

An Examination of Leader Report about the Improvement of Leader's Duties

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Abstract - In the class which aims to improve student's teamwork ability, the leader reports which the students submitted on weekend and the conscious investigation about the leadership of the students were analyzed and the effect on the education about the leadership ability was examined.

Index Terms: Effect on Education, Leadership Ability, Leader Report, Conscious Investigation, Engineer.

INTRODUCTION

The important goal for the education of Kanazawa Institute of Technology is to bring up the student to the engineer who can be active in today's society. The subject named Engineering Design 1, 2 has been opened as a leading subject since 1996. This Engineering Design 1, 2 is opened for all the students of freshmen and sophomores, and it aims that students not only learn the design process but also improve the teamwork abilities. As we reported [1], [2] about the way of evaluating the teamwork ability so far, we will report the result of the investigation related to the leadership in the class which one of the authors took charge of in 2006 years and the examination results about the effect on the education of the improvement in the ability as a leader here.

THE METHOD OF THE CONSCIOUS INVESTIGATION OF THE STUDENTS ABOUT THE LEADERSHIP

As this class open for all the freshmen and the sophomores, there are many students who have never experienced the team activity by that time. So, the short lecture was given about the team activities, the duties of the team member and the leaderships in the beginning of the class. The student took charge of the team leader by turns every week, and submitted a leader report on weekend.

I. The questionnaire investigation about the impression after took charge of the leader

The questionnaire investigation relating to the leader's ability was done to all the students at the end of the term. At

first the duties of the leader of eight heads in the table 1 were shown to the students, and they selected two clauses from A-H in the table 1 for each four questionnaire shown in the table 2.

TABLE 1

LEADER'S DUTIES SHOWN TO THE STUDENTS BEFORE INVESTIGATION

- A Show the definite goal to the team members
- B Make an action plan in which working item, the due time, job sharing, and so on were decided.
- C Put the team member's opinion together
- D Improve the communication between the team members
- E Encourage the team members motivation in their learning
- F Grasps the progress conditions of the jobs that each member shared.
- G If the problem occurs, examine and decide the countermeasure at once.
- H Attain the excellent team products.

TABLE 2

QUESTIONNAIRE ABOUT LEADER'S DUTIES

Choose two items to the following question from the table 1

- 1. What do you think the most important duties as a leader?

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
- 2. What leader's duties do you think to be the most difficult to learn?

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
- 3. What are the duties which you think improved?

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
- 4. What is the ability that you want to improve further more?

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

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Leader Report

Y: M: D:

Class No.: Team No.: Name:

- 1. What plan did you make to lead your team before you charge of the leader
- 2. What does it's result
- 3. How do you think to improve next time you charge of the leader
- 4. Others

FIGURE 1

CONTENTS OF LEADER REPORT

II. Leader Report

The team leader submitted the leader report described freely to four questions shown in the figure 1 in each weekend.

THE RESULT OF THE QUESTIONNAIRE INVESTIGATION ABOUT LEADER'S DUTY

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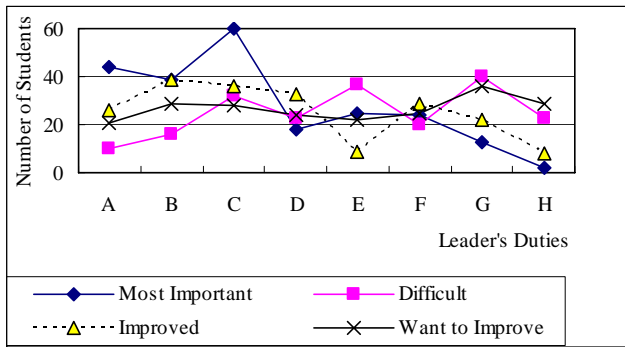


FIGURE 2
THE IMPRESSION OF LEADER'S DUTIES

The figure 2 showed the results of the conscious investigation of the class of architecture as an example. The student's answer dispersed around all the duties except for C: Put the member's opinion together. These results were totaled in all the classes for every question, and the results were shown in the figure 3 - the figure 6. The horizontal axis of these figures(A-H) show the marks in the table 1 and the vertical axis is the number of the student who gave that item. The figure 3 shows the result of the question 1 in the table 2. It knows the following by the figure 3. The student thinks that the item C: Put the team member's opinion together, A: Show the definite goal to the team members, B: Make an action plan in which working item, the due time, the job sharing and so on were decided, are important as the leader's duties in the order. These results reflect that the teacher told many times that the leader should put all opinion together and show the policy during the semester. The figure 4 shows the result about the leader' duties that is difficult to learn. It found that the student thinks that learning is difficult in order of item G: If the problem occurs, examine and decide the countermeasure at once and item E: Encourage the member's motivation in their learning. It seems that these student recognition is very suitable because these competencies are not the skill which becomes easily good, but it is experienced many times and it becomes good. The figure 5 and the figure 6 are the results of the question 3 and the question 4 respectively.

TABLE 3
THE KEYWORDS WHICH COME OUT IN THE LEADER REPORT

Keywords or Contents.
1 Leader's importance, Preparation of the team activity.
2 Leaderships, Sharing job, Show directions/put together
3 Communication, Information transmission.
4 Motivation, Progress condition of activity
5 Member's evaluation, Result and reflection
6 Plan, Time, Efficiency

THE ANALYSIS OF THE LEADER REPORT

The contents of the leader report which the student submitted were classified in six items shown in the table 3. Then, the number of times that six items appeared in the description of the first question (before) and the third&4th questions (after)

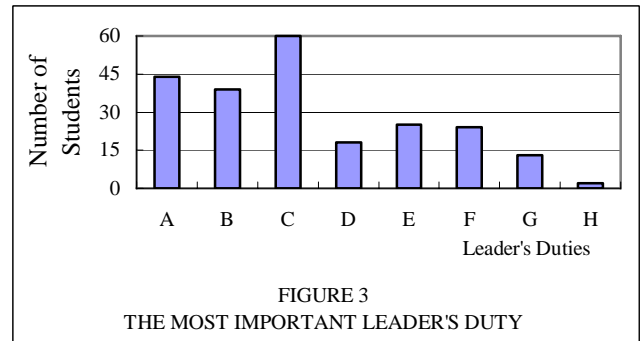


FIGURE 3
THE MOST IMPORTANT LEADER'S DUTY

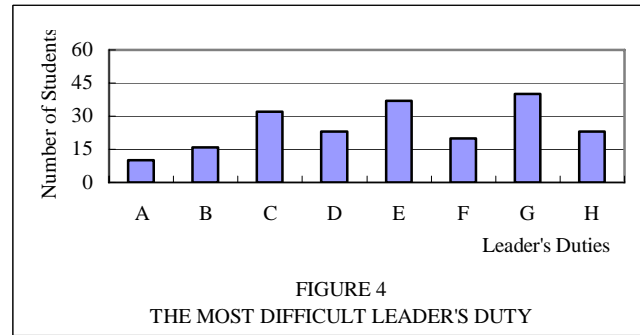


FIGURE 4
THE MOST DIFFICULT LEADER'S DUTY

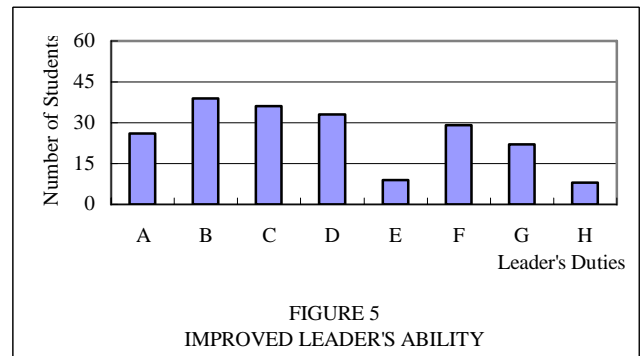


FIGURE 5
IMPROVED LEADER'S ABILITY

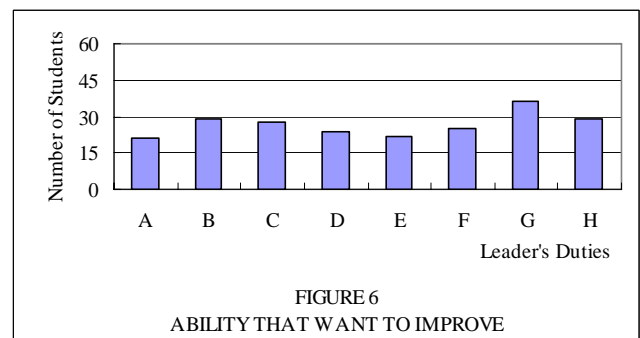
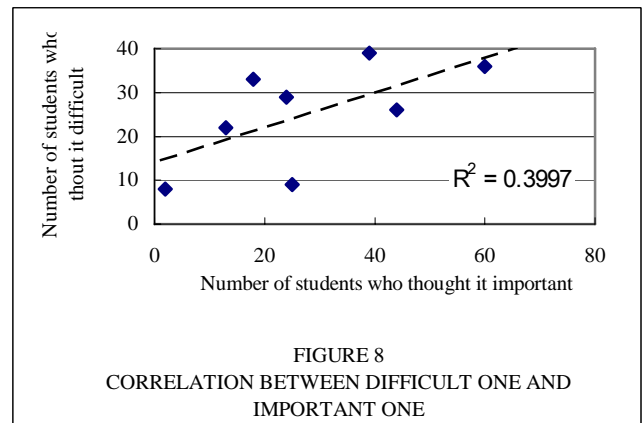
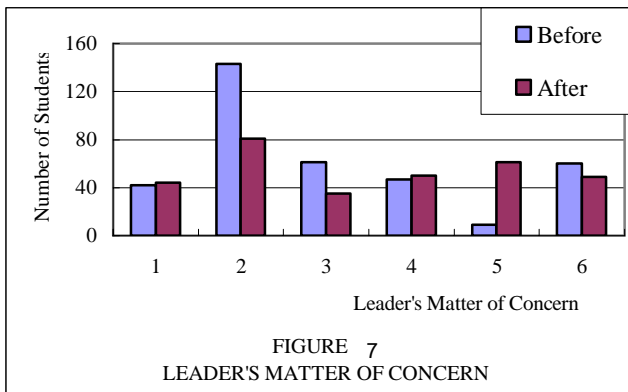


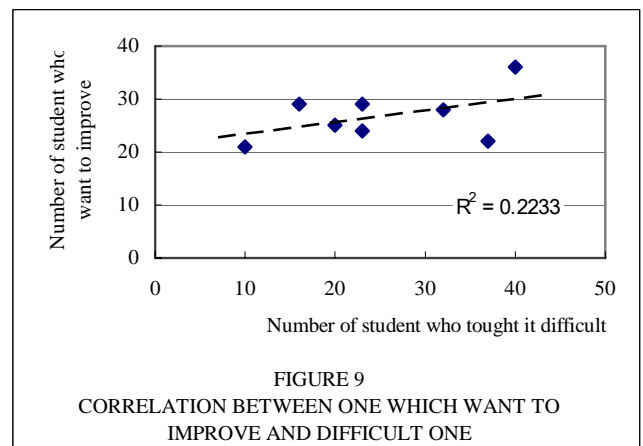
FIGURE 6
ABILITY THAT WANT TO IMPROVE

in the leader report was totaled to know a student's matter of concern as a leader. That result is shown in the figure 7. The horizontal axis of the figure 7 is the item shown in the table 3. It found that before taking charge of the leader, the matter of concern of the student is good at the act which the teacher put emphasis on such as sharing of the work, showing the direction to the member and putting member's opinion together. On the other hand, a matter of concern of the student after took charge of leader spreads out on the leader's whole of the acts. But, student's matter of concern is low in the action that member's evaluation and communication which effect can be hard to see. As the figure 7 is the result of the freshmen, these results seems to be suitable.



THE CORRELATION ANALYSIS OF THE RESULT OF THE QUESTIONNAIRE INVESTIGATION

The correlation between the results of the questionnaire about the duty of the leader mentioned above was examined. Figure 8 show the number of students who think that that was difficult to lean against to the number of students who think that it is important. It is understood that it is in the good correlation between these. The figure 9 shows the number of students who want to improve it against to the number of students who think that it is difficult to learn. The correlation between these is poor. However, the will of the student who tries to the difficult matter seems to appear in the figure 9 a little.



SUMMARY

The effect of the education on the improvement of the leadership was examined in the class which aims to improve student's leadership ability. The contents of the leader report and the result of the questionnaire investigation done at the end of a term were analyzed. And it found out the following as that result. *The student before sharing a leader attaches importance the matter that a teacher put emphasis. *However, student's matter of concern spreads out in the whole of the leader duties after took charge of the leader. *The student thinks that the execution ability of the easy duties improved. *The students think that the execution ability which they thought important improved. *The student's the matter of concern is still weak for the work which result is hard to see. Our class may be thought to be effective on the improvement in the leadership ability from the above result.

REFERENCE

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