.2.1

Class: 6-1, Date: 2015-12-16, Course: 6-1-15-12-16

Group: 6-1-4, Role: Animator

Content of externalizing card: Today we could finish an end credit roll. While we finished the job, I thought that it was good to see Ms. K who was working hard to clear up.

Learning Type: 3. Change in Role Grasp and Recognition, none

Emotional Type: 2. Happy, 3. Interesting

Effort Type: 5. Tried Hard Enough

B. Understanding oneself series

3.3 and 3.4 subcategories belong to a series of abilities to reflect oneself through relationship with others.

3.3 Ability to reflect oneself through others

Based on the inter-subjective way of thinking, because it is difficult to observe own attitude and action unless we record it by a video camera, we can reflect who we are only through communicating with others.

Though every member supports each other during animation production, jobs are clearly divided by each role. Therefore, there is no excuse for cheating work performance. If it is a common paper test, you can hide the result in your desk's drawer and keep it away from others' eyes. However, your work performance is checked by other members and recorded on a film directly.

Following 3.3.1 case describes that a student who left the externalizing card started to be the confident of his/her ability and work performance because his/her job could receive high evaluation from his/her friends. It can be sure that he/she could reflect himself/herself because he/she worked with other members.

3.3.1

Class: 6-1, Date: 2015-12-03, Course: 6-1-15-12-03

Group: 6--, Role: Cinematographer

Content of externalizing card: Today we worked on background pictures too. I could find my job rewarding because my friends praised me.

Learning Type: 1. Change in Self-Affirmative Tendency, 5. Change in Communication

Emotional Type: 2. Happy, 3. Interesting

Effort Type: 3. Tried

3.4 Ability to reflect oneself through experience

As an extension of “3.3 Ability to reflect oneself through others” mentioned above, through the experience of collaboration with other members in a group, the aim of this ability is to promote each student to reflect what kind of person he/she is.

Ability to reflect oneself through others tries to reflect oneself through communicating with other members as the name suggests. On the other hand the feature of this ability is to reflect oneself through a variety of experiences obtained from entire animation production from a larger perspective including communicating with other members though it is true that there is a vague boundary between them and it is not necessary to divide them if you wish to suggest it.

Following 3.4.1 case describes that a student who left the externalizing card apologized that his/her group could not finish each job process as scheduled and eventually could not prepare enough time for adding sound effects that directly affected the outcome of its film because he could not work well as a director in connection with above mentioned “1.3 Ability to lead a group”. Though this is very severe reflection for him/her mentally, it should be a very valuable experience for him/her to learn difficulty to lead a group and the weight of responsibility through the skin.

3.4.1.

Class: 6-1, Date: 2015-12-16, Course: 6-1-15-12-16

Group: 6-1-7, Role: Director

Content of externalizing card: Terrific. We could not finish. I thought that we did not do jobs thinking ahead. As a director, I apologized that we had to cut out time even for adding sound effects.

Learning Type: 4. Change in Occupation Understanding, none

Emotional Type: 5. Sad, 7. Painful

Effort Type: 4. Tried Hard

4. Ability to understand and recognize a role

The number of subcategorized item: 7

A. Elementary level

4.1 Ability to accomplish own role

B. Intermediate level

4.2 Ability to deal with multiple jobs simultaneously

4.3 Ability to expand own role

C. Advanced level

4.4 Ability to look out over entirely beyond own role

4.5 Ability to undertake absurd jobs

D. Superlative level

4.6 Ability to stick to own jobs

4.7 Ability to optimize human resources according to situations

A. Elementary level

4.1 subcategory belongs to an ability level to deal with what you need to do in front of you as a first step in Ability to understand and recognize a role.

4.1 Ability to accomplish own role

As mentioned before, animation production is based on the system of division of labor because each job is done according to a role that each member takes even it consists of collaboration at a group unit as a basic condition. Therefore, if even one member cannot finish his/her job within a certain time frame, it will cause a trouble in other members who need to do next jobs. Each work performance at the spot and at the time will eventually affect the completion of a film.

Following 4.1.1 case is an externalizing card described by a student who was an animator. What this role needs to do is the most clearly defined and it is impossible to hide its work performance because it is obvious. Because jobs such as making characters by clay or painting background pictures by colors are essential for animation production, how hard the students who take the role work in each production activity at that moment is directly connected with the quality and outcome of a film.

4.1.1

Class: 6-1, Date: 2015-11-10, Course: 6-1-15-11-10

Group: 6-1-7, Role: Animator

Content of externalizing card: This time I worked on a storyboard and it was difficult more than expected. However, it was good and I felt happy because I worked hard and

could proceed. Next time I will make characters and keep working hard for the next job.

Learning Type: 1. Change in Self-Affirmative Tendency, none

Emotional Type: 1. Glad, 8. Difficult

Effort Type: 4. Tried Hard

B. Intermediate level

4.2 and 4.3 subcategories belong to an ability level that enhances capacity for processing work more than the elementary level such as dealing with multiple jobs simultaneously in Ability to understand and recognize a role.

4.2 Ability to deal with multiple jobs simultaneously

Though it depends on the size of a film, if it is the level of ones that are broadcasted on the air, a professional job site for animation production consists of strict division of labor and there is no chance to do other jobs beyond own role except for some extraordinary reason, for example, an animator takes a job for a dubbing artist.

On the other hand, in NAKAHARA Animation though it is based on division of roles as same as professional animation production, because there were only 4 members in a group especially in this fiscal year, in each production process sometimes extraordinary amount of jobs were loaded onto the students who took a specific role. Therefore, as the name of this ability suggests, it was necessary to deal with a lot of jobs simultaneously across role boundaries according to circumstances.

Following 4.2.1 case shows that division of roles worked well in a group and a variety of jobs were done smoothly. This fiscal year's activities can be regarded as an exceptional case. The system of division of labor was firmly established in most of groups. Situations where a group was divided by a forward that kept shooting a film and a back that prepared properties necessary for next scenes and both of them collaborated well to make film shooting move forward smoothly were observed from the earlier stage of film production.

4.2.1

Class: 6-1, Date: 2015-11-27, Course: 6-1-15-11-27

Group: 6-1-1, Role: Director

Content of externalizing card: Today we made the title and the first part. It proceeded smoothly because of division of roles. From now on I wish to keep doing jobs with

division of roles.

Learning Type: 3. Change in Role Grasp and Recognition, 4. Change in Occupation Understanding

Emotional Type: 4. Easy, 8. Difficult

Effort Type: 5. Tried Hard Enough

4.3 Ability to expand own role

As an extension of “4.2 Ability to deal with multiple jobs simultaneously” mentioned above, in NAKAHARA Animation activities there are situations more or less where the participating students are required to deal with unsuitable jobs for each of them. As a familiar example, because every year animation production is held during the fall and winter months and the students who are absent because of catching a cold or having flu start to come up, eventually other members need to relieve the roles of the absent students in a hurry.

Following 4.3.1 case describes that a group that a student who left the externalizing card belonged to could deal with what they needed to do even in a situation where a director who was supposed to lead a group was absent like an above mentioned example. It is true that a group can work in solidarity because of especially this kind of emergency situation.

4.3.1

Class: 6-1, Date: 2015-10-30, Course: 6-1-15-10-30

Group: 6-1-7, Role: Assistant director

Content of externalizing card: Today though our director was absent, it was good that 3 members could work well with division of roles.

Learning Type: 3. Change in Role Grasp and Recognition, none

Emotional Type: 2. Happy, 8. Difficult

Effort Type: 5. Tried Hard Enough

C. Advanced level

4.4 and 4.5 subcategories belong to an advanced ability level such as undertaking absurd jobs considering the progression of the entire production activity in Ability to understand and recognize a role.

4.4 Ability to look out over entirely beyond own role

As a highly developed version of “4.3 Ability to expand own role” mentioned above, the feature of this ability is not only to deal with a variety of jobs flexibly if necessary understanding them beyond own role but also to look out over how what you are doing right now will connect with the entire production activity.

Following 4.4.1 case is an externalizing card described by a student who was an animator and worried about the progress status of film shooting. If not only a director or assistant director manages the schedule of production but also an animator keeps watchful eyes on a tight schedule, they can share a sense of working on the production activities as scheduled in a group.

4.4.1

Class: 6-1, Date: 2015-12-03, Course: 6-1-15-12-03

Group: 6-1-2, Role: Animator

Content of externalizing card: Today we finished to shoot more than 500 pictures totally when I calculated. Because 1 minute 30 seconds needs 900 pictures to shoot, I will work hard.

Learning Type: 1. Change in Self-Affirmative Tendency, 5. Change in Communication

Emotional Type: 2. Happy, 3. Interesting

Effort Type: 4. Tried Hard

4.5 Ability to undertake absurd jobs

It is natural that most of responsible jobs are not simply divided by members equally. Therefore, as is often the case, some members are forced to take an unfair job because it will never be completed if they do not undertake it.

Following 4.5.1 case describes that a group that a student who left the externalizing card belonged to faced an unavoidable problem that was the deterioration of characters due to air drying as long as they were made by clay. We can read that he or she compulsorily endured an absurd situation where his/her group had to repair characters in parallel every time when a film was shot one by one frame because a film was never completed unless his/her group kept shooting.

4.5.1

Class: 6-2, Date: 2015-11-17, Course: 6-2-15-11-17

Group: 6-2-8, Role: Director

Content of externalizing card: Today we could start shooting at last. I felt very difficult because characters were broken every time when we moved them. I think that I will work hard from now on.

Learning Type: 2. Change in Self-Discovery Tendency, none

Emotional Type: 2. Happy, 8. Difficult

Effort Type: 4. Tried Hard

D. Superlative level

4.6 and 4.7 subcategories belong to a professional level in Ability to understand and recognize a role such as sticking to own jobs as much as possible or seeking to optimize human resources for own group as one more step after smoothly dealing with any kinds of jobs related to own role.

4.6 Ability to stick to own jobs

We can say that this ability to stick to own jobs is to be able to figure out what jobs your role needs to do, complete most of them and wish to enhance more. Once you can do jobs even little by little and start to gradually have confidence in your role, it is natural that you wish higher levels. At that time, being able to give special attention to details more than before is the feature of this ability.

Following 4.6.1 case is an externalizing card described by a student who was a cinematographer. Work related to film shooting has a tremendous number of environmental parameters that reflect in a film directly including conditions or settings such as exposure angle or lighting adjustment and you can unlimitedly stick to them if you wish. Especially like this case, once he/she could develop a basic ability to shoot a film, it is natural that he/she wished to try more shooting techniques.

4.6.1

Class: 6-1, Date: 2015-12-03, Course: 6-1-15-12-03

Group: 6-1-6, Role: Cinematographer

Content of externalizing card: Today we tried shooting a film as much as possible. It was good that the scene in which a pudding went into space was very interesting and shot smoothly. If possible, I wish to move the close-up scene more smoothly.

Learning Type: 3. Change in Role Grasp and Recognition, none

Emotional Type: 2. Happy, 3. Interesting

Effort Type: 5. Tried Hard Enough

4.7 Ability to optimize human resources according to situations

This ability to optimize human resources according to situations is located on the highest position of Ability to understand and recognize a role. As the ideal form of collaborative work, to be able to look out over each situation and the whole working condition and deploy human resources most suitably according to the site and the moment is essential for this ability.

Following 4.7.1 case is an externalizing card described during character design at Planning stage. We can read that a group that a student who left the externalizing card belonged to intentionally invested human resources on the most urgent job. As the feature of this case that is related to “5.8. Ability to access time and quality” to be mentioned later, we can point out that the group optimized human resources to put emphasis on the quality of character design and the outcome as a doll as the advantage of its film prior to working faster.

4.7.1

Class: 6-1, Date: 2015-10-30, Course: 6-1-15-10-30

Group: 6-1-3, Role: Director

Content of externalizing card: Today we kept working with the lead of our animator and could not complete writing all. However, it was good that we could draw unique characters.

Learning Type: 3. Change in Role Grasp and Recognition, none

Emotional Type: 2. Happy, 3. Interesting

Effort Type: 3. Tried

5. Ability to carry out a plan

The number of subcategorized item: 11

A. Management series

5.1 Ability to meet a certain deadline

5.2 Ability to manage time in each job

B. Implementation series

5.3 Ability to deal with multiple jobs in parallel

5.4 Ability to accomplish jobs as a group

C. Practical use series

5.5 Ability to make use of previous experience

5.6 Ability to decide a work procedure

5.7 Ability to prepare in advance

5.8 Ability to access time and quality

D. Reflection series

5.9 Ability to verify work performance

5.10 Ability to reflect entire work procedure

5.11 Ability to review objectively

A. Management series

Subcategories 5.1 and 5.2 belong to a series of basic abilities to be punctual or to meet a deadline while doing a job with responsibility.

5.1 Ability to meet a certain deadline

In a contract society like the present day, it is common that most of jobs set a deadline when some sort of contract is made and the terms of agreement are reached. In NAKAHARA Animation, as a major premise it is necessary to meet a deadline to produce a completed film or a deadline according to each work process such as proposing a plan or a prototype edition.

Following 5.1.1 case describes some situation where a group that a student who left the externalizing card belonged to was pressed by a deadline to propose a plan. In the career educational activities implemented in Nakahara Elementary School, the participating students are very strictly ordered to meet a deadline.

5.1.1

Class: 6-1, Date: 2015-10-30, Course: 6-1-15-10-30

Group: 6-1-5, Role: Director

Content of externalizing card: I learned that it was difficult to complete jobs by a deadline. I thought that even we tried but I felt difficult because we could not do them as scheduled.

Learning Type: 2. Change in Self-Discovery Tendency, 4. Change in Occupation Understanding

Emotional Type: 6. Angry, 8. Difficult

Effort Type: 4. Tried Hard

5.2 Ability to manage time in each job

Basically in NAKAHARA Animation, as long as meeting a deadline set in each production process, it entirely depends on each group to decide how to deal with jobs. However, actually it is common that they are pressed by numerous jobs requested in each production process. Therefore, they are expected to demonstrate this ability to manage time in each job following work process firmly.

Following 5.2.1 case describes that a group that a student who left the externalizing card belonged to could firmly complete jobs necessary to do within each production activity time. Like this case, unless finishing each job firmly, there is no way to complete one animation film. Therefore, not only it is important to look out over the whole work but also it is important that how much each member can pay attention to finishing jobs in sight within each production activity time and how actually he/she can demonstrate it.

5.2.1

Class: 6-2, Date: 2015-11-16, Course: 6-2-15-11-16

Group: 6-2-7, Role: Director

Content of externalizing card: Today it was good that various jobs including making a goalpost were completed.

Learning Type: 2. Change in Self-Discovery Tendency, none

Emotional Type: 3. Interesting, none

Effort Type: 5. Tried Hard Enough

B. Implementation series

5.3 and 5.4 subcategories belong to a series of abilities to implement jobs as planned increasing working efficiency as a group.

5.3 Ability to deal with multiple jobs in parallel

This ability is almost as same as “4.2 Ability to deal with multiple jobs simultaneously” mentioned above but is considered from the perspective of Ability to carry out a plan. During a limited time how you can deal with not only each job but

also multiple jobs in parallel in order to save time, even one minute for the production activities is essential to demonstrate this ability.

Following 5.3.1 case describes that film shooting and making properties were done in parallel and eventually necessary jobs were completed smoothly. Even one member was absent and manpower or work force was decreased significantly, as long as other members could deal with jobs in parallel and simultaneously, this case showed that they could fully compensate for one member's absence.

5.3.1

Class: 6-1, Date: 2015-11-27, Course: 6-1-15-11-27

Group: 6-1-2, Role: Assistant director

Content of externalizing card: Today though we have only 3 members, we collaborated and shot around 100 pictures. Because we also made many properties at the same time, we could proceed smoothly.

Learning Type: 2. Change in Self-Discovery Tendency, 4. Change in Occupation Understanding

Emotional Type: 2. Happy, 8. Difficult

Effort Type: 5. Tried Hard Enough

5.4 Ability to accomplish jobs as a group

The feature of this ability is what we reconsider "4.1 Ability to accomplish own role" in Ability to understand and recognize a role mentioned above from the perspective of group unit. Even it is necessary to complete jobs which are expected to be done individually as a major premise, an actual condition is that it is difficult to complete an animation film within a deadline unless necessary jobs should be accomplished as a group too.

Therefore, the bottom line of this ability is to build a consensus to definitely accomplish jobs as a group at the earlier stage of the production activities and to keep it to the end. It is natural that each member actually has a different ability and capability. Therefore, how to fill the gap between them as a group is also an important point to demonstrate this ability.

Following 5.4.1 case describes that a group that a student who left the externalizing card belonged to could collaborate with each other as a group definitely to be able to introduce its proposal for planning in a planning presentation. Like this case, making a proposal for planning arouses the students' awareness of animation production as an

occupation and becomes the first experience that requires them to work together as a group.

5.4.1

Class: 6-1, Date: 2015-11-05, Course: 6-1-15-11-05

Group: 6-1-4, Role: Animator

Content of externalizing card: Today it was good that we rehearsed a presentation and every member could work together to appeal.

Learning Type: 5. Change in Communication, 1. Change in Self-Affirmative Tendency

Emotional Type: 2. Happy", "3. Interesting

Effort Type: 3. Tried

C. Practical use series

Subcategories from 5.5 to 5.8 belong to a series of abilities to positively make use of methods that can advance jobs more effectively even one step further.

5.5 Ability to make use of previous experience

Because most of participating students have no experience of animation production as an occupation, each activity time is a chance for them to gain precious experience in order to deal with jobs more smoothly next time. Having no experience means that it requires how much they can learn on the moment and the site.

As a matter of fact, having no previous experience tends to result in a higher rate of failure. Therefore, how much they can extract knowledge that can avoid failure next time from experience in which they could not do as they expected rather than they could do smoothly is a key to success.

Following 5.5.1 case describes that a group that a student who left the externalizing card belonged to prepared another proposal considering experience in a planning presentation where any kinds of proposals was not automatically accepted. We can read in this case that he/she could cultivate a strong spirit and an ability to develop an actual strategy without being depressed after learning a harsh reality that his/her idea was turned down literally.

5.5.1

Class: 6-1, Date: 2015-11-10, Course: 6-1-15-11-10

Group: 6-1-4, Role: Cinematographer

Content of externalizing card: Today we made the second proposal if the first one is turned down. I thought that we worked faster because we could make most of background pictures too.

Learning Type: 3. Change in Role Grasp and Recognition, 4. Change in Occupation Understanding

Emotional Type: 1. Glad, 4. Easy

Effort Type: 4. Tried Hard

5.6 Ability to decide a work procedure

This ability can be called as the application of “5.5. Ability to make use of previous experience” mentioned above on the actual site. Even the students have no experience of animation production, if they try various jobs related to production in an impromptu manner without sufficiently planning in advance, they cannot expect efficient work procedure and it will be directly linked to a waste of precious time for production.

Of course, as long as they deal with jobs that they never tried before, it is true that only what they can do is throwing themselves into jobs. That is why it is necessary to feed back what you obtained from previous experience for the next production activities paying attention to how and what you can do to make things better or cannot and to make an efficient work procedure.

Following 5.6.1 case is an externalizing card described in the early stage of the practical production activities. Every year it is common that a time when most of groups can start jobs after firmly making a work procedure like this case is around the late second half of the production activities while mastering “5.5 Ability to make use of previous experience” mentioned above.

5.6.1

Class: 6-1, Date: 2015-10-30, Course: 6-1-15-10-30

Group: 6-1-2, Role: Assistant director

Content of externalizing card: Today we continued what we did the other day. We also decided how to make a detailed story and characters in order to convince Mr. Ito.

Learning Type: 1. Change in Self-Affirmative Tendency, 3. Change in Role Grasp and Recognition

Emotional Type: 2. Happy, 3. Interesting

Effort Type: 4. Tried Hard

5.7 Ability to prepare in advance

As the similar ability of “5.6 Ability to decide a work procedure” mentioned above, everybody knows empirically that how completely preparatory work is done in advance is important to deal with jobs smoothly. On the other hand, in reality things gradually tends to be not going as expected once the quantity of job is overflowing.

However, in NAKAHARA Animation even jobs necessary to do are overflowing, how proactively you can prepare in advance making the best use of knowledge obtained through previous experience eventually is a key to use a limited production time effectively and it affects the content and quality of a film.

Following 5.7.1 case is an externalizing card described while the second half of making properties and shows that a group that a student who left the externalizing card belonged to firmly prepared for a practical film shooting that was about to start soon. Like this case, preparing various variations of expression even for a same character enables to enrich emotional expressions and becomes an advantage to make film shooting move smoothly saving the effort of making them on the site as minimum as possible.

5.7.1

Class: 6-1, Date: 2015-11-21, Course: 6-1-15-11-21

Group: 6-1-2, Role: Assistant director

Content of externalizing card: Today we made a lot of characters. We made various versions for each character. Because Penta was completed, I think that next time we can start smoothly.

Learning Type: 1. Change in Self-Affirmative Tendency, 3. Change in Role Grasp and Recognition

Emotional Type: 2. Happy, 4. Easy

Effort Type: 5. Tried Hard Enough

5.8 Ability to access time and quality

As a necessary ability that is common to most of jobs, we can point out accessing a balance between time and quality. Especially, occupations such as animation production in which work performance is directly left as visual expression strongly require an ability to assess. Obviously a relationship between time and quality is inversely proportional. If you wish to make a good film as much as possible, you will be

required enough time and eventually you will be pressed for time that you have already spent.

Following 5.8.1 case is an externalizing card described in the stage of making properties. As a matter of fact, because the outcome of a film will be drastically changed by the quality of a character as a target for film shooting, like this case, it is important to spend enough time on making properties and prepare characters and background pictures with higher quality as much as possible.

5.8.1

Class: 6-2, Date: 2015-11-12, Course: 6-2-15-11-12

Group: 6-2-8, Role: Director

Content of externalizing card: Today we made properties. Because making good animation depends on properties, I did it carefully. I will work hard to make a good film.

Learning Type: 1. Change in Self-Affirmative Tendency, none

Emotional Type: 3. Interesting, none

Effort Type: 4. Tried Hard

D. Reflection series

Even how positively you engage in production activities, it is necessary to verify whether actual jobs proceeds as planned or not. 5.9, 5.10 and newly added 5.11 subcategories belong to a series of abilities to reflect the whole from one step back in perspective.

5.9 Ability to verify work performance

As the essence of this ability, dealing with a job with responsibility includes not only completing it but also verifying it as promised.

Following 5.9.1 case is an externalizing card described by a student who was a cinematographer. As long as whoever chooses the role, every time he/she needs to check if his/her hands or a desk as a foundation is shot in a picture together. Once production time is running out, it starts to ignore this kind of basic procedure. For this reason, it is important to form the habit of verifying every time.

5.9.1

Class: 6-1, Date: 2015-11-19, Course: 6-1-15-11-19

Group: 6-1-3, Role: Cinematographer

Content of externalizing card: Today I did shooting a film. If I make a mistake on the first part, I have to erase all parts. Therefore, I wish to do it checking every time.

Learning Type: 2. Change in Self-Discovery Tendency, none

Emotional Type: 2. Happy, none

Effort Type: 3. Tried

5.10 Ability to reflect entire work procedure

In concert with “5.9 Ability to verify work performance” mentioned above, it is important not only to check each work performance but also to review the whole work performance as required. Even in such a case where each job that each member is in charge of is done smoothly with division of roles, unfortunately it often happens that it is not actually moving forward to an ideal direction from the perspective of the entire work.

Following 5.10.1 case describes that a student who left the externalizing card recognized that the outcome of each property that he/she was making at that moment related to the entire outcome of a film. Like this case, to work on a job on the site paying attention to next jobs, the whole production activities and consequently the outcome of a film directly affects work efficiency and the quality of a film considerably.

5.10.1

Class: 6-1, Date: 2015-11-10, Course: 6-1-15-11-10

Group: 6-1-3, Role: Cinematographer

Content of externalizing card: Today it was difficult to make small and big things. However, I thought that we can make a good film if we can make all of them.

Learning Type: 1. Change in Self-Affirmative Tendency, none

Emotional Type: 2. Happy, none

Effort Type: 4. Tried Hard

5.11 Ability to review objectively

This ability is newly and additionally categorized through this fiscal year’s NAKAHARA Animation activities. Animation production implemented in Nakahara Elementary School is definitely a part of artistic activities. However, the activities aim to make films only to introduce to an audience as responsible work. Therefore, it

always requires the students to review a film that they are making including the work process from the perspective of a third person. If the objective viewpoint is lost, most of completed films tend to be egoistic and nobody except own group members can understand them.

Following 5.11.1 case describes that a student who left the externalizing card worked on the production activities always paying attention to an audience's or expert's reaction or their viewpoint.

5.11.1

Class: 6-2, Date: 2015-11-09, Course: 6-2-15-11-09

Group: 6-2-2, Role: Cinematographer

Content of externalizing card: Today we received advices. I thought that it was important to receive objective opinions because there were a lot of parts that we needed to amend after reviewing a storyboard.

Learning Type: 2. Change in Self-Discovery Tendency, none

Emotional Type: 2. Happy, 3. Interesting

Effort Type: 4. Tried Hard

6. Ability to solve problems

The number of subcategorized item: 8

A. Self-awareness series

6.1 Ability to be ready for own responsibility

6.2 Ability to be patient tirelessly

6.3 Ability to complete important jobs steadily

6.4 Ability to demonstrate by own action actively

B. Continuation series

6.5 Ability to keep increasing work efficiency

6.6 Ability to keep inventing

C. Group series

6.7 Ability to keep increasing work efficiency as the whole group

6.8 Ability to make up for deficiencies with each other

A. Self-awareness series

Subcategories from 6.1 to 6.4 belong to a series of abilities to be ready for taking the initiative in solving problems.

6.1 Ability to be ready for own responsibility

Though this ability shares some parts with “4.1 Ability to accomplish own role” in Ability to understand and recognize a role, as a major premise unless each member firmly makes up his/her mind to solve troubles or problems that each members needs to face with their own responsibility, there is no way to keep moving production activities. Moreover, if you do not have a sense of responsibility to solve problems, you may incline yourself to depending too easily on somebody’s help and have an irresponsible attitude toward work performance that you need to deal with.

Following 6.1.1 case is an externalizing card described by a student who was an animator in the stage of deciding one plan. We can read that he/she sufficiently made up his/her mind because an animator was the most important role to realize a story that was decided in a group.

6.1.1

Class: 6-1, Date: 2015-10-24, Course: 6-1-15-10-24

Group: 6-1-6, Role: Animator

Content of externalizing card: I am an animator and think that it is actually difficult to make what we decided this time. However, we will collaborate to realize it as a good film. I am looking forward to it.

Learning Type: 3. Change in Role Grasp and Recognition, none

Emotional Type: 2. Happy, none

Effort Type: 3. Tried

6.2 Ability to be patient tirelessly

Most of jobs related to animation production try the majority of the students’ patience. Even film shooting needs to take more than 1000 pictures in terms of 10 frames per one second every year and a film will never be completed unless each frame is shot consistently.

For example, in order to make a background picture with a blue sky, it is necessary to paint it patiently with blue color using coloring materials or a magic marker avoiding an uncoated area. If there is an uncoated area, even a small spot, it is automatically

shot in a film and in most cases there is no chance to amend it later. In other words, it is impossible to leave troubles or problems that happened at the site until later.

Following 6.2.1 case describes a situation where a student who left the externalizing card kept shooting a film patiently facing a hard reality that it was necessary to shoot 10 frames for only one second film and it was impossible to complete the entire film without shooting one by one frame. If you shoot same 10 frames continuously, it is not so difficult. However, if you need to move characters slightly and shoot them one by one frame, it is going to be more difficult to do and it also requires patience to work steadily.

6.2.1

Class: 6-1, Date: 2015-11-27, Course: 6-1-15-11-27

Group: 6-1-1, Role: Cinematographer

Content of externalizing card: Today I shot a film. Because of only one second per 10 pictures, it was very difficult.

Learning Type: 2. Change in Self-Discovery Tendency, 4. Change in Occupation Understanding

Emotional Type: 3. Interesting, 8. Difficult

Effort Type: 4. Tried Hard

6.3 Ability to complete important jobs steadily

This ability interprets “4.1 Ability to accomplish own role” mentioned above from the side of “Ability to solve problems”. In NAKAHARA Animation, there are some jobs that never forgive a mistake even they are very simple to do such as saving film data through dragging and dropping a specific folder into a USB memory drive.

For another example that never forgives a mistake, it is editing work to manage films that were shot on a roll to roll basis and to connect all of them to make one completed film. As a matter of fact, if you mistake the order of connection, it will turn to be an embarrassing film that is composed of nonsensical scenes. For your reference, a running time per one roll depends on each of them but usually around a few seconds or 10 seconds at most. Therefore, though it depends on a total running time, if it is a 2 minutes film, it will be composed of around 12 to 20 rolls.

Following 6.3.1 case is a typical one as mentioned above that a student who left the externalizing card failed to save digital film data that his/her group shot.

6.3.1

Class: 6-2, Date: 2015-12-04, Course: 6-2-15-12-04

Group: 6-2-4, Role: Director

Content of externalizing card: Because today I made a lot of mistakes when I needed to save data in a USB memory disk, I thought that I should pay more attention to it.

Learning Type: 1. Change in Self-Affirmative Tendency, 5. Change in Communication

Emotional Type: 1. Glad, none

Effort Type: 3. Tried

6.4 Ability to demonstrate by own action actively

On the site of animation production, it requires visible work performance as visual expression literally even you say anything in word. Therefore, unless the students keep acting positively and show the result of action in a visible manner, they cannot complete a film and their work performance will not be accepted socially.

Following 6.4.1 case is an externalizing card described by a student who was a cinematographer and shows that he or she could not do a job related to his/her role at the stage of making properties, on the other hand, once film shooting was started, he or she could thoroughly make a significant contribution to the job corresponding to his/her role. Furthermore, he or she also showed a will to act more positively in the activities ahead.

6.4.1

Class: 6-1, Date: 2015-11-19, Course: 6-1-15-11-19

Group: 6-1-6, Role: Cinematographer

Content of externalizing card: This time was film shooting and it was good that I could help other members. I would like to do creative jobs more positively.

Learning Type: 1. Change in Self-Affirmative Tendency, none

Emotional Type: 1. Glad, 2. Happy

Effort Type: 4. Tried Hard

B. Continuation series

6.5 and 6.6 subcategories belong to a series of abilities to keep walking toward solving problems continuously through advancing a series of self-awareness mentioned above with one step further.

6.5 Ability to keep increasing work efficiency

This ability is positioned as a pair of “6.7 Ability to keep increasing work efficiency as the whole group” that we will see later. On the premise that it is necessary to complete jobs or to solve problems that each member should deal with, this ability seeks to increase more work efficiency at the same time.

Following 6.5.1 case describes that a student who left the externalizing card realized that his/her group’s work efficiency was increasing. As a feature, a word such as “pace” related to time or speed was used in the card. In a situation where this ability to keep increasing work efficiency is demonstrated, like this case, a sense of speed that makes you feel moving forward energetically is shared in a group.

Moreover, as the data of Emotional Type in this case shows directly, it can be sure that while his/her group tried to deal with difficult jobs every time, eventually work efficiency was increasing and the production activities proceeded smoothly so that they could also feel a sense of fulfillment including “Happy”.

6.5.1

Class: 6-1, Date: 2015-11-05, Course: 6-1-15-11-05

Group: 6-1-5, Role: Director

Content of externalizing card: Though we were behind other groups until the last time, it was good that this time we could catch up with them and manage to prepare for a presentation. I wish to keep this pace next time too.

Learning Type: 1. Change in Self-Affirmative Tendency, none

Emotional Type: 8. Difficult, 2. Happy

Effort Type: 4. Tried Hard

6.6 Ability to keep inventing

It is necessary to keep inventing constantly to cultivate “6.5 Ability to keep increasing work efficiency” mentioned above. As long as doing same things continuously, it is difficult to increase work efficiency anymore. As a reality, there are few chances to keep shooting same scene for a long time and you always need to face problems according to a new scene. Therefore, it is necessary to keep inventing to deal with them consequently.

Following 6.6.1 case describes that a group that a student who left the externalizing card belonged to added new devices and ideas to its film.

6.6.1

Class: 6-1, Date: 2015-11-21, Course: 6-1-15-11-21

Group: 6-1-4, Role: Director

Content of externalizing card: Today we made small sets. We made a lawn with the leftovers of a pencil sharpener based on Ms. H's idea. I was surprised to see it because it was so real. I wish that it will be dried up soon.

Learning Type: 5. Change in Communication, 2. Change in Self-Discovery Tendency

Emotional Type: 2. Happy, 1. Glad

Effort Type: 4. Tried Hard

C. Group series

6.7 and 6.8 subcategories belong to a series of abilities to solve problems continuously as a group.

6.7 Ability to keep increasing work efficiency as the whole group

As compared with "6.5 Ability to keep increasing work efficiency" mentioned above that requires each member to increase his/her work efficiency from a personal perspective, the essence of this ability is to require work efficiency from an entire group perspective.

Though there is no specific boundary between them, there is no way to promote efficiency as a whole unless each member tries to increase efficiency in each job. On the other hand, unless a sense of promoting efficiency is actively shared in a group, it is difficult to expect that it is reflected in each job.

As following 6.7.1 case represents, in this fiscal year's NAKAHARA Animation activities, because a sense of increasing work efficiency was shared in most of groups from the early stage of production, they could work on film shooting with a very fast speed. As described in this case, because a group was wonderfully divided into some members who were in charge of film shooting basically and other members who were in charge of preparing equipment necessary for next scenes with division of roles, it succeeded in keeping film shooting as seamlessly as possible.

6.7.1

Class: 6-1, Date: 2015-12-03, Course: 6-1-15-12-03

Group: 6-1-2, Role: Director

Content of externalizing card: Today we could work smoothly and shoot 591 pictures. I wish to keep this pace. It worked efficiently because we divided our group into a team in charge of making properties and another one in charge of shooting pictures.

Learning Type: 3. Change in Role Grasp and Recognition, 4. Change in Occupation Understanding

Emotional Type: 2. Happy, 8. Difficult

Effort Type: 5. Tried Hard Enough

6.8 Ability to make up for deficiencies with each other

Totally the 59 subcategories related to the 7 types of abilities that are expected to cultivate through career education are picked up in this chapter. However, it is never expected that every 6th grader can master all of them during NAKAHARA Animation activities. This chapter did nothing more than categorizing abilities that were demonstrated or bloomed during the production activities and introducing the result.

Because there are similar ones or they contradict each other in the subcategories, it is initially impossible to ask one person to cultivate all of these abilities.

One hand nobody can ask one person to cultivate all of these abilities, on the other hand there are situations in front of the students that require each ability. Therefore, a conclusion that is derived from two hands is that there is no way without compensating for some abilities that are in short among members.

Following 6.8.1 case describes that in a critical situation where one member was absent, a group that a student who left the externalizing card belonged to worked harder than usual to make up for a vacancy on the staff. We can read that the group could get over the crisis even someone was absent through cultivating “4.3 Ability to expand own role” mentioned above and actually demonstrating it. As a familiar story, this kind of contingency situation promotes jobs to proceed more smoothly than usual like this case.

6.8.1

Class: 6-1, Date: 2015-11-27, Course: 6-1-15-11-27

Group: 6-1-2, Role: Animator

Content of externalizing card: Even Mr. S was absent, this time we could shoot a film more than 1000 pictures. Though it still needs more to complete, I would like to keep working hard.

Learning Type: 3. Change in Role Grasp and Recognition, 4. Change in Occupation

Understanding

Emotional Type: 2. Happy, 3. Interesting

Effort Type: 5. Tried Hard Enough

7. Ability to understand occupations

The number of subcategorized item: 7

A. Reality perception series

7.1 Ability to grasp the nature of work

7.2 Ability to grasp the structure of division of labor system

7.3 Ability to recognize a world where dependence is unacceptable

7.4 Ability to approach with a sense of reality

B. Evaluation series

7.5 Ability to accept social evaluation

7.6 Ability to measure achievement based on an outcome

C. Desire for improvement series

7.7 Ability to embrace a mind to further challenge

A. Reality perception series

From 7.1 to 7.4 subcategories belong to a series of abilities to firmly recognize the reality of having a job.

7.1 Ability to grasp the nature of work

This ability based on how firmly the students can grasp the meaning of implementing animation production as a part of career education leads to the value or importance of the educational activities held in Nakahara Elementary School.

As a matter of fact, as long as holding career education in the framework of public education, it never aims to foster experts such as animators or designers. Of course as the secondary result, it should be grateful if some students will pick up a job in this field in the near future.

At least the career educational activities in Nakahara Elementary School expect the participating students to be able to reflect what they experienced through holding a job with responsibility. In other words, the educational activities expect the students to

foster this kind of awareness setting animation production as a learning material and borrowing wisdom and experience from the world outside of a school including a professional animation production studio.

In following 7.1.1 case, a student who left the externalizing card recognized that there are persons who keep working this kind of work that requires patience every day through his/her own experience that he/she needed to take a picture one by one at 1000 frame unit. It can be sure that he or she also recognized that only persons who keep working this kind of job for a long time can be called as a professional.

7.1.1

Class: 6-1, Date: 2015-12-03, Course: 6-1-15-12-03

Group: 6-1-1, Role: Cinematographer

Content of externalizing card: Today I shot a film. I thought it was great that professionals keep shooting a film one by one picture every day.

Learning Type: 2. Change in Self-Discovery Tendency, 4. Change in Occupation Understanding

Emotional Type: 3. Interesting, 8. Difficult

Effort Type: 4. Tried Hard

7.2 Ability to grasp the structure of division of labor system

NAKAHARA Animation activities adapt a professional animation production process as much as possible in order to have the students feel a sense of reality. Because professional animation production is based on the system of division of labor, NAKAHARA Animation is also base on it among members in a group.

Following 7.2.1 case is an externalizing card described in Preliminary production stage. After receiving a lecture on basic work process for animation production from a professional at first in Preliminary production stage, most of students start to recognize the complicated process and the existence of various roles. After the actual work begins in Planning stage, they start to recognize the importance of role-sharing and after the production activities are proceeding, they start to understand through their own experience that division of labor corresponding to each role is essential to dealing with jobs smoothly.

7.2.1

Class: 6-2, Date: 2015-09-15, Course: 6-2-15-09-15

Group: 6-2-4, Role: Assistant director

Content of externalizing card: I thought that making an animation work that I was always watching was difficult because it took a lot of time. Only for 2 seconds scene, it needed to make a hundred of original pictures. I learned that there were more roles to make one animation work than I thought.

Learning Type: none, none

Emotional Type: none, none

Effort Type: none

7.3 Ability to recognize a world where dependence is unacceptable

As mentioned before, animation production is implemented as a part of career education to the last and there is no aim to foster the next generation of animators as a part of occupational training. On the other hand, as long as it is implemented as a part of work, every completed film as the result is socially evaluated by an audience and professionals through a screen party.

Evaluation and comments in a screen party can be directly replaced with work performance. A ranking list from top to bottom is literally opened to the public according to audience response to each film, professional comments and a popularity vote by them. Every year this social evaluation process has no sweetheart deal by someone including the teachers in charge and tends to be severe because a few films can receive most of votes and some ones cannot have even a single vote.

NAKAHARA Animation activities require the students to accept a social reality where dependence is unacceptable through teaching not by someone else but by their own actual experience. It is true that even some films can get high in rankings in a popularity vote, there are obviously a lot of points that they need to amend in the eyes of experts.

Not only children but also adults will be disappointed if they can only receive a severe evaluation as the result of work that they spent for a long time. Nevertheless, through having this kind of experience in youth, when they start to actually work on site as a member of society and receive hard social evaluation inevitably in the future, instead of easily running away from there, they are expected to firmly receive the reality without losing a heart and foster a strong mind to move forward even one step ahead.

Following 7.3.1 case is an externalizing card that was described when a group that a student who left this card belonged to received social evaluation through a planning presentation. As this case shows, even the students receive severe evaluation, how

they can make the best use of what they learned from it for the next activities and their future from now on is the aim of career education implemented in Nakahara Elementary School and leads to increase zest for living that it aims at.

As mentioned above, even the students in the 6th grade receive severe social evaluation, it is totally unnecessary for them to doubt the limitations of their abilities and to lose confidence in their way of life from now on. It is enough for them to have an experience to try boldly standing at the entrance to a working world that is expected to be one of factors that foster zest for living.

As the response of the students like this case, one hand they recognized a hard reality in a society, on the other hand they had only a little sense of despair and rather expected future. The essence of this ability to recognize a world where dependence is unacceptable is not only based on severity to face reality but also hope for future beyond hardship.

7.3.1

Class: 6-1, Date: 2015-11-06, Course: 6-1-15-11-06

Group: 6-1-6, Role: Assistant director

Content of externalizing card: Today we did our best on the real stage of presentation but it did not work at all. I understood that how important working was.

Learning Type: 4. Change in Occupation Understanding, none

Emotional Type: 7. Painful, 8. Difficult

Effort Type: 2. A Little Insufficient

7.4 Ability to approach with a sense of reality

NAKAHARA Animation aims to let the participating students approach various jobs related to animation production holding a sense of reality through making a career educational program based on a simulated experience type model that follows professional animation production procedure and realizing a work atmosphere as much as possible instead of visiting at the production site of animation studio.

If the students try to approach NAKAHARA Animation as same as other regular learning activities without a sense of reality, we are afraid that they will rely on their teachers who are an amateur at animation or misunderstand that there is a role model somewhere and they need to copy it as precisely as possible as the aim of the activities.

We can identify approaching jobs with a sense of reality with taking responsibility for the jobs. As long as the students produce animation just for fun, we cannot expect

them to take responsibility. If films that are made without hard work are easily accepted socially, it should be a shame.

Moreover, because of holding a sense of reality, it will lead to promote a challenging spirit or a sense of advancement that the students have. Because they dare to try something difficult, a thought to examine their own ability will come up. Even they are beaten by a hard reality, a truth that they challenged bravely is left and it is definitely a medal of honor for them.

Following 7.4.1 case describes that a student who left the externalizing card needed to work overtime because his/her group could not finish jobs as scheduled. There are few chances for most of students to experience overtime work with responsibility in regular educational programs. In connection with above mentioned “5.4 Ability to accomplish jobs as a group”, as long as the students cannot expect support from their teachers or other groups, they need to work on jobs by themselves and if there is not enough time, they need to make it by themselves. Because they have to face these kinds of hardships, needless to say this ability to approach with a sense of reality will be cultivated.

7.4.1

Class: 6-1, Date: 2015-12-08, Course: 6-1-15-12-08

Group: 6-1-8, Role: Assistant director

Content of externalizing card: At today's moment, less than 256 pictures were shot. It should be terrible more or less. I can easily predict that we need to work overtime. I would like to work harder increasing speed.

Learning Type: 1. Change in Self-Affirmative Tendency, none

Emotional Type: 8. Difficult, none

Effort Type: 5. Tried Hard Enough

B. Evaluation series

7.5 and 7.6 subcategories belong to a series of abilities to properly evaluate past achievements considering that any jobs with responsibility need to face social evaluation.

7.5 Ability to accept social evaluation

As the feature of career part in career education, the career educational activities implemented in Nakahara Elementary School put emphasis on evaluation by third

persons. As long as a job needs to take responsibility in any occupational fields, needless to say social evaluation for the work performance will be shown in whatever form. Therefore, we can say that social meaning to implement career education as a part of public educational system can be established because this evaluation part is definitely involved in the activities.

Of course it is also true that various ways to evaluate socially exist according to each field and occupation. For example, the more products you sell, the more profit increases and the more it reflects on your income. Or like researchers in universities, if your academic paper as the result of your research is approved in a society, you can rise in rank. On the other hand, it is common among most of fields that promoting higher socially according to evaluation means having more chances to commit larger scale business with more responsibilities.

At first, you cannot avoid social evaluation if you wish to be accepted as a member of society and commit jobs with more responsibilities. In most cases, quite severe social evaluation is common. In the background, there is a condition that severe social evaluation is a criterion to decide whether you can handle a job with a heavy responsibility or not, therefore the way of evaluation cannot be softened easily.

On the other hand, even there are a variety of methods for social evaluation, there is no perfectly accurate standard to evaluate equally and objectively in reality. Therefore, it is unavoidable to include intentional judgment by evaluators frequently. Furthermore, in some occupations that deal with visual expression such as animation, social evaluation for them is decided by only audiences' sensuous judgment such as likes or dislikes and their income also directly depends on it.

As mentioned before, NAKAHARA Animation activities put much emphasis on opportunities for social evaluation. Setting these kinds of opportunities to face a hard reality contributes to promote a sense of reality and responsibility such as trying professional jobs among the students in connection with "7.4 Ability to approach with a sense of reality" mentioned above.

The career educational activities in Nakahara Elementary School regard how firmly the students can accept even severe social evaluation as a part of the essence. On the other hand, a special opportunity that enables the students to reflect the result of social evaluation from the side of "education" in career education is also prepared.

7.5.1 case describes that a student who left the externalizing card noticed that their proposal had room for improvement after it received severe suggestions from an expert on animation production. The value of cultivating this ability to accept social evaluation is to encourage this kind of awareness or reflection. In other words, social

evaluation that cannot encourage awareness or reflection is meaningless.

7.5.1

Class: 6-1, Date: 2015-11-06, Course: 6-1-15-11-06

Group: 6-1-6, Role: Director

Content of externalizing card: Though today is for the presentation on a real stage and I felt very nervous, it was good because we could make it through. Because our film received advices and I thought that we have a long road to travel. However, I think that we can make the best use of the advices to improve our film.

Learning Type: 3. Change in Role Grasp and Recognition, 4. Change in Occupation Understanding

Emotional Type: 8. Difficult, none

Effort Type: 4. Tried Hard

7.6 Ability to measure achievement based on an outcome

As mentioned before animation production through the career educational activities in Nakahara Elementary School does not directly aim to foster self expression or artistic creativity. It mainly aims to make films as a part of job, to show completed ones to an audience and to receive social evaluation through reaction or comments from it.

Though every year the students have to face severe social evaluation, this kind of experience promotes them to reflect what they did and becomes an opportunity to recognize to what extent their capability can work in a practical social activity. If they do not know how much their real capability is, they will be treated as a child for a longer time. Therefore, being treated as a target for evaluation itself is a precious trial for the students even they are evaluated severely. Considering this kind of background, we can say that this ability to measure achievement based on an outcome is an ability to calmly reflect own capability at this moment certainly based on social evaluation.

Academic achievement tests for general education or measurements for various games to gauge improvement in physical performance are a ruler to know own real capability and these measurements put emphasis on the growth of individual capability. However, they cannot directly gauge how academic achievement or physical performance can work in practical social activities.

Within the framework of public education there are few opportunities to know how much your capability can really work or what kind of level you have in the field of practical business activities. In other words, public education has not prepared

opportunities or arrangements to measure zest for living in a society so far. Therefore, the career educational activities to cultivate zest for living are expected to be precious opportunities for the students to definitely try their practical capability and NAKAHARA Animation is no exception.

Being judged through social evaluation leads the students to accept severe results without choice more often than not and forces them to face a difficult situation mentally. On the other hand, through the trial of the career educational activities implemented in Nakahara Elementary School for 11 years until now, there were very few students who absolutely showed a negative reaction when they faced an opportunity in which their capability was directly judged.

The reason why the students can accept severe evaluation is that they regard an opportunity to try their real capability as a first step to be recognized as a member of society or as a person who can decide what he/she need to do by him/herself.

As a matter of fact, we can point out that even they fail at that moment, they definitely know the truth that they are still children and there is a plenty of time before they become an adult. This means that they fear nothing in a good sense and we can also say that this is a privilege that only they have as a child.

Following 7.6.1 case is an externalizing card that was described in the final phase of film shooting and we can read that a student who left the externalizing card pushed him/herself to the max in order to improve the quality of his/her group's film as much as possible till the last. We can also read that he/she evaluated him/herself not based on self-indulgent assessment without actual achievement but a sense of accomplishment or fulfillment after his/her group competed professional work.

7.6.1

Class: 6-1, Date: 2015-12-11, Course: 6-1-15-12-11

Group: 6-1-6, Role: Animator

Content of externalizing card: Today we could finally shoot the last scene and only an end credit roll is left. After watching every part of film at once, it was good that we could gain from the pain until now. I expect to watch other groups' films.

Learning Type: 1. Change in Self-Affirmative Tendency, none

Emotional Type: 1. Glad, 2. Happy

Effort Type: 5. Tried Hard Enough

C. Desire for improvement series

7.7 subcategory belongs to a series of abilities to have desire for further improvement making use of skills or abilities that are acquired through the career educational activities.

7.7 Ability to embrace a mind to further challenge

Though cultivating zest for living autonomously is the major premise of implementing career education, to accomplish zest for living once at some point of time is not enough and we need to keep learning it over a lifetime. In that context career education is a part of lifelong education and completing it once in elementary or middle schools is not enough too though unfortunately it is automatically finished until the period of public education in reality.

As a matter of fact, NAKAHARA Animation does not expect the students to accomplish zest for living for half a year to implement the activities and each student will chose how to live from now on in a thousand ways. Therefore, nobody including the students themselves can predict how to keep learning zest for living.

Furthermore, because we cannot avoid facing the information society based on globalization where various types of information are exchanged and every moment a situation is constantly changing and need to live in this kind of society inevitably accepting waves of change, learning continuously at all times in response to change is the core of zest for living.

Therefore, this ability is regard as a part to sustain continuous learning. To keep always stimulating zest for living through highly embracing a mind to challenge and curiosity for example aiming at a higher level according to a situation where you are in or finding a new way turns to be the driving force of this ability.

7.7.1 case is an externalizing card described after receiving severe social evaluation through a screen party for completed films and we can read that a student who left the card felt disappointed because of a low social evaluation. On the other hand, we cannot see resignation in this card. We can rather read a strong will to make use of precious experience that he/she learned through a hard reality for his/her future.

If NAKAHARA Animation is a learning activity to force the students to give up their future from the stage of elementary school, it should be closed after the pilot project held by Ministry of Economy, Trade and Industry 11 years ago. On the other hand, in the background of why NAKAHARA Animation could continue after that, we can point out that the learning activity expects that every student has the bud of this ability to embrace a mind to further challenge and keeps watching that it is really bloomed like this case.

7.7.1

Class: 6-1, Date: 2016-01-16, Course: 6-1-16-01-16

Group: 6-1-1, Role: Director

Content of externalizing card: The result of our animation film was 11th. But I thought that we should definitely embrace hard work and the evaluation for our film that we collaborated to make as a team and would like to make the best use of what we experienced when we go into the workforce.

Learning Type: 3. Change in Role Grasp and Recognition, 4. Change in Occupation Understanding

Emotional Type: 3. Interesting, 8. Difficult

Effort Type: 4. Tried Hard

In this chapter the 59 types of abilities including newly added one were introduced as the subcategories of the 7 types of abilities that are expected to foster during career education based on more than 1200 externalizing cards that were described in this fiscal year's activities. On the other hand, in reality it should have more types of abilities that were bloomed than the 59 ones and some of them may not fit into the framework of the 7 types of abilities. Moreover, the work to categorize the externalizing cards itself is based on the author's subjective view and he might interpret some descriptions on the cards mistakenly. Therefore, we need to rigidly regard the 59 types of abilities as reference information.

On the other hand, this chapter could definitely show the existence of various types of more detailed and practical abilities than the highly abstractive 7 types of abilities for 4 years from the FY 2012 report that started this kind of categorization to this fiscal year's report. It proved that NAKAHARA Animation is not just one time unique case.

Furthermore, it showed that there were a lot of scenes and situations that required every student to bloom or demonstrate a variety of types of abilities in the career educational activities implemented in Nakahara Elementary School every year. To that extent, it also proved that the activities were a challenging program for the students and appropriated to the name of career education.

Chapter 3

In this chapter, the result of a questionnaire survey to check learning outcomes that was implemented after NAKAHARA animation activities were completely finished including a screen party will be introduced. This questionnaire survey was implemented almost every time when NAKAHARA animation activities were held.

Also in FY 2015, questionnaires were handed out to the 63 students of 6th grade in 2 classes who joined in the career educational activities except one who was absent for long periods of time and they were allowed to answer to questions openly.

Regarding the setting of the question items in the questionnaire survey, the detail was described in a previous report, if you have interests in the detail, please see it. Only the outline is explained in here, each question item was made by the author through combining quantitative analysis by text mining with qualitative analysis by Modified Grounded Theory Approach (M-GTA) based on the data of the externalizing cards that were collected at the beginning of the career educational activities implemented in Nakahara Elementary School. In the background of preparing the question items with these kinds of analysis methods, there is an intention to make the items associate with descriptions that the students wrote on the externalizing cards as much as possible.

In this questionnaire survey, there is no question item that is vague and difficult to answer such as “Are these activities useful for your future planning?” that is seen in the common types of questionnaire surveys. Each question is detailed and prepared absolutely based on real experience in the activities that the students had been carried out.

The reason why the detail of the questions is well considered is that there is an aim to let the students answer easier through preparing ones in connection with their real experience as much as possible and the author explain the results easier too in the same way as introducing confirmed various and practical abilities that were bloomed and demonstrated in the participating students through NAKAHARA animation activities in Chapter 2. If a gap between questions and real experience is minimum, the results of the questionnaire survey will turn to be more acceptable for everyone.

Totally there are 17 question items and they are divided by 4 stages, Preliminary production stage, Planning stage, Production stage and Posteriori production stage in connection with a series of working process. As mentioned above, each question was set up making the best use of the data of the externalizing cards collected in each stage. A learning program for NAKAHARA Animation with 4 stages was set up in connection

with acquiring the 7 abilities to lead to the improvement of zest for living that Mitaka City holds up. As noted above, as long as a gap between questions and real experience is minimum, it enables us to figure out the exterior of learning situations regarding the 7 abilities even through the results of this questionnaire survey.

In each question item, 4 choices are prepared. In this chapter, aggregate results about how many times the students selected each choice were directly cited and statistical analysis was conducted with a method named as Exact Probability Test that compared the sum of the 2 choices that showed a positive trend with the sum of the other 2 ones that showed a negative trend in 4 ones and analyzed which side of the sum of the choices sloped. All results were also introduced in this chapter.

By the way, Exact Probability Test is the simplest statistical method, however as its name suggests, it is said that the most exact method of verification because of the simplicity. For details, please refer to the following URL.

Fisher's exact test

https://en.wikipedia.org/wiki/Fisher's_exact_test

Furthermore, in the following URL, free service for Exact Probability Test that everybody can try easily is provided (only in Japanese). If there are 2 comparable values, statistical results will be outputted instantly just after inputting them.

js-STAR 2012

<http://www.kisnet.or.jp/nappa/software/star/freq/1x2.htm>

◇ Questions related to Preliminary production stage

1. In the first activity of Career Educational Program, you understood that animation production needed the involvement of many people and was a hectic job even completing one film.			
n = 63			
1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all
57	5	1	0
The sum of 1 and 2		The sum of 3 and 4	
62		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 = 63

1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all
61	2	0	0
The sum of 1 and 2		The sum of 3 and 4	
63		0	

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 = 63

1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all
51	10	1	1
The sum of 1 and 2		The sum of 3 and 4	
61		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.

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 = 63

1. Thought well	2. Thought a little	3. Not think well	4. Not think at all
45	15	2	1

The sum of 1 and 2	The sum of 3 and 4
60	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.	

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.

As the explanation of each question item, at first regarding No.1 question item “In the first activity of Career Educational Program, you understood that animation production needed the involvement of many people and was a hectic job even completing one film.”, 1 student chose a negative response alternative. Probably he/she might not have a feeling of reality about how hard the job is even after listening to a lecture on complicated film production process from an expert on animation production. Or he/she might have already known to some degree about the reality of the animation industry through watching a TV show or other media.

On the other hand, considering 62 students chose positive choices, it can be sure that as a first step to foster ability to understand occupation, listening to a lecture from an expert had become a valuable opportunity for them to know about the structure of animation production as an occupation and how it is working out.

Regarding No.2 question item “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.”, considering every student chose positive choices, we can read that they firmly recognized the truth that animation films which they are usually watching was composed of astonishingly a number of pictures more than imagined. Moreover, in connection with ability to understand occupation mentioned above, to know the reality of animation production also becomes the first opportunity for them to recognize that

the production activities which they will try from now on are never easy.

Regarding No.3 question item “When you made clay animation for the first time, you understood that making animation with your hands was hard work.”, 2 students chose negative choices and there were 10 students who picked up “2. Understood a little”. Probably these students might feel a good response to clay animation production instead of having difficulty because they could do it better than expected.

On the other hand, considering 51 students chose “1. Understood well”, in the same way as above noted question item No. 2, with relation to blooming or demonstrating ability to understand occupation, it suggested that most of students could recognize that clay animation production which they will try from now on should never be done with a feeling of fun.

Regarding No.4 question item “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.”, 3 students chose negative choices and there were 15 students who picked up “2. Thought a little”. As an alternatives reaction to No.3 question item mentioned above, it is supposed that these students might have difficulty in producing clay animation with requirements of controlling a character in millimeters and shooting the results one by one more strongly than feeling expectation or fulfillment in the new trial.

Both recognizing hardship or difficulty to produce animation as an occupation and feeling fulfillment or accomplishment once they could do well are important factors to lead to the improvement of ability to understand occupation. Considering the trend of answering this question, we can assume that feeling hardship or difficulty in work is higher than feeling fulfillment in this fiscal year’s participating students. We can also say that it proved that they tried animation production very seriously focusing their mind.

◇ 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 = 63			
1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all
52	8	3	0
The sum of 1 and 2		The sum of 3 and 4	
60		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 = 63			
1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all
52	11	0	0
The sum of 1 and 2		The sum of 3 and 4	
63		0	
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 = 63			
1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all
43	16	1	3
The sum of 1 and 2		The sum of 3 and 4	
59		4	
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 = 63			
1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all

56	5	2	0
The sum of 1 and 2		The sum of 3 and 4	
61		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 = 63			
1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all
51	9	3	0
The sum of 1 and 2		The sum of 3 and 4	
60		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.			

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.

As the explanation of each question item, at first, regarding No.5 question item “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.”, 3 students chose a negative choice and there were 8 students who picked up “2. Understood a little”, it is conceivable that this question item might miss the point to those students who are good at making an original own story and completing a proposal.

On the other hand, considering 52 students chose “1. Understood well”, we can say that they had difficulty in finding ideas for an original story and making it

understandable for everyone because it was the first time for them to try writing a proposal for planning as a job. Furthermore, the experience of making a plan should also become the first opportunity for them to face the real test of their ability to carry out a plan and ability to solve problems.

Regarding No.6 question item “When you listened to other members’ proposals for planning in your group, you understood that each of them had a different story.”, considering that there was no student who chose negative choices, we can say that every student could at least recognize that each member had a different opinion and idea at the stage of selecting only one planning. In connection with ability to understand self-other, this result means for them that enough communication ability to persuade other members was also required after that precisely because each of them had a different opinion.

Regarding No.7 question item “You understood that selecting only one planning in your group was a difficult job with disputes and troubles.”, 3 students chose negative choices and there were 16 students who picked up “2. Understood a little”. This suggests on the flip side of the coin that there were few troubles and selecting only one planning was done relatively smoothly in some groups.

On the other hand, considering 43 students chose “1. Understood well”, it means that selecting only one planning was a very difficult job for most of groups to deal with. As noted above, because each member’s planning differed, it also means that demonstrating communication ability was fully required to persuade other members if they wish their own planning to be adapted.

Regarding No.8 question item “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.”, 2 students chose a negative choice. In contrast to question item No. 6 and No. 7, it is only a guess that some groups that the students who picked up this choice belonged to might struggle to select only one planning to the last and could not form a consensus inside a group firmly so that they might start the production activities for example by a director’s or other specific member’s own authority without more effort to reach a consensus. Or it is also only a guess that in connection with question item No. 7 mentioned above, selecting only one planning was done too smoothly so that some students might feel regret that they should keep discussion more positively in a group and make a better plan even facing disputes and troubles.

On the other hand, considering there were 61 students who chose positive choices, it suggests that most of students had difficulty in making a good plan unless they could collaborate within a group to keep discussion. Precisely because only one of four

proposals was adapted, this result suggests that demonstrating communication ability substantially was requested in every group.

Regarding No.9 question item “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.”, 3 students chose a negative choice and there were 9 students who picked up “2. Understood a little”. In the background it is conceivable that they could advance the production activities as initially planned because comments from an expert on animation production was better than expected or could not firmly grasp what the expert criticized because it was too professional.

On the other hand, considering there were 51 students who chose “1. Understood well”, it suggests that professional comments by the expert were useful for most of students. This result apparently suggests that as one of features in NAKAHARA animation activities asking the expert of the field about his/her advices instead of a teacher was effective and was also related to fostering ability to understand occupation and ability to gather and find information.

◇ 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 = 63			
1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all
59	2	1	1
The sum of 1 and 2		The sum of 3 and 4	
61		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.			

11. You understood that shooting your film could not proceed smoothly if disputes or troubles happened among members in your group.
n = 63

1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all
42	17	3	1
The sum of 1 and 2		The sum of 3 and 4	
59		4	
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 = 63			
1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all
48	13	0	2
The sum of 1 and 2		The sum of 3 and 4	
61		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.			

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 = 63			
1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all
57	6	0	0
The sum of 1 and 2		The sum of 3 and 4	
63		0	
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 = 63			
1. Understood well	2. Understood a little	3. Not understand well	4. Not understand at all
54	7	1	1
The sum of 1 and 2		The sum of 3 and 4	
61		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.			

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.

As the explanation of each question item, at first regarding No.10 question item “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.”, 2 students chose negative choices, since some groups could not manage collaborative work smoothly to the last, it might affect this result. Or considering every group in this fiscal year could produce their films quite earlier than the deadline, the students who belonged to groups that could go ahead with animation production more than expected might choose these choices.

On the other hand, considering 61 students chose positive choices, we can say that in connection with ability to understand occupation and ability to solve problems, most of them learned through animation production that dealing with jobs and challenges as a group and working together with other members are the fundamentals of working.

In the same way as above noted question item No. 7, regarding question item No. 11 “You understood that shooting your film could not proceed smoothly if disputes or troubles happened among members in your group.”, it is common in almost every year that it was difficult for most of groups to move forward with every production activity smoothly and they often faced disputes and troubles within a group instead. However,

because there were some groups that could get on with the job of what they needed to do smoothly without a trouble, this question was irrelevant to the students who belonged to these kinds of groups. Therefore, we can guess that 4 students chose negative choices and there were 17 students who picked up “2. Understood a little”. Furthermore, because there were some groups that had the very strong bond of solidarity in this fiscal year, it might be reflected in this result.

On the other hand, because 42 students chose “1. Understood well”, it proved that they could not move forward with the production activities as they wished and it means that they experienced hardship to that extent within a group such as disputes or troubles.

NAKAHARA animation activities do not automatically regard disputes and troubles as a negative issue and approve the value of a variety of abilities starting with the various types of communication ones as introduced in Chapter 2 that are strengthened through this kind of hard experience. We can say that these are one of features that the activities have.

Regarding No.12 question item “You understood that film shooting could proceed smoothly if role sharing worked well in your group and each member completed his/her job.”, 2 students chose a negative choice and there were 13 students who picked up “2. Understood a little”. Considering that there were many groups in this fiscal year’s activities that had the strongest bond of solidarity in 11 year activity records as mentioned above, this result was unexpected to some extent. It is conceivable that there might be many students who had a feeling of regret such as they could do it more effectively reflecting on the result of social evaluation in a screen party.

On the other hand, considering that 48 students chose “1. Understood well”, in connection with ability to understand and recognize a role and ability to carry out a plan, we can say that they acknowledged the value of sharing roles properly to carry out jobs from an early stage. As mentioned above, actual achievement that every group could release their completed version films earlier than originally scheduled supports this result.

Regarding No.13 question item “You understood that it was necessary to hold on to the last to complete your film even while you were pressed for time.”, considering that every student chose positive choices, it suggests that all participating students realized to no small extent that it is necessary to work hard to accomplish important responsibilities. This result shows that a sense of understanding occupation was definitely fostered in the students and it led to the meaning of implementing the career educational activities in public education.

Regarding No.14 question item “You understood that you were very happy when you completed your film that you devoted to.”, 2 students chose negative choices and there were 7 students who picked up “2. Understood a little”, we can guess that there were some students more than a few who had strong feelings such as there was room for improvement on the quality and outcome of their films might affect this result.

On the other hand, considering that 54 students chose “1. Understood well”, in connection with fostering ability to understand occupation, we can take into account that most of students felt fulfillment from completing one animation film as a responsible job. Having this kind of fulfillment based on real experience will also turn to be an important indicator that leads to the expectation of having a job in the future for them.

◇ 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 = 63			
1. Thought well	2. Thought a little	3. Not think well	4. Not think at all
48	12	3	0
The sum of 1 and 2		The sum of 3 and 4	
60		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.			

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 = 63			
1. Thought well	2. Thought a little	3. Not think well	4. Not think at all
46	15	2	0
The sum of 1 and 2		The sum of 3 and 4	
61		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.

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 = 63

1. Thought well	2. Thought a little	3. Not think well	4. Not think at all
58	5	0	0
The sum of 1 and 2		The sum of 3 and 4	
63		0	

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.

As the explanation of each question item, at first regarding No.15 question item “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.”, 3 students chose a negative choice and there were 12 students who picked up “2. Thought a little”, probably in the same way as above noted No.14 question item, considering the result of social evaluation in a screen party, we can guess that because there were some students more than a few who felt regret that they could not make a good enough film to lead to their satisfaction or fulfillment, it might affect this result.

On the other hand, considering that 48 students chose “1. Thought well”, in connection with ability to carry out a plan and ability to understand occupation, in the same way as above mentioned No.14 question item, we can take into account that there were many students who felt fulfillment based on the truth that they could complete a film and show it to an audience.

Even choosing either side of the choices, the truth that they could complete films still remains, if they satisfied with that temporarily because they definitely achieved the result or they wished to go forward, we can guess that relatively more students might wish to go forward in this fiscal year.

Furthermore, having an evaluation from an audience in a screen party was a special opportunity for them to be given because they carried out their jobs completely and one of trials for them as a first step to be approved as a full-fledged member of society. We can say that this result is an honest response from the students to NAKAHARA animation activities that hold these kinds of opportunities in high esteem.

Regarding No.16 question item “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.”, 2 students chose a negative choice and there were 15 students who picked up “2. Thought a little”. In the background of this fiscal year’s activities, checking prototype version films and commenting on them by an expert were delayed because completed version ones were released quite earlier than the deadline. It should have some effect on this result. Most of groups had already made their completed version films before receiving comments from an expert.

On the other hand, in connection with ability to understand occupation and ability to gather and find information, this result indicates that 46 students who picked up “1. Thought well” could find value in this kind of opportunity such as receiving comments from an expert even they were delayed. Furthermore, this result suggests that using knowledge and wisdom from outside as one of features in career education worked effectively in the activities implemented in Nakahara Elementary School.

Regarding No.17 question item “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.”, considering that all students chose positive choices, we can read that every students tried hard to find valuable information that might lead to improve their film as much as possible even examining other groups’ films carefully.

In connection with ability to gather and find information and ability to solve problems, though finding good ideas and improvements constantly is the most basic of basic skills, this result shows that every participating student definitely made excellent use of this basic skill.

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 these learning outcomes.

On the other hand, in each question item, there were some students who chose negative choices. In the background of this fiscal year's activities, it is conceivable that there might be many students who set their heart on animation production with a high professional sense to complete their obligations more than a sense of fulfillment as a whole.

As mentioned above, in almost every year there were many groups that could not complete their films just before a screen party for completed version that was held around the middle of January. In this fiscal year, the truth as a brilliant achievement that every group could complete their films by late December before the end of the year verifies that many students worked out with a high professional sense.

As long as implementing the career educational activities in the framework of public education, both feeling fulfillment and having a professional sense are necessary factors. If only feeling fulfillment is put at the forefront, the activities will end up just for fun and the meaning of holding animation production as a responsible job will diminish. On the other hand, if the activities force the students only to increase a professional sense, hardship alone will be left and pride in having a job or feeling accomplishment after a responsible job is completed will never occur, on top of all that there is anxiety that the students cannot hope for their future or cultivate a sense of anticipation of having a job.

Every year how to keep the balance between them is a key to move the career educational activities in Nakahara Elementary School forward. In this fiscal year, because a learning concept was decided to challenge higher tasks at all times by the teachers in charge carefully considering that the strong bond of solidarity had already been constructed among the students. Therefore, each student could try the activities from the beginning with a professional sense to no small extent. We can guess that these kinds of things might affect this questionnaire survey. In other words, it can be

said that the learning concept that sought further challenges could achieve a successful outcome based on trusting the strong bond of solidarity among the students.

Chapter 4

This chapter will introduce the results of self evaluation on what the participating students conducted during a series of production activities by themselves through detailed analysis based on the data of the externalizing cards from the side of “education” in career education. A session for reflection based on analysis and evaluation is usually held at a group unit and this trial itself is one of features that the career educational activities implemented in Nakahara Elementary School have.

SAKANA system was introduced to implement the session for reflection in order to promote the reflective activities among the students. This system that was developed by the author and other colleague aims to make the best use of the externalizing cards that the students wrote and contained various and rich learning histories.

As a basic mechanism in this system, it has a database function to record the externalizing cards and another one to analyze them word by word through text mining. For your reference, the name of SAKANA is derived from “Let’s play together” in Kikongo that is spoken around Congo’s peripheral provinces in the African Continent.

As the specification of this system, you can make sure of all externalizing cards recorded on the database over again on a computer screen. The described data are automatically divided word by word and you can also immediately find out how many times which word is used in order of the number of times until top 50.

You can set up the scope of the inquiry at a group unit, a role unit, a session unit or a class unit freely and the system can flexibly allow you to examine the results of multiple groups or classes as a whole. You can also find out a certain description in which a specific word is involved among divided ones in the externalizing cards easily by the click of a mouse.

Furthermore, not only you can examine each aggregate the result or average of “Learning type”, “Emotional type” and “Effort Type” on the externalizing cards but also can easily conduct a complex analysis in combination with a frequently appearing word. For example, the system can quickly show you which word is most frequently used in the externalizing cards that “Difficult” in “Emotional type” is selected on.

This fiscal year’s 6th graders also reflected what they learned through the career educational activities at a group unit making the best use of the externalizing cards that they described by themselves and above mentioned various functions that SAKANA system has.

It is common that a reflective activity with a widely used essay style has few chances to prove the content or conclusion in essays once again and only persons who directly

participated in the activity can understand what it really means in most cases. On the other hand, SAKANA system enables the students to show sufficient evidence for reflection with multilateral data. In other words, showing certain evidence can open a way for third persons who do not know well about NAKAHARA Animation activities to review why such kind of conclusion the students led to after they reads the results of reflection.

Though it is basic for university level academic papers to enable someone to review, trying a reflective activity that enables to review by even the elementary school students aims to show learning achievements through NAKAHARA Animation with their hands as fairly as possible.

Because this kind of academic analysis or self evaluation itself is the first trial for most of children as same as animation production, of course there were some groups that could not analyze as they expected every year. However, it is also true that some other groups could find out analysis viewpoints that only persons concerned could aware and lead to the excellent results of reflection that even university researchers have no way to reach.

As a basic step for a reflective activity, a session with 2 consecutive hours is prepared every year. However, in this fiscal year 4 more hours were added and totally 6 hours were spent for the session. Nakahara Elementary School puts strongly emphasis on this reflective activity as same as animation production.

Each group is requested to analyze their own externalizing cards and lead to some sort of analysis result and a conclusion based on it within a session. Basically each group can take any kinds of analysis approaches freely and there is no specific standard or limitation on a conclusion led by them.

On the other hand, because a reflective activity itself is positioned as a part of job as same as animation production, the students can take any kinds of analysis approaches freely and lead to any kinds of conclusions. However, it is necessary for each group to lead to some sort of conclusion. It also means that each group needs to take responsibility for a conclusion that they led to. In other words, if some groups reflect irresponsibly, they will be laughed by other groups in a presentation.

Because conclusions through reflection led by each group contain precious information to be shared among not only group members but also all class members, furthermore for the future career educational activities in Nakahara Elementary School, it is necessary for each group to outline a conclusion on condition that it will be introduced to others. It means that some conclusion that only group members can understand is unacceptable.

During an analysis job, 1 laptop PC that was installed SAKANA system, 1 Android tablet PC as a device to show the analysis results of the system and 2 sets of printed documents that contained the analysis data regarding the whole grade and each group were distributed to each group. For your reference, various data withdrawn from SAKANA system as same as ones that 6th graders actually used are separately introduced at the end of this report.

As an analytic procedure, each group starts to find out features as an analysis item and write them down one by one. For example, as compared with a list for frequently appearing top 50 words that the whole grade used, some group can pick up words that do not exist on its own list or ones that are apparently more often used at a frequently appearing average.

Next each group picks up ones that can link to or implicate in the production activities among the features reflecting what it has conducted in the past, examines how to lead to a conclusion based on picked ones and itemizes what it examined. Though most of groups directly described the results of their examination in analysis items in this fiscal year's activities, this process can be positioned in an interim analysis in some cases.

Then each group selects the most agreeable one among what it examined as an interim analysis or combines some of them and leads to a conclusion. Furthermore, consideration was also added based on a conclusion in this fiscal year. Because the consideration is similar to a common essay, it is not necessary to be based on evident data and each group can describe it freely only to the extent that it is not far away from the conclusion that each group led to.

Each group can take any annalistic procedure freely. For example, it is no problem even if some groups lead to a conclusion deductively from the beginning based on experience so far and find out data suitable for it after that. However, it is true that it is easier for most of groups to find out featured data at first and then lead to a conclusion recursively.

Some actual analysis results that each group concluded are introduced hereafter. The author reconfirmed whether evident data were appropriate and especially really existed or not and examined what kind of analysis and conclusion that each group led to.

6-1 Group 4

◇ Analysis items

1. “Change in Communication” in Learning Type was often selected (24 times). --> We discussed enough and made a film carefully.
2. “However” that was used 12 times contained both positive and negative thought. “We failed, however it was good.”, “We felt regretful, however we did well.”
3. “We made a lawn with the leftovers of a pencil sharpener” in an externalizing card described on November 21. --> We used a property that we made the idea of. “Lawn” was used 6 times.
4. As compared with other groups, a phrase “Work hard” was fewer used. We used it 5 times. Other groups used it from around 10 to 20 times.
5. “Painful” or “Angry” in Emotional Type was fewer selected. --> Positive

◇ Conclusion

Our group reflected adapting both positive and negative thought through the usage of a word “However”. We used many properties such as a lawn that we made with the leftovers of a pencil sharpener that we made the idea of. Considering that we often selected “Change in Communication” in Learning Type, we could figure out that we discussed enough. However, a phrase “Work hard” that was used 5 times and fewer than other groups is our shortcoming.

◇ Consideration

Our group learned a variety of things such as difficulty to meet a certain deadline or the hardship of working during about 3 ~ 5 months. We thought that we had an easygoing attitude for too long time. Though we had a margin of time for production at first, we gradually started feeling impatient and spending uneasy days. However, we could complete our jobs and put our whole heart into them. We felt a little regret for the result but the bitter experience made us keenly realize that it was important to complete a film from scratch.

◆ Examination

The author reconfirmed the validity of the data that were used to lead to the analysis results by this group. Regarding No.1 analysis item, “Change in Communication” in Learning Type was definitely selected 24 times and most often done in 5 choices alongside of “Change in Occupation Understanding” that was also selected 24 times. This result proves that this group discussed actively. In the background of active discussion, it is unique that this group explained how carefully it dealt with jobs. This kind of analysis can be held by only this group that knows well about its own inside

affairs.

Regarding No.2 analysis item, the author could confirm that a word “However” was used 12 times. As this group explained, the word was definitely used to combine two different contexts such as “Today we shot a film and failed a lot, however it was good that we could do it well at the end.” or “Today our group added sound effects for the first time and we wondered whether we could finish the job or not, however it was good that we could complete it all”.

Regarding No.3 analysis item, a word “Lawn” that was one of creative originalities that this group demonstrated was definitely used 6 times and mainly in the period of making properties. The word was never used in the other groups’ externalizing cards. Therefore, it is considered that the word represents the feature of this group.

Regarding No.4 analysis item, this group used a phrase “Work hard” 5 times. On the other hand, the whole grade used it 10.6875 times on average (totally 171 times). The author could confirm that this group used the phrase obviously fewer than the whole grade. Even there was no explanation why the number of times the phrase was used was fewer, a part of it was described in a conclusion as we shall see later.

Regarding No.5 analysis item, “Sad” in Emotional Type was definitely selected 2 times and “Painful” was selected 1 time. The number of times that the options were selected was definitely fewer as compared with the whole grade that selected “Painful” 2.4375 times on average (totally 39 times) and “Angry” 2.375 times on average (totally 38 times). Based on these truths we can read that an atmosphere or production environment in this group was comfortable.

Regarding Conclusion, after paying attention to the conjunction “However” that combines two different contexts, this group’s logical argument that examined its own activities from both the positive and negative side is sufficiently acceptable. Communication with these different viewpoints proves that this group discussed actively and made a decision carefully. It seems that assessing things with different viewpoints may also affect on the background in which this group could invent unique ideas.

On the other hand, even communication was done smoothly inside this group, it explained with the fewer number of times a phrase “Work hard” was used that there was a problem on total performance. Because the average of Effort Type in this group was 3.828125 that was the almost same as the whole grade’s average that was 3.89175, it is lacking in sufficient explanation with only the analysis result. However, this group described a truth in Consideration that its activity pace was slow in the early stage of production and we can read it reversibly that this group could have enough

communication and evaluate things carefully and make the best use of inventiveness but spent too much time on them. If performance issues were described logically on this context, everybody could understand it.

Regarding Consideration, we can nod the description that this group worked on the production activities in the second half feeling anxiety about a deadline coming everyday in sharp contrast with the first half in which its activity pace was slow.

It is to be regretted that probably other reasons that made this group's motivation work in top gear might exist without anxiety about a deadline during the production activities. If this group could analyze this kind of part a little deeper, point out the analysis results in its conclusion and describe that how seriously every member worked in the second half of the production activities, we can guess that its consideration might be more suitable for this group.

6-1 Group 5

◇ Analysis items

1. We frequently selected "Change in Occupation Understanding" in Learning Type as our good point.
2. Especially we frequently selected "Change in Self-Affirmative Tendency". --> We could work with joy.
3. We never selected "Easy" in Emotional Type. --> We went into the detail of each job.
4. As compared with the top group, we could work with joy. However, we gave in to negative thinking. Our effort was not enough.
5. As our problem, we paid too much attention to detail and could not meet a deadline. We did not see a reality.

◇ Conclusion

As our good point, we could work with responsibility because "Change in Occupation Understanding" was selected frequently. We understood that we could work with joy because "Change in Self-Affirmative Tendency" was selected 34 times and more than other choices on our externalizing cards. As our problems, we could not meet a deadline because of paying too much attention to detail. As compared with the top group, we gave in to negative thinking and needed more effort. Because especially quarrels and disputes with each other frequently happened, we lacked in teamwork. This was our most serious problem. It should be good if we could improve this problem.

◇ Consideration

At first we felt nervous about whether we could complete it or not but we could complete our animation work eventually. However, we were given a very low rating. We thought that the reason was our negative thinking. If we could work with positive thinking like the top group, we could make a better work.

◆ Examination

The author reconfirmed the validity of the data that were used to lead to the analysis results by this group. Regarding No.1 analysis item, “Change in Occupation Understanding” in Learning Type was definitely the second most often selected in 5 choices, actually 29 times. The number was more than the average of the whole grade that was 21 times (totally 336 times). Based on these truths, we can read that this group worked on the production activities with high professional consciousness.

Regarding No.2 analysis item, it is confirmed that “Change in Self-Affirmative Tendency” was most often selected, actually 34 times and the number was definitely more than the average of the whole grade that was 28.625 times (totally 458 times). We can be sure that each member in this group worked on the production activities with a sense of fulfillment.

Regarding No.3 analysis item, “Easy” in Emotional Type was definitely never selected in this group. For your information, the average of the whole grade for this choice was 4 times (totally 64 times). The author confirmed that “Difficult” in Emotional Type was most often selected in 8 choices, actually 42 times. It was more than the average of the whole grade that was 16.5 times (totally 264 times). These truths proved that this group obviously worked on the production activities very seriously and actually dealt with each job carefully.

Regarding No.4 analysis item in relation to No.2 analysis item, this group compared with another group that received the highest social evaluation. The top group with 3 members selected “Change in Self-Affirmative Tendency” 21 times. If the top group was composed of 4 members, the number would be 28 time ($21 \div 3 = 7$, $21 + 7 = 28$) and we can interpret that it was less than 34 times in this group. However, we need to consider that the top group also selected “Change in Self-Affirmative Tendency” more often than other choices.

Regarding the description about negative thinking, unfortunately this group did not show any data to identify it. If an atmosphere in this group always inclined to negative thinking, there is no problem because only the members of this group knew the

information. However, they could still provide some sample externalizing cards that showed a deteriorating atmosphere such as “I learned that it was difficult to complete jobs by a deadline. I thought that even we tried but we felt difficult because we could not do them as scheduled.” or “Today many things screwed up and I did not know what I could do.”. It could also pick up remarkable data to show a deteriorating atmosphere such as “Angry” in Emotional Type that was more often selected, actually 15 times than the average of the whole grade that was 2.375 times (totally 38 times).

We can understand this group’s logical argument because spreading negative thinking caused low performance as compared with the top group. On the other hand, as long as the author confirmed, the average of Effort Type in this group was 3.85245 and the one in the top group was 4.41666. There is a gap between them obviously. However, it is almost same with the average of the whole grade that was 3.89175. It means that each member worked hard even this group had problems.

Regarding No.5 analysis item, it was led by the results of each analysis. The author could find some externalizing cards that showed being pressed for time such as “Today we started film shooting. I needed a long time to make characters with clay but could not finish them. I think that I will do the job quickly.” or “I spent a long time to make a human character with clay. I would like to do it more smoothly from now on.”. We can read through these descriptions that this group made properties finely and carefully.

The description “We did not see a reality” is probably common understanding in this group and only this group among 16 ones actually faced miserable fate that it could not add sound effects on its film because it continued the production activities until the last one minute before a deadline.

Regarding Conclusion, it was made properly based on the results of each analysis. This group also pointed out another problem that the members could not establish tight collaborative relationships as a group. However, even there is no reason to defend this group, it is still notable that each member worked with high professional consciousness and dealt with own jobs with a sense of fulfillment.

In case an atmosphere in a company is deteriorating, it is common that nobody can work with high professional consciousness. However, it is remarkable that the members of this group never gave up own jobs even in a hard situation mentally and completed them to the last. It is also admirable that this group could properly prove it with analysis results.

On the other hand, in a real society as a matter of fact, completing own jobs is not enough. As this group pointed out in Consideration, if every member could improve an

atmosphere in this group and work together with strong team spirit, it could make a better film because each member worked with high professional consciousness.

A reflective session sometimes reveals very difficult inside affairs like this group. For this reason, it is also true that we can find precious knowledge in them. The truths that each member worked with high professional consciousness and dealt with own jobs with a sense of fulfillment can regard them as reliable human resources. Even you can expect a good atmosphere, if each member in your group works with low professional consciousness and performance in jobs or the quality of work is low, you cannot make business sense. On the other hand, it is also true that we can realize high quality jobs or enterprises that one person can never complete only because a great number of people work together. This case definitely represents how an individual or group involves in social activities and a relationship between them.

6-1 Group 8

◇ Analysis items

1. “Sato” (6times), “Fairy” (4 times), “Amendment” (5 times), “Background” (4 times)
--> We made properties carefully and loved them.
2. “Good” (20 times), “Painful, Sad, Angry” was selected only 1 time for each. --> Positive
3. The average of Effort Type was 4.41666. The result of selection follows from top choice to bottom one; “Tried Hard Enough” (29 times), “Tried Hard” (11 times), “Tried” (7 times), “A Little Insufficient” (1 time) and “Quite Insufficient” (0 time).

◇ Conclusion

Our key words are “Sato” (6times), “Fairy” (4 times), “Amendment” (5 times) that was used for especially Sato character and “Background” (4 times). All of them are related to properties. It means that how much we put a lot of love into making them such as characters. We still remember that the face of Sato was cracked and we strongly focused on characters including making Sato stand still and their clothes.

As for the rest, “Good” was used 20 times. “Painful, Sad, Angry” was selected only 1 time for each in Emotional Type. All of those were the choices of negative thinking. Our self evaluation in Effort Type follows from top choice to bottom one; “Tried Hard Enough” (29 times), “Tried Hard” (11 times), “Tried” (7 times), “A Little Insufficient” (1 time) and “Quite Insufficient” (0 time). Furthermore, the average of Effort Type was 4.41666 and it was a good score. Based on these truths, we understand that we tried

thinking about everything positively.

◇ Consideration

Our group's animation was "Ojipuri of hope" and the story was that a middle aged man transformed to be a weird princess and defeated UFOs. We never thought that our animation work that was made by only 3 members (1 member less than other groups) could go to the top. During the production activities, argument happened so that we could not work smoothly and failed a lot times at first. However, it was great that we could collaborate with each other to complete the work in the end. Usually we had not talked a lot with each other but it was also great that we could deepen our friendship.

◆ Examination

The author reconfirmed the validity of the data that were used to lead to the analysis results by this group. Regarding No.1 analysis item, "Sato" (6times), "Fairy" (4 times), "Amendment" (5 times), "Background" (4 times) were definitely in frequently appearing top 50 words. "Character" (6 times) and "Ojipuri" (4 times) were also found. Considering these words, we can easily read that this group was very particular about properties including "Sato" as a main character. It also proves that this group worked hard on the production activities.

Regarding No.2 analysis item, "Good" was definitely used 20 times and the author confirmed that "Painful, Sad, Angry" in Emotional Type was selected only 1 time for each. Based on these truths, we can be sure that this group worked on the production activities with positive thinking.

Regarding No.3 analysis item, the author confirmed that the average of Effort Type in this group was 4.41666 and the number of times each choice was selected was correct and in the exact order as this group checked. The average of 4.41666 was the second highest figure in the whole grade and this kind of high figure was never seen before in previous reflective sessions with SAKANA system and definitely astonishing.

Regarding Conclusion, what this group concluded is that it focused on properties from the stage of making materials and also worked hard on the production activities with quite positive thinking and is acceptable within the range of what we can read from its analysis results. This group received the highest social evaluation in a screen party and we can be sure that the best reason was making materials very carefully. As the author's impression, a middle aged man who transformed to be a weird princess was a quite impactful character.

Even you can write an interesting story but cannot make a character that is able to extract the interest, it is difficult to attract audience's attention. However, this group wrote a very weird story and worked hard to make unique characters that were able to extract the feature so that it could succeed to catch audience's attention.

This group combined its analysis results and conclusion based on them with the result of social evaluation in a way that everybody can understand. In other words, we can say that the reason why this group's social evaluation was high is not a product of chance but the result of what they accomplished through the production activities. If this group could not analyze the reason why its film received a high evaluation precisely through this opportunity for reflection, it might be difficult for this group to expect same result when there is another chance to try animation production.

On the other hand, as described on the part of the consideration, every job was by no means completed smoothly in this group. The production activities in this group were the continuous process of trial and error as same as other groups. There are truths that it needed to work on the production activities facing arguments and problems among its members and difficult work environment with only 3 staffs from the beginning because of a long-absent one.

As the last part of Consideration showed, we can say that how this group could deepen the bond of trust through sharing hardship among all members is one of ideal educational achievements in the career educational activities that Nakahara Elementary School has implemented.

It is to be regretted that this group had a chance to lead to a better conclusion or consideration if they could analyze how it could overcome conflicts that were mentioned in Consideration and show the results. As far as the author guess, considering one externalizing card that was described by the director of this group, "Now I strongly feel great because I am a member of this group. At first I felt nervous about our future because only our group had 3 members and 1 member less than other ones. So the reason why we made our subject as "To have hope for our future". During the production activities, even we had arguments, we could not make our work without the ridiculously strong power of idea that Mr. F showed and creativity to make characters adorable that Miss. S demonstrated. I really feel good because our three members could team up as a group.", we can guess that this group could overcome conflicts through firmly admitting each member's unique abilities and deepening the relationship of mutual trust and transform them into a driving force for the production activities.

6-2 Group 4

◇ Analysis items

1. “Change in Self-Discovery Tendency” was often selected (48 times). --> We always kept improving through finding good points and bad points about the production activities.
2. “Happy” in Emotional Type was often selected (43 times). --> We completed animation with having fun.
3. We frequently selected “Tried” (37 times) and “Tried Hard” (33 times) in Effort Type. --> We engaged in sessions positively.
4. “Change in Role Grasp and Recognition” was fewer selected (11 times). --> Regardless of division of roles, we could find jobs and work on them.
5. “Easy” in Emotional Type was fewer selected (3 times). --> We tried something difficult (23 times).
6. “Sad” was selected (3 times). --> We guess that it was selected because the results of a prototype edition presentation and a screen party for a completed edition were worse than expected.
7. Totally we get along with each other.
8. As pros, we always kept improving through finding good points and bad points about the production activities because “Change in Self-Discovery Tendency” was often selected (48 times). Moreover, we completed animation with having fun because “Happy” in Emotional Type was often selected (43 times).
9. As cons, we could work more effectively because the number of “Tried Hard Enough” in Effort Type was fewer selected than the top group. The top group selected it 29 times and we did it 12 times.

◇ Conclusion

As our group's feature, totally we get along with each other. As pros, we can say that we always kept improving through finding good points and bad points about the production activities because “Change in Self-Discovery Tendency” was often selected (48 times). We could also enjoy animation production because “Happy” in Emotional Type was often selected (43 times). As cons, we could work more effectively because the number of “Tried Hard Enough” in Effort Type was fewer selected than the top group. The top group selected it 29 times and we did it 12 times. The reason why we could not go to the top is the difference of effort per each activity. We did not demonstrate the whole strength that we had per each activity as compared with the top

group and that is the difference and reason.

◇ Consideration

Through one thing that is making “animation”, we think that we could deepen our friendship more than before. Even we could not go to the top, this is very precious. Because we could grow professional consciousness in our mind through working on what we could do as much as possible to meet a deadline, we could learn that we need to work on own occupation in the proper way when we go into the workforce in the future.

◆ Examination

The author reconfirmed the validity of the data that were used to lead to the analysis results by this group. Regarding No.1 analysis item, “Change in Self-Discovery Tendency” in Learning Type was definitely selected 48 times and most frequently selected in 5 choices. The number was significantly more than the average of the whole grade that was 28.625 times (totally 458 times).

This group pointed out its effort to keep finding good and bad points as the reason why the choice was frequently selected. The author also confirmed that the choice was definitely selected in the context of improving own work as much as possible after reading some externalizing cards with the choice such as “When we prepared for presentation during today’s NAKAHARA Animation session, it was good that we could make sure of the content and consider how to improve it once again.” or “Today we talked about materials. While talking about how we will use materials and how efficiently we can make use of them, I started to create a sense of being a director”.

Regarding No.2 analysis item, “Happy” in Emotional Type was selected 43 times and most frequently selected in 8 choices. It was more than the average of the whole grade that was 35.4375 times (totally 567 times). Based on this truth, we can be sure that this group worked on the production activities with a sense of fulfillment.

Regarding No.3 analysis item, “Tried” in Effort Type was definitely selected 37 times and “Tried Hard was done 33 times. The average of this group in Effort Type was 3.65476 and it was slightly lower than the average of the whole grade that was 3.89175. However, if we think that “Tried” is a median (the middle figure in 5 choices), it is at least 0.6 higher than the median so that we can be sure that this group worked hard on the production activities as this group asserted. For your information, because the average of Effort Type totally in this fiscal year’s activities was quite high and it is usually around 3.2, we can say that any figures that are more than 3.6 should be enough high regardless of the median as a standard.

Regarding No.4 analysis item, “Change in Role Grasp and Recognition” was definitely selected 11 times and fewest in 5 choices. As compared with the average of the whole grade that was 12.875 times (totally 206 times), the number was slightly lower. As this group asserted, it is true that most of groups could easily manage division of roles since the early stage of the production activities in the tendency of the whole grade. Therefore, even this group did not dare to select this choice, it cannot prove that division of roles did not work in this group.

Regarding No.5 analysis item, “Easy” in Emotional Type was definitely selected 3 times and “Difficult” was selected 23 times. Because the author found some externalizing cards such as “While shooting a film, I learned that making animation was very difficult. Even it was fun, there were some difficulties. Next time I would like to devise the way of doing better.” or “Today we considered a design for our title. It was difficult to draw fluffy clouds (when we cut them).” that showed this group’s effort to improve the quality of its film or visual expression, we can be sure that this group kept trying something difficult.

Regarding No.6 analysis item, “Sad” in Emotional Type was selected 3 times and each of them were selected on the externalizing cards that were described just after receiving social evaluation in a prototype edition presentation and a screen party. For example, we can read this group’s regret about losing a chance to receive higher evaluation from a following externalizing card; “Our result was 5th by a narrow margin. We should add more sound effects to make our work understandable.”.

Regarding No.7 analysis item, though there was no specific data or description to show good relationship among its members, as long as this group commonly felt good relationship through the entire production activities, there is nothing wrong with it. If the author tries to show a reasonable proof, there was an externalizing card; “Through making animation, we thought that our bonds were deepened because when we presented our story, what each of us was particular about was same among us.”. As another proof, there was no word related to argument or problem in frequently appearing top 50 words and in the externalizing cards when the author directly searched.

Regarding No.8 analysis item, based on the analysis results of No.1 and No.2 analysis item mentioned above, this group drew its strong points. We can agree with them because there is no unreasonable interpretation in its analysis results.

Regarding No.9 analysis item, this group definitely selected “Tried Hard Enough” in Effort Type 12 times and the top group selected it 29 times. There is a huge gap between them. Though its interpretation based on this truth that it could work more

effectively as cons sounds very strict self-analysis, as long as this group commonly felt like this, there is nothing wrong with it.

Regarding Conclusion, because it was firmly based on the detailed analysis results mentioned above, it is reasonably enough. Especially what this group pointed out as a reason why it could not work more effectively in each production activity based on the analysis result of No.9 analysis item as compared with the top group is excellent because it showed its internal conditions openly and its feature clearly.

Regarding Consideration, even this group could not receive higher social evaluation as a result, it evaluated valuable things such as deepened membership that they could obtain. It also described that it could understand the importance of completing jobs with responsibility within a deadline. We can say that both of them are ideal as learning results that the career educational activities implemented in Nakahara Elementary School wish to achieve. In a real society, it is necessary to learn social nature to cooperate with other colleagues while working in a group and it is ideal if each of us can firmly complete jobs with responsibility instead of shifting the responsibility to a group.

6-2 Group 8

◇ Analysis items

1. As an advantage, we received an opinion that our work was simple and easy to understand when a screen party was held inviting guardians.
2. As a problem, our work was short of interest as compared with the top group. “Interest” was not in frequently appearing top 50 words for our group but used 4 times in the top group.
3. As an advantage, because “Happy” was more frequently selected than the top group, we think that we could firmly work on jobs. We selected it 37 times and the top group did it 28 times.
4. As an advantage, a word “Amendment” was often used (13 times). We think that it means that we tried to improve our work. We used the word 13 times and the top group did it 5 times.
5. As an advantage, because “Material” was frequently used and we used the word in sentences that aimed to improve our animation work devising materials, we think that we worked on jobs enthusiastically. We used the word 14 times and the top group never did it.

◇ Conclusion

We thought that a work that we made could impress an audience because it was simple and easy to understand. However, we did not adopt the perspective of interest sufficiently and we needed to review it. A word “Amendment” was frequently used. We think that we tried to improve our film. We also found a description that we wished to devise materials in order to make our work understandable. We think that we worked on jobs enthusiastically. Because a word “Fun” was frequently used in the externalizing cards, we could have interests in animation activities this time and have good experience with them. “Happy” in Emotional Type was frequently selected and “Difficult” was also. We think that it is the feature of this group. A phrase “Work hard” was used 17 times and the top group never used it. We think that we could keep working very hard.

◇ Consideration

Through this learning, we could consider how to get across to opponents effectively.

◆ Examination

The author reconfirmed the validity of the data that were used to lead to the analysis results by this group. Regarding No.1 analysis item, it seems that it is based on a comment that this group directly received from an audience in a screen party. We can read that this group could firmly develop attitude to evaluate the quality of its own work from the perspective of an outsider. It is considered that NAKAHARA Animation activities in this fiscal year made emphasis on this point more than before and that would have an effect on No.1 analysis item.

Regarding No.2 analysis item, there was no “Interest” in frequently appearing top 50 words for this group. On the other hand, the word was used 4 times in the top group (5.33333 times in terms of 4 members). As long as the author reconfirmed, the word was used 2 times in the externalizing cards that this group wrote. One of them was used in a sentence that “Today we decided our group’s work. I thought that it needed more interest.” as this group asserted. In the externalizing cards that the top group wrote, the word was used in the context of working hard to attract an audience such as “Today we decided the setting of characters. They seem very interesting and we can expect a good animation work.” or “Finally we completed Ojipuri of hope! We added BGM and sound effects overwhelmingly by design and it made the work more interesting. I really would like to watch other groups’ works.”.

Regarding No.3 analysis item, this group selected “Happy” in Emotional Type 37

times and the top group did it 28 times (37.33333 times in terms of 4 members). Though both of numbers are almost same, the author confirmed that the one for this group was slightly higher than the average of the whole group that was 35.4375 times (totally 567 times). It is not necessary to compare with the top group as long as this group could actually recognize that it sufficiently worked on jobs without major problems. If the author tries to show reasonable data, it should be good enough to pick up a truth that “Happy” was second most frequently selected among 8 choices in Emotional Type.

Regarding No.4 analysis item, “Amendment” was definitely in frequently appearing top 50 words for this group and used 13 times as compared with 5 times in the top group (6.66666 times in terms of 4 members). Even as compared with the average of the whole grade that was 4.4375 times (totally 71 times), there was a huge gap between them. In the externalizing cards that this group wrote, we can read that the word was obviously used in the context of wishing to improve a work such as “We amended our animation work. We worked hard to improve it. I would like to keep working hard to make a good work.” or “Our animation work is getting much better. I would like to keep amending it and doing my best for it.”. Based on these truths, we can fully agree with its assertion that this group worked hard to improve the quality and result of its animation work.

On the other hand, as described in one analysis item through reflection by 6-1 Group 8 that received the highest social evaluation, though the top group did not use a word “Material”, “Character” and “Sato” that suggest its meaning were used a reasonable number of times. It means that it is difficult to assert that the top group did not devise making materials. Therefore, it should be enough to show how much this group attached its mind to making materials through comparing with the whole grade instead of comparing with the top group.

Regarding Conclusion, at first the author reconfirmed parts that were not included in the analysis items mentioned above. A word “Fun” was used 12 times in this group and it was not included in frequently appearing top 50 words for the top group and the whole grade. Considering how frequently this group used the word, we can say that it should be a word that represented one of features that this group had. The author checked the externalizing cards in which the word was included and found that the word was used in the context of having highly interests in the development of the production activities such as “Today we decided materials for a storyboard. While doing it, I noticed that we could devise materials too and make an idea for visual expression to draw more attraction from everybody. I am looking forward to it.” or

“Today we made materials. Though there were many happenings, we could relatively make them. I am looking forward to completing them.”. Regarding a period when the word was used, it was used evenly from the early stage of the career educational activities until the final moment without focusing on some certain period. Based on this truth, we can fully agree that this group interpreted keeping interests in animation production and the activities to the end as valuable experience.

“Difficult” in Emotional Type was selected 46 times and most frequently done among 8 choices. It is obvious that the number is extremely high as compared with the top group that was 17 time (22.66666 times in terms of 4 members) and the whole grade that was 23.4375 times (totally 375 times). It definitely represents one of features that this group had. However, unfortunately there was no interpretation of what this group could read from the number. In some externalizing cards in which the choice was selected, we can read that how hard this group continued to amend, for example “Today we knew interim results and understood that our work came down to an audience less than expected. I would like to concentrate on amending it from now on.” or “Today we amended. It was very difficult. Even we can almost complete it, I will stay sharp.”. If this group interpreted combining the choice with these cards, it could draw a more persuasive conclusion.

Because this group definitely used a phrase “Work hard” 17 times, the top group never used it and the average of the whole grade was 10.6875 times (totally 171 times), the author could confirm that the number in this group was obviously higher. Based on only this truth, it is difficult to say that this group worked on the production activities harder than the top group considering a difference in Effort Type between them. This group was 3.75 and the top group was 4.41666. However, at least it is enough to conclude that this group engaged in jobs seriously.

It is to be regretted that this group could not show some externalizing cards in which the world was involved as detailed cases such as “Today we made materials and a title. Because we allotted a portion of the work to each, it was good that it worked smoothly. Film shooting as far is going well. We will keep working hard.” or “We made a presentation paper. We worked hard to make an animation film. I would like to show our effort on January 16th”. If this group provided these cases, it is considered that it could add more weight on its conclusion.

This group had several problems with interpretation in its analysis results and analysis subjects to compare. Even theses problems are regrettable, because this group could recognize that its film had been lack of factors to attract an audience since the planning stage while working hard to amend its film and make it simpler and

understandable for an audience, we can say that it was totally excellent analysis.

Regarding Consideration related to Conclusion mentioned above, even with a great story, if you make a work with abstract visual expression, an audience cannot understand it. On the other hand, if a work is lack of factors to catch audience's eyes, it is difficult for it to be a target for evaluation from the beginning. In other words, this dilemma happens between impotence to bring words simply to a society and importance to try creating new expression as much as possible. Therefore, we can say that one of learning results especially in this group through NAKAHARA Animation activities is that they could firmly recognize this dilemma between them based on a real experience.

In this physical year's NAKAHARA Animation, every group worked on the production activities very enthusiastically and kept division of roles in place from an early stage and prepared enough for each job in advance. As the proof of it, the average of Effort Type in the whole grade was extremely high and every group completed their works 2 weeks earlier than usual. Considering these truths, we can be sure that each group engaged in the production activities at a higher level. Therefore, as the total tendency of the reflective activities in this fiscal year, it is considered that the reason why the number of the analysis items was fewer is probably that gaps or differences among the groups were smaller than usual.

Moreover, as the first trial in this fiscal year's reflective activities, a paper that cited only the results of frequently appearing words for the whole grade and the top group that received the highest social evaluation was distributed to every group and each of them could fill its own results next to the ones for the whole grade and the top group in the paper. It aimed to facilitate each group to easily find data that featured its group as compared with the whole grade or the top group visually. We can guess that because each group described only characteristic data in the analysis items after finding gaps as compared with the whole grade or a top group with the paper and selecting ones that featured own group in advance, the number of the analysis items was fewer than usual through this kind of trial.

On the other hand, though the author could not reconfirm some data that were picked up for the analysis items, most of them including proper decision to select them were reasonable from the perspective of outsiders. Furthermore, as the feature of this fiscal year, some groups added audience response or the characteristics (appeal points) of their films to the analysis items. Through adding these kinds of new viewpoints, they succeeded to lead to a conclusion or consideration that characterized them.

As mentioned before, conducting this kind of analysis and leading to a conclusion are regarded as a part of job and showing a conclusion in a way that outsiders can examine and understand is also inside the scope of responsibilities of its job. It is obvious that most of students could understand the importance of logical and empirical activities and definitely demonstrated them, even adults acknowledge the difficulty of them.

Only central players who engaged in the learning activities could lead to these kinds of analysis results and they were all the more valuable based on the reality of the activities. Even how many times outsiders like the author observes the activities, it is impossible for them to understand the situation of the activities in each group or an atmosphere inside a group correctly because they are not in the center of the activities and cannot directly feel a variety of dramas that are going on there and changing human relations.

The career educational activities that Nakahara Elementary School has implemented seek demonstrating a variety of abilities that each member has and simultaneously work performance as a group. It is also necessary to show a visual result as a film at the end. Furthermore, results that each group achieved will be evaluated socially through a screen party. It will turn to be the evaluation of “Career” part in career education.

On the other hand, this reflective session at a group unit is the evaluation of “Education” part in career education by the students themselves showing what kinds of things they learned through incidents that happened during the production activities in a way that even outsiders can understand.

In NAKAHARA Animation activities, both the evaluation of “Career” part and “Education” part are necessary. Because both of them are firmly built in these educational activities, they lead to enhance the social meaning and value of implementing career educational activities in public education.

In this chapter, it is supposed that the students themselves could sufficiently introduce the social meaning and value of implementing NAKAHARA Animation activities from the side of “Education” part in career education in this fiscal year’s activities too.

Chapter 5

In this report, Chapter 1 introduced the basic information on NAKAHARA Animation as a part of the career educational activities implemented in Nakahara Elementary School. It also introduced the 7 abilities that Mitaka city holds up and are expected to be fostered through these educational activities.

Chapter 2 tried to find out what kinds of abilities were bloomed or demonstrated among 64 sixth graders who participated in FY 2015 NAKAHARA Animation through the practical and professional animation production activities tracking the data of the externalizing cards that the students wrote and subcategorize the results according to the 7 abilities mentioned above.

While subcategorizing, even only one externalizing card containing a description related to an ability that was approved of necessity for a specific situation existed regardless of more or few social usefulness, the author added it as a new type of subcategory on the ground of the card. A variety of 59 types including newly added one were consequently found.

Not only abilities bloomed in each student but also ones bloomed in a group combining with each students' ability were found while working on categorization. The author intentionally included these abilities in above mentioned subcategory without distinguishing them from individual abilities.

Especially in this fiscal year's activities, because the students were accustomed to writing an externalizing card in other learning activities before starting this fiscal year's career education according to a definite learning concept applied by the teachers in charge, as long as the author observed, not only every student could write an externalizing card without a problem but also descriptions in them were totally at a higher level than usual qualitatively and quantitatively. Therefore, the author could find out a number of cards that were applied to each category more than before while categorization mentioned above.

In reality, still more abilities or skills that the author could not find out through reading descriptions on the externalizing cards or ones that were not mentioned in the cards should exist. On the other hand, even ones that were found could fully introduce in the chapter that how many abilities were demonstrated or bloomed among the students who participated in FY 2015 NAKAHARA Animation.

As mentioned in the chapter, there is no specific meaning in the categorization. Instead when someone asks what kinds of abilities or skills the participating students really acquired through the career educational activities, in other words when someone

asks whether the career educational activities have enough value to implement in public education or not, we can be sure even in the eyes of the author that a variety of bloomed or demonstrated abilities and skills were confirmed. Therefore, the categorization was conducted in order to reply clearly that the career educational activities have enough value to implement socially.

In Chapter 3, a questionnaire survey that aimed to make sure of learning achievements of the whole class was implemented and the results were analyzed. 16 questions that were related to learning achievements confirmed through NAKAHARA Animation were prepared and we could see a tendency that the sum of positive choices that admitted each learning achievement was considerably more than the sum of negative ones in every question.

Because there were statistically significant differences between them, we could make sure that most of student admitted 16 learning achievements. One hand categorization was applied to make sure of bloomed or demonstrated abilities in Chapter 2, on the other hand this chapter confirmed learning achievements that the whole class could share through the questionnaire survey.

Same questionnaire survey has been conducted almost every year after the career educational activities in each fiscal year were finished and every time statistically significant differences in all questions were confirmed. This truth also proves that NAKAHARA Animation activities as a learning program keep showing high learning achievements steadily even participating students and teachers in charge were changed every year. Considering the 11 year history of the continuity, we can say that these learning activities are reaching a maturity stage.

Chapter 4 introduced results of reflecting learning achievements at a group unit with the record of the externalizing cards and SAKANA system. 16 groups in 2 classes led to own conclusion and consideration as reflection according to a reality of each group's activities based on descriptions on the externalizing cards showing firm ground that even outsiders could review.

Regarding the results of reflection by each group, the author reviewed the analysis process once again and examined what kinds of data were selected and how each group led to a conclusion and consideration from there. In the results of examination, though there were some analysis processes with problems, most of them were acceptable to all showing data as firm ground.

We can see that only members who belonged to a specific group could lead to such kind of conclusion and many of them contained precious knowledge. We can highly acknowledge educationally that the students reflected the whole activities and proved

what they learned through the activities by themselves as self evaluation from the side of “education” in career education while firmly accepting social evaluation in a screen party from the side of “career”.

At the end of this report, as the whole conclusion, we could confirm based on the externalizing cards that a variety of abilities were demonstrated or bloomed in each participating student through the FY 2015 career educational activities that Nakahara Elementary School implemented. We could also confirm common learning achievements in the whole class through the questionnaire survey. Moreover, the students analyzed learning achievements at a group unit by themselves and most of conclusions and considerations led by them were acceptable even from the viewpoint of outsiders.

This report introduced learning achievements in the FY 2015 career educational activities from these kinds of different analysis standpoints and showed enough in each standpoint. Therefore, it indicates that these activities become established in Nakahara Elementary School and we can say that it proves that these activities have been building up a solid track record that can steadily expect high learning achievements even participating students and teachers in charge are changed every year.

In Nakahara Elementary School, every year based on the foundation of the career educational activities, the activities’ goals or content have been improved in concert with a tendency of the whole grade in each year or features that each class had. Because these kinds of detailed adjustments have been done every time, we can be sure that high learning achievements could be expected every year. In the background, we can point out that the teachers in charge deeply understand and are enthusiastic about these trials. Because of the declaration of amateur, they can keep away from teaching animation production directly. On the other hand, while the participating students work on animation production by themselves, these activities are established by strong support from the teachers in charge for the students through carefully preparing opportunities that let them promote zest for living autonomously in the backside.

As a new challenge of recent years, through an international judge who is active internationally, a global perspective has been adapted in social evaluation. Even following the foundation of NAKAHARA Animation that can continuously expect high learning achievements as introduced in this report, the career educational activities in Nakahara Elementary School are expected to contribute more than a little to fostering zest for living that can deal with the trend of global society from this time on through further new challenges.

Reference data related to SAKANA system

The data of SAKANA system that were actually used for the reflective activities at a group unit introduced in Chapter 4 by 16 groups in 2 classes that participated in the FY 2015 career educational activities are bellow for your reference.

* Most of following frequently appearing words were translated from original Japanese to English as literally as possible. However, it was difficult to translate some words or phrases exactly because they have multiple meanings in Japanese. Therefore, they were translated freely.

6th grade all

Frequently appearing top 50 words

Do: 959 times, Today: 775 times, Think: 481 times, Good: 440 times, Not: 348 times, Can: 346 times, Make: 298 times, Exist: 289 times, Filming: 245 times, However: 241 times, Anime: 199 times, Work hard: 171 times, A piece of work: 169 times, Own: 161 times, Lie in: 140 times, Perform: 133 times, Everyone: 130 times, Crisis: 130 times, Announcement: 130 times, Go: 127 times, Understand: 127 times, Difficult: 116 times, Animation: 115 times, Finish: 115 times, Piece: 112 times, More: 110 times, Mr. or Miss.: 108 times, Completion: 105 times, From now on: 104 times, Person: 103 times, Sound: 102 times, When: 98 times, Very: 98 times, Advance: 96 times, Picture: 95 times, We: 93 times, Nice: 93 times, And so on: 92 times, Part: 89 times, Thing: 87 times, This time: 82 times, Shoot: 78 times, Making: 77 times, Paint: 76 times, And: 75 times, Roll: 75 times, Which means: 74 times, Consider: 72 times, Amendment: 71 times, Further: 70 times,

Learning Type

2. Change in Self-Discovery Tendency: 458 times
1. Change in Self-Affirmative Tendency: 346 times
4. Change in Occupation Understanding: 336 times
5. Change in Communication: 232 times
3. Change in Role Grasp and Recognition: 206 times

Emotional Type

2. Happy: 567 times
3. Interesting: 390 times
8. Difficult: 375 times
1. Glad: 222 times

4. Easy: 64 times
5. Sad: 41 times
7. Painful: 39 times
6. Angry: 38 times

Effort Type

4. Tried Hard: 499 times
 5. Tried Hard Enough: 313 times
 3. Tried: 282 times
 2. A Little Insufficient: 53 times
 1. Quite Insufficient: 17 times
- Average: 3.89175257731959

6-1

Frequently appearing top 50 words

Do: 339 times, Today: 326 times, Think: 217 times, Not: 170 times, Can: 155 times, Good: 153 times, Make: 139 times, Exist: 126 times, However: 121 times, Filming: 109 times, Work hard: 97 times, Piece: 85 times, Anime: 83 times, Crisis: 78 times, Mr. or Miss.: 69 times, Perform: 66 times, This time: 66 times, Understand: 63 times, Lie in: 58 times, Difficult: 55 times, Go: 54 times, Own: 51 times, Announcement: 49 times, Finish: 49 times, From now on: 47 times, Which means: 45 times, Animation: 45 times, Part: 45 times, And so on: 45 times, ! : 44 times, Person: 44 times, A piece of work: 44 times, Very: 44 times, Sound: 43 times, · : 43 times, Second: 42 times, Roll: 42 times, When: 41 times, Everyone: 40 times, Shot: 40 times, Nice: 39 times, Thing: 39 times, Ito: 38 times, Advance: 38 times, Shoot: 37 times, End: 37 times, Little: 37 times, Clay: 37 times, Picture: 36 times, And: 36 times,

Learning Type

1. Change in Self-Affirmative Tendency: 177 times
2. Change in Self-Discovery Tendency: 172 times
4. Change in Occupation Understanding: 165 times
5. Change in Communication: 117 times
3. Change in Role Grasp and Recognition: 107 times

Emotional Type

- 2. Happy: 255 times
- 8. Difficult: 193 times
- 3. Interesting: 172 times
- 1. Glad: 111 times
- 4. Easy: 25 times
- 6. Angry: 23 times
- 5. Sad: 18 times
- 7. Painful: 18 times

Effort Type

- 4. Tried Hard: 203 times
- 5. Tried Hard Enough: 162 times
- 3. Tried: 90 times
- 2. A Little Insufficient: 26 times
- 1. Quite Insufficient: 3 times
- Average: 4.02272727272727

6-2

Frequently appearing top 50 words

Do: 357 times, Today: 261 times, Think: 160 times, Good: 146 times, Make: 117 times, Can: 111 times, Exist: 96 times, Not: 95 times, Filming: 91 times, However: 77 times, Anime: 75 times, Own: 66 times, A piece of work: 65 times, Picture: 59 times, Material: 53 times, Making: 52 times, Difficult: 50 times, From now on: 49 times, Perform: 48 times, Everyone: 48 times, Paint: 47 times, Person: 47 times, Animation: 46 times, Work hard: 45 times, Crisis: 44 times, Storyboard: 43 times, More: 42 times, Go: 41 times, Advance: 41 times, Lie in: 41 times, Understand: 41 times, When: 38 times, Nice: 38 times, Consider: 37 times, Devise: 37 times, Very: 36 times, Be done: 34 times, And so on: 34 times, Shoot: 32 times, Thing: 32 times, Mr. or Miss.: 32 times, Further: 30 times, We: 29 times, I: 28 times, Ito: 27 times, Completion: 26 times, Use: 26 times, Opinion: 26 times, Title: 25 times, Fun: 25 times,

Learning Type

- 2. Change in Self-Discovery Tendency: 141 times
- 4. Change in Occupation Understanding: 117 times
- 5. Change in Communication: 88 times

1. Change in Self-Affirmative Tendency: 82 times
3. Change in Role Grasp and Recognition: 70 times

Emotional Type

2. Happy: 185 times
3. Interesting: 133 times
8. Difficult: 126 times
1. Glad: 42 times
4. Easy: 19 times
7. Painful: 16 times
6. Angry: 12 times
5. Sad: 8 times

Effort Type

4. Tried Hard: 183 times
 3. Tried: 106 times
 5. Tried Hard Enough: 64 times
 2. A Little Insufficient: 16 times
 1. Quite Insufficient: 7 times
- Average: 3.74734042553191

6-1 Group 1

Frequently appearing top 50 words

Do: 49 times, Today: 47 times, Work hard: 26 times, Make: 24 times, Not: 16 times, This time: 15 times, Anime: 14 times, Understand: 14 times, Crisis: 14 times, Think: 13 times, Difficult: 13 times, Mr. or Miss.: 12 times, Can: 12 times, Filming: 11 times, Exist: 11 times, Perform: 10 times, Animation: 9 times, Role: 9 times, From now on: 9 times, Superb: 9 times, Person: 8 times, Good: 8 times, Ito: 8 times, However: 8 times, Everyone: 8 times, Announcement: 7 times, Part: 7 times, Next: 7 times, In the beginning: 7 times, Piece: 7 times, Picture: 7 times, Second: 6 times, Which means: 6 times, Lie in: 6 times, When: 6 times, Fix: 6 times, Consider: 6 times, Fast: 6 times, Work sharing: 6 times, Finish: 6 times, Thing: 5 times, Know: 5 times, Add: 5 times, Sound: 5 times, Nevertheless: 5 times, Business: 5 times, Clay: 5 times, Side: 5 times, Last: 5 times, Devise: 5 times,

Learning Type

2. Change in Self-Discovery Tendency: 38 times
4. Change in Occupation Understanding: 28 times
3. Change in Role Grasp and Recognition: 18 times
5. Change in Communication: 12 times
1. Change in Self-Affirmative Tendency: 9 times

Emotional Type

8. Difficult: 32 times
2. Happy: 30 times
3. Interesting: 23 times
4. Easy: 11 times
1. Glad: 9 times
7. Painful: 2 times
5. Sad: 1 time

Effort Type

4. Tried Hard: 34 times
5. Tried Hard Enough: 13 times
3. Tried: 11 times
2. A Little Insufficient: 4 times
1. Quite Insufficient: 2 times

Average: 3.8125

6-1 Group 2

Frequently appearing top 50 words

Today: 47 times, Do: 40 times, Think: 27 times, However: 23 times, Can: 21 times, Good: 20 times, Not: 18 times, Work hard: 17 times, Make: 16 times, Piece: 15 times, Completion: 12 times, Announcement: 11 times, Mr. or Miss.: 11 times, !: 11 times, Finish: 11 times, Filming: 11 times, Exist: 11 times, Lie in: 10 times, Make something to do: 9 times, And: 8 times, Background: 8 times, Difficult: 8 times, Go: 8 times, End: 7 times, ·: 7 times, Anime: 7 times, Roll: 7 times, Ito: 7 times, Advance: 7 times, Picture: 7 times, Shoot: 6 times, Result: 6 times, Next: 6 times, Character: 6 times, This: 6 times, Second: 6 times, Fun: 6 times, Seem: 6 times, Which means: 6 times, From now on: 6 times, Everyone: 6 times, Whole: 6 times, Glad: 6 times, Paint: 6 times, Many: 6 times,

More than: 6 times, A piece of work: 6 times, Thing: 5 times, Minute: 5 times, This time: 5 times,

Learning Type

4. Change in Occupation Understanding: 29 times
1. Change in Self-Affirmative Tendency: 24 times
2. Change in Self-Discovery Tendency: 19 times
3. Change in Role Grasp and Recognition: 15 times
5. Change in Communication: 13 times

Emotional Type

2. Happy: 42 times
3. Interesting: 32 times
1. Glad: 13 times
8. Difficult: 10 times
4. Easy: 5 times
5. Sad: 3 times
7. Painful: 3 times
6. Angry: 1 time

Effort Type

5. Tried Hard Enough: 28 times
 4. Tried Hard: 24 times
 3. Tried: 7 times
 1. Quite Insufficient: 1 time
 2. A Little Insufficient: 1 time
- Average: 4.26229508196721

6-1 Group 3

Frequently appearing top 50 words

Today: 44 times, Think: 33 times, Do: 31 times, Make: 26 times, Not: 24 times, Good: 20 times, Exist: 19 times, Filming: 18 times, However: 18 times, Anime: 14 times, Perform: 12 times, Shot: 12 times, Can: 12 times, Piece: 12 times, Crisis: 11 times, Advance: 11 times, Lie in: 11 times, Sound: 10 times, Own: 9 times, And so on: 9 times, Promote: 9 times, Second: 9 times, Property: 8 times, More: 8 times, Animation: 8 times, When: 8

times, Part: 8 times, A piece of work: 8 times, This time: 7 times, Go: 7 times, Add: 7 times, Understand: 7 times, Seem: 7 times, Thing: 6 times, Whole: 6 times, Shoot: 6 times, Finish: 6 times, Day: 6 times, Clay: 6 times, Little: 6 times, Many: 6 times, Fun: 6 times, Rank: 6 times, Nice: 6 times, Nevertheless: 5 times, We: 5 times, Use: 5 times, Fix: 5 times, Reach: 5 times, Difficult: 5 times,

Learning Type

1. Change in Self-Affirmative Tendency: 29 times
2. Change in Self-Discovery Tendency: 24 times
3. Change in Role Grasp and Recognition: 13 times
4. Change in Occupation Understanding: 8 times
5. Change in Communication: 5 times

Emotional Type

2. Happy: 32 times
3. Interesting: 28 times
8. Difficult: 17 times
1. Glad: 11 times
4. Easy: 4 times
5. Sad: 2 times
6. Angry: 2 times

Effort Type

4. Tried Hard: 31 times
 3. Tried: 17 times
 5. Tried Hard Enough: 10 times
 2. A Little Insufficient: 5 times
- Average: 3.73015873015873

6-1 Group 4

Frequently appearing top 50 words

Today: 57 times, Do: 43 times, Think: 35 times, Can: 26 times, Good: 23 times, Make: 21 times, Not: 19 times, Mr. or Miss.: 14 times, Crisis: 12 times, However: 12 times, Piece: 10 times, Perform: 10 times, Filming: 10 times, Nice: 9 times, Reach: 9 times, Well done: 8 times, Very: 8 times, • : 8 times, Roll: 7 times, Everyone: 7 times, Finish: 7 times,

Sound: 7 times, Many: 7 times, End: 7 times, Lawn: 6 times, Listen: 6 times, Anime: 6 times, Second: 6 times, Advance: 6 times, Nevertheless: 6 times, A piece of work: 6 times, Early: 6 times, This: 5 times, Announcement: 5 times, Oh: 5 times, Exist: 5 times, Clay: 5 times, Story: 5 times, Work hard: 5 times, Ito: 5 times, Next: 5 times, Difficult: 5 times, Consider: 5 times, One: 5 times, Result: 4 times, Fast: 4 times, Bit: 4 times, Detailed: 4 times, Advice: 4 times, Seem to make: 4 times,

Learning Type

- 4. Change in Occupation Understanding: 24 times
- 5. Change in Communication: 24 times
- 1. Change in Self-Affirmative Tendency: 18 times
- 2. Change in Self-Discovery Tendency: 17 times
- 3. Change in Role Grasp and Recognition: 7 times

Emotional Type

- 2. Happy: 27 times
- 8. Difficult: 24 times
- 1. Glad: 23 times
- 3. Interesting: 16 times
- 4. Easy: 3 times
- 5. Sad: 2 times
- 7. Painful: 2 times
- 6. Angry: 1 time

Effort Type

- 4. Tried Hard: 25 times
 - 3. Tried: 19 times
 - 5. Tried Hard Enough: 16 times
 - 2. A Little Insufficient: 4 times
- Average: 3.828125

6-1 Group 5

Frequently appearing top 50 words

Do: 46 times, Today: 32 times, Think: 29 times, Not: 21 times, Filming: 18 times, Can: 17 times, Work hard: 13 times, From now on: 12 times, Make: 12 times, However: 12

times, Mr. or Miss.: 10 times, Go: 10 times, Own: 9 times, Understand: 9 times, Piece: 9 times, Perform: 9 times, This time: 9 times, Yet: 8 times, Listen: 8 times, Ito: 8 times, Good: 8 times, Nice: 8 times, Come to: 8 times, Shot: 7 times, Next: 7 times, Lie in: 7 times, Creation: 7 times, Exist: 7 times, Part: 7 times, Take time: 7 times, Only: 6 times, Animation: 6 times, When: 6 times, Hour: 6 times, Difficult: 6 times, Announcement: 6 times, Very: 6 times, Background: 5 times, Little: 5 times, Story: 5 times, And so on: 5 times, Talk: 5 times, Fun: 5 times, What: 5 times, Know: 5 times, Further: 5 times, Which means: 5 times, Person: 4 times, I: 4 times, How: 4 times,

Learning Type

1. Change in Self-Affirmative Tendency: 34 times
4. Change in Occupation Understanding: 29 times
2. Change in Self-Discovery Tendency: 23 times
5. Change in Communication: 16 times
3. Change in Role Grasp and Recognition: 14 times

Emotional Type

8. Difficult: 42 times
2. Happy: 25 times
1. Glad: 18 times
6. Angry: 15 times
3. Interesting: 10 times
5. Sad: 5 times
7. Painful: 4 times

Effort Type

5. Tried Hard Enough: 20 times
 3. Tried: 19 times
 4. Tried Hard: 17 times
 2. A Little Insufficient: 5 times
- Average: 3.85245901639344

6-1 Group 6

Frequently appearing top 50 words

Do: 53 times, Think: 42 times, Today: 38 times, Not: 28 times, Exist: 28 times, Good: 23

times, Can: 23 times, However: 21 times, Anime: 18 times, Make: 18 times, This time: 16 times, Crisis: 15 times, ! : 14 times, • : 13 times, Filming: 13 times, Go: 12 times, Only: 11 times, Work hard: 11 times, End: 10 times, Roll: 10 times, Sound: 10 times, When: 10 times, Watch: 10 times, Which means: 9 times, Piece: 9 times, Everyone: 9 times, Understand: 9 times, Lie in: 8 times, Nice: 8 times, Hour: 8 times, And so on: 8 times, Many: 8 times, Perform: 8 times, Shoot: 8 times, Thing: 7 times, Now: 7 times, Announcement: 7 times, Person: 7 times, Difficult: 7 times, Finish: 7 times, Completion: 7 times, Further: 7 times, Collaboration: 7 times, Nevertheless: 7 times, I: 7 times, Add: 7 times, Animation: 7 times, A piece of work: 7 times, Use: 6 times, And: 6 times,

Learning Type

1. Change in Self-Affirmative Tendency: 30 times
5. Change in Communication: 21 times
2. Change in Self-Discovery Tendency: 19 times
3. Change in Role Grasp and Recognition: 16 times
4. Change in Occupation Understanding: 12 times

Emotional Type

2. Happy: 47 times
3. Interesting: 32 times
8. Difficult: 17 times
1. Glad: 14 times
7. Painful: 1 time

Effort Type

4. Tried Hard: 38 times
 5. Tried Hard Enough: 12 times
 3. Tried: 7 times
 2. A Little Insufficient: 6 times
- Average: 3.88888888888889

6-1 Group 7

Frequently appearing top 50 words

Today: 37 times, Do: 33 times, Can: 32 times, Good: 31 times, Exist: 30 times, Think: 26 times, Not: 25 times, However: 17 times, Work hard: 17 times, Understand: 14 times,

Crisis: 14 times, Make: 14 times, Filming: 13 times, Come to: 12 times, Perform: 11 times, Piece: 11 times, Person: 10 times, More: 10 times, Very: 10 times, Business: 9 times, Which means: 9 times, I: 9 times, Yet: 9 times, Own: 8 times, Difficult: 8 times, Promote: 8 times, It: 8 times, And: 7 times, A piece of work: 7 times, Go: 7 times, Thing: 7 times, And so on: 7 times, Everyone: 7 times, From now on: 7 times, With utmost effort: 7 times, Be able to: 7 times, Announcement: 7 times, Last time,: 7 times, Mr. or Miss.: 7 times, Get to: 6 times, Anime: 6 times, Communication: 6 times, Little: 6 times, Steady: 6 times, Lie in: 6 times, Next times,: 6 times, ! : 6 times, Get behind: 5 times, Enjoy: 5 times, Well done: 5 times,

Learning Type

4. Change in Occupation Understanding: 22 times
3. Change in Role Grasp and Recognition: 17 times
5. Change in Communication: 16 times
2. Change in Self-Discovery Tendency: 13 times
1. Change in Self-Affirmative Tendency: 12 times

Emotional Type

8. Difficult: 34 times
2. Happy: 24 times
1. Glad: 13 times
3. Interesting: 9 times
7. Painful: 5 times
5. Sad: 4 times
6. Angry: 3 times
4. Easy: 1 time

Effort Type

5. Tried Hard Enough: 34 times
 4. Tried Hard: 23 times
 3. Tried: 3 times
- Average: 4.51666666666667

6-1 Group 8

Frequently appearing top 50 words

Do: 44 times, Today: 24 times, Good: 20 times, Not: 19 times, Filming: 15 times, Exist: 15 times, Anime: 14 times, Think: 12 times, Piece: 12 times, Can: 12 times, Own: 10 times, However: 10 times, Make: 8 times, What: 7 times, Completion: 7 times, We: 7 times, Person: 7 times, Lie in: 7 times, Shot: 6 times, Very: 6 times, And: 6 times, Second: 6 times, Mr. or Miss.: 6 times, Character: 6 times, Sato: 6 times, This time: 6 times, Picture: 5 times, Part: 5 times, ! : 5 times, And so on: 5 times, Merely: 5 times, Paint: 5 times, Amendment: 5 times, Receive: 5 times, This: 4 times, Clay: 4 times, Other: 4 times, Interest: 4 times, Little: 4 times, Understand: 4 times, Spend: 4 times, Put in: 4 times, Squad: 4 times, Background: 4 times, Seem: 4 times, Sound: 4 times, S: 4 times, • : 4 times, Ojipuri: 4 times, Which means: 4 times,

Learning Type

1. Change in Self-Affirmative Tendency: 21 times
2. Change in Self-Discovery Tendency: 19 times
4. Change in Occupation Understanding: 13 times
5. Change in Communication: 10 times
3. Change in Role Grasp and Recognition: 7 times

Emotional Type

2. Happy: 28 times
3. Interesting: 22 times
8. Difficult: 17 times
1. Glad: 10 times
7. Painful: 1 time
5. Sad: 1 time
4. Easy: 1 time
6. Angry: 1 time

Effort Type

5. Tried Hard Enough: 29 times
 4. Tried Hard: 11 times
 3. Tried: 7 times
 2. A Little Insufficient: 1 time
- Average: 4.416666666666667

6-2 Group 1

Frequently appearing top 50 words

Do: 97 times, Today: 43 times, Think: 41 times, Can: 33 times, Exist: 32 times, Make: 28 times, Good: 24 times, Own: 20 times, Everyone: 20 times, Not: 20 times, Anime: 20 times, Filming: 19 times, However: 16 times, Person: 15 times, When: 13 times, We: 12 times, Watch: 12 times, More: 12 times, Advice: 10 times, Job: 10 times, Picture: 10 times, Completion: 10 times, Part: 10 times, Perform: 9 times, Lie in: 9 times, Nevertheless: 9 times, While: 9 times, Advance: 8 times, Receive: 8 times, Squad: 8 times, A piece of work: 8 times, Paint: 8 times, Work hard: 8 times, Fun: 8 times, Opinion: 8 times, Announcement: 8 times, Animation: 7 times, Thing: 7 times, From now on: 7 times, And: 7 times, Understand: 7 times, Decide: 7 times, Mr. or Miss.: 7 times, Finish: 7 times, Many: 7 times, Role: 7 times, Devise: 7 times, Storyboard: 7 times, Very: 7 times, Business: 7 times,

Learning Type

4. Change in Occupation Understanding: 34 times
2. Change in Self-Discovery Tendency: 29 times
1. Change in Self-Affirmative Tendency: 22 times
5. Change in Communication: 19 times
3. Change in Role Grasp and Recognition: 11 times

Emotional Type

2. Happy: 44 times
3. Interesting: 36 times
1. Glad: 23 times
8. Difficult: 9 times
4. Easy: 4 times
7. Painful: 1 time
6. Angry: 1 time

Effort Type

3. Tried: 43 times
 4. Tried Hard: 30 times
 5. Tried Hard Enough: 11 times
 2. A Little Insufficient: 2 times
- Average: 3.58139534883721

6-2 Group 2

Frequently appearing top 50 words

Do: 75 times, Today: 53 times, Think: 43 times, Not: 28 times, Own: 24 times, Can: 22 times, Good: 22 times, Exist: 21 times, A piece of work: 19 times, Make: 19 times, Anime: 17 times, Work hard: 16 times, Perform: 15 times, Everyone: 14 times, Lie in: 13 times, Nice: 13 times, Crisis: 13 times, Announcement: 13 times, I: 13 times, Interest: 12 times, Be done: 12 times, However: 12 times, Filming: 12 times, Advice: 10 times, Use: 10 times, Well done: 10 times, Consider: 10 times, Completion: 9 times, Thing: 9 times, Difficult: 9 times, Understand: 9 times, Clay: 9 times, We: 9 times, Try: 9 times, And so on: 8 times, Go: 8 times, Although : 8 times, Seem: 8 times, Making: 8 times, More: 8 times, Devise: 8 times, Very: 8 times, Animation: 8 times, Advance: 8 times, Superb: 7 times, Be able to: 7 times, And: 7 times, Fix: 6 times, Squad: 6 times, Part: 6 times,

Learning Type

1. Change in Self-Affirmative Tendency: 40 times
2. Change in Self-Discovery Tendency: 40 times
5. Change in Communication: 9 times
3. Change in Role Grasp and Recognition: 7 times
4. Change in Occupation Understanding: 4 times

Emotional Type

8. Difficult: 34 times
2. Happy: 29 times
3. Interesting: 26 times
1. Glad: 19 times
5. Sad: 5 times
7. Painful: 3 times
4. Easy: 3 times
6. Angry: 3 times

Effort Type

4. Tried Hard: 42 times
3. Tried: 24 times

5. Tried Hard Enough: 18 times

1. Quite Insufficient: 2 times

2. A Little Insufficient: 1 time

Average: 3.83908045977011

6-2 Group 3

Frequently appearing top 50 words

Do: 107 times, Good: 57 times, Today: 51 times, Can: 44 times, Think: 37 times, Filming: 20 times, Exist: 20 times, Everyone: 18 times, Make: 18 times, Collaboration: 15 times, A piece of work: 15 times, Own: 14 times, Sound: 13 times, Person: 13 times, Anime: 12 times, Perform: 12 times, Go: 12 times, Picture: 11 times, More: 11 times, Completion: 11 times, Announcement: 10 times, Suitable: 10 times, Not: 10 times, Finish: 10 times, Thing: 9 times, Make something to do: 9 times, Part: 9 times, Consider: 9 times, Storyboard: 9 times, Lie in: 9 times, Amendment: 9 times, We: 8 times, Roll: 8 times, All: 7 times, Little: 7 times, Put in: 7 times, Piece: 7 times, Material: 7 times, Devise: 7 times, This time: 7 times, When: 7 times, Mr. or Miss.: 6 times, Different: 6 times, Nice: 6 times, Enjoy: 6 times, However: 6 times, Scene: 6 times, Squad: 6 times, About: 6 times, Bell pepper: 6 times,

Learning Type

2. Change in Self-Discovery Tendency: 30 times

1. Change in Self-Affirmative Tendency: 22 times

5. Change in Communication: 18 times

4. Change in Occupation Understanding: 12 times

3. Change in Role Grasp and Recognition: 11 times

Emotional Type

2. Happy: 54 times

3. Interesting: 30 times

8. Difficult: 12 times

1. Glad: 2 times

7. Painful: 1 time

4. Easy: 1 time

5. Sad: 1 time

Effort Type

- 4. Tried Hard: 50 times
- 5. Tried Hard Enough: 25 times
- 3. Tried: 13 times
- Average: 4.13636363636364

6-2 Group 4

Frequently appearing top 50 words

Do: 91 times, Today: 68 times, Good: 46 times, Think: 36 times, Not: 26 times, Filming: 25 times, Exist: 23 times, Can: 22 times, However: 21 times, Make: 20 times, A piece of work: 19 times, Difficult: 18 times, Amendment: 15 times, Everyone: 14 times, When: 14 times, More: 14 times, We: 12 times, And: 12 times, Announcement: 12 times, Animation: 12 times, Further: 12 times, Shoot: 11 times, Lie in: 11 times, Understand: 11 times, Watch: 10 times, Thing: 9 times, Consider: 9 times, I: 9 times, Roll: 9 times, Sound: 9 times, From now on: 9 times, Go: 9 times, Be done: 8 times, Part: 8 times, Before: 8 times, Anime: 8 times, Own: 8 times, End: 8 times, Which means: 8 times, · : 8 times, Making: 8 times, Paint: 7 times, Devise: 7 times, Finish: 7 times, Mr. or Miss.: 7 times, Title: 7 times, Ito: 7 times, Completion: 6 times, And so on: 6 times, Person: 6 times,

Learning Type

- 2. Change in Self-Discovery Tendency: 48 times
- 4. Change in Occupation Understanding: 25 times
- 1. Change in Self-Affirmative Tendency: 20 times
- 5. Change in Communication: 12 times
- 3. Change in Role Grasp and Recognition: 11 times

Emotional Type

- 2. Happy: 43 times
- 8. Difficult: 23 times
- 3. Interesting: 20 times
- 1. Glad: 13 times
- 4. Easy: 3 times
- 5. Sad: 3 times

Effort Type

- 3. Tried: 37 times
- 4. Tried Hard: 33 times
- 5. Tried Hard Enough: 12 times
- 2. A Little Insufficient: 2 times
- Average: 3.6547619047619

6-2 Group 5

Frequently appearing top 50 words

Today: 63 times, Do: 62 times, Good: 35 times, Not: 24 times, Make: 20 times, Filming: 20 times, Anime: 20 times, Can: 19 times, Exist: 19 times, Think: 14 times, A piece of work: 13 times, However: 13 times, Announcement: 12 times, Making: 11 times, And so on: 10 times, Material: 10 times, Own: 10 times, Advance: 9 times, Early: 9 times, Animation: 9 times, Completion: 8 times, Perform: 8 times, Understand: 8 times, Finish: 7 times, More: 7 times, Lie in: 7 times, Amendment: 7 times, Person: 7 times, Picture: 7 times, Interest: 7 times, Such like: 6 times, Listen: 6 times, Paint: 6 times, Difficult: 6 times, Mr. or Miss.: 5 times, Storyboard: 5 times, Rank: 5 times, Make use of: 5 times, Steady: 5 times, Shoot: 5 times, Know: 5 times, Watch: 5 times, From now on: 5 times, Make something to do: 5 times, Sound: 5 times, This: 5 times, Relief: 4 times, I: 4 times, Work hard: 4 times, Decide: 4 times,

Learning Type

- 2. Change in Self-Discovery Tendency: 33 times
- 5. Change in Communication: 30 times
- 4. Change in Occupation Understanding: 28 times
- 1. Change in Self-Affirmative Tendency: 18 times
- 3. Change in Role Grasp and Recognition: 17 times

Emotional Type

- 1. Glad: 32 times
- 2. Happy: 32 times
- 8. Difficult: 30 times
- 3. Interesting: 14 times
- 7. Painful: 7 times
- 4. Easy: 4 times

5. Sad: 3 times
6. Angry: 2 times

Effort Type

4. Tried Hard: 34 times
 3. Tried: 22 times
 5. Tried Hard Enough: 17 times
 2. A Little Insufficient: 7 times
 1. Quite Insufficient: 3 times
- Average: 3.66265060240964

6-2 Group 6

Frequently appearing top 50 words

Today: 65 times, Do: 45 times, Not: 32 times, Good: 23 times, However: 21 times, Think: 19 times, Exist: 19 times, A piece of work: 17 times, Make: 16 times, Can: 14 times, Work hard: 12 times, Finish: 11 times, Background: 10 times, Own: 9 times, Paint: 9 times, Lie in: 8 times, Filming: 8 times, And so on: 8 times, We: 7 times, Anime: 7 times, H: 7 times, Sound: 6 times, Difficult: 6 times, Come to: 6 times, Animation: 6 times, Everyone: 6 times, Mr.: 6 times, Use: 6 times, Advance: 6 times, Perform: 6 times, Picture: 6 times, Piece: 6 times, Forget: 5 times, Understand: 5 times, Tell: 5 times, Completion: 5 times, Storyboard: 5 times, Opinion: 5 times, Seem: 5 times, Remaining: 5 times, Make something to do: 5 times, Rank: 5 times, Next: 4 times, Interest: 4 times, Hour: 4 times, Get to: 4 times, Roll: 4 times, Be done: 4 times, Prototype: 4 times, Opening: 4 times,

Learning Type

2. Change in Self-Discovery Tendency: 36 times
4. Change in Occupation Understanding: 23 times
3. Change in Role Grasp and Recognition: 21 times
1. Change in Self-Affirmative Tendency: 11 times
5. Change in Communication: 4 times

Emotional Type

3. Interesting: 35 times
8. Difficult: 21 times

2. Happy: 21 times
1. Glad: 10 times
4. Easy: 7 times
6. Angry: 6 times
5. Sad: 5 times
7. Painful: 5 times

Effort Type

4. Tried Hard: 33 times
 5. Tried Hard Enough: 21 times
 3. Tried: 15 times
 2. A Little Insufficient: 8 times
 1. Quite Insufficient: 6 times
- Average: 3.66265060240964

6-2 Group 7

Frequently appearing top 50 words

Today: 50 times, Do: 49 times, Good: 42 times, Think: 33 times, However: 18 times, Can: 17 times, Not: 17 times, Understand: 13 times, Advance: 13 times, Devise: 13 times, Filming: 12 times, Crisis: 11 times, Make: 10 times, Very: 10 times, Anime: 10 times, Completion: 10 times, Nice: 9 times, Various: 9 times, More: 9 times, Lie in: 9 times, Further: 8 times, Exist: 8 times, Work hard: 8 times, Finish: 7 times, A piece of work: 7 times, Next: 7 times, Go: 7 times, From now on: 7 times, Paint: 7 times, Announcement: 7 times, When: 7 times, Picture: 6 times, Come through: 6 times, Everyone: 6 times, Sound: 6 times, Consider: 5 times, Effect: 5 times, Thing: 5 times, And so on: 5 times, Own: 5 times, Perform: 5 times, I: 5 times, In order to: 5 times, Interest: 5 times, We: 5 times, Subject: 5 times, Enjoy: 5 times, Job: 5 times, Bit: 4 times, Its: 4 times,

Learning Type

2. Change in Self-Discovery Tendency: 40 times
1. Change in Self-Affirmative Tendency: 20 times
4. Change in Occupation Understanding: 12 times
5. Change in Communication: 8 times
3. Change in Role Grasp and Recognition: 5 times

Emotional Type

- 2. Happy: 52 times
- 3. Interesting: 37 times
- 4. Easy: 12 times
- 8. Difficult: 7 times
- 1. Glad: 5 times
- 5. Sad: 3 times
- 7. Painful: 2 times
- 6. Angry: 2 times

Effort Type

- 4. Tried Hard: 41 times
- 5. Tried Hard Enough: 25 times
- 3. Tried: 13 times
- 2. A Little Insufficient: 2 times
- Average: 4.09876543209877

6-2 Group 8

Frequently appearing top 50 words

Do: 94 times, Today: 56 times, Think: 41 times, Good: 38 times, Make: 28 times, A piece of work: 27 times, Go: 23 times, Anime: 22 times, Exist: 21 times, Animation: 21 times, Not: 21 times, Can: 20 times, Filming: 20 times, Own: 20 times, From now on: 18 times, Very: 18 times, Work hard: 17 times, Lie in: 16 times, Making: 15 times, Announcement: 15 times, More: 15 times, Material: 14 times, However: 13 times, Finish: 13 times, Amendment: 13 times, Completion: 12 times, We: 12 times, Fun: 12 times, Sound: 11 times, Devise: 11 times, Everyone: 10 times, Picture: 9 times, Nice: 9 times, Advance: 8 times, Mr. or Miss.: 8 times, Crisis: 8 times, Little: 8 times, Although : 8 times, Edit: 7 times, Consider: 7 times, Work sharing: 7 times, Further: 7 times, Perform: 7 times, When: 7 times, Put in: 7 times, Be done: 7 times, Understand: 7 times, Group: 6 times, Paint: 6 times, Result: 6 times,

Learning Type

- 4. Change in Occupation Understanding: 33 times
- 2. Change in Self-Discovery Tendency: 30 times
- 1. Change in Self-Affirmative Tendency: 16 times

3. Change in Role Grasp and Recognition: 16 times

5. Change in Communication: 15 times

Emotional Type

8. Difficult: 46 times

2. Happy: 37 times

3. Interesting: 20 times

1. Glad: 7 times

4. Easy: 5 times

5. Sad: 3 times

7. Painful: 2 times

6. Angry: 1 time

Effort Type

4. Tried Hard: 33 times

3. Tried: 25 times

5. Tried Hard Enough: 22 times

2. A Little Insufficient: 5 times

1. Quite Insufficient: 3 times

Average: 3.75