The 9th Career Development Workshop for Young Students and Professionals Hiroyuki Kurata IEEE Tokyo University of Science Student Branch Chair

1. Introduction

The 9th Career Development Workshop for Young Students and Professionals was held at Chuo University's Korakuen campus on Saturday, June 22, 2013. This workshop was planed by IEEE Tokyo GOLD(Graduate Of Last Decade) Affinity Group and IEEE Japan Council WIE(Women in Engineering) Affinity Group and co-sponsored by six student branches as follows.

-Keio University Student Branch -Chuo University Student Branch -Tokyo Denki University Student Branch -Tokyo University of Agriculture and Technology Student Branch -Tokyo University of Science Student Branch -Meiji University Student Branch

2. Abstract

2.1 Object

This workshop was held for the university undergraduate student, master's course, the doctoral student, and the young professionals of whom is expected to play a big role in the society in the future. The object is to have participants to change their self-consciousness and think about their future plan through the group discussion.

2.2 Content

We invited 6 facilitators to lead discussions from research institutions and academic institutions. In six groups (A-F), including each facilitator we discussed a specific theme shown in the list below. The themes were settled based on the facilitators' ideas. Supporting student staffs also joined each group to encourage the discussion and register it. At the end of the program, each group presented the content of the discussion and conclusion. Also, we invited an internship student to this workshop and had her speak about her experience for the first time in our workshop.

2.3 Program

13:00-13:30 Reception
13:30-13:35 Opening greeting

Prof.Hashimoto from Chuo University

13:35-14:10 Introduction of facilitators
14:10-14:15 Break
14:15-15:45 Discussion in each group
15:45-15:55 Summarizing the discussion
15:55-16:00 Break
16:00-16:50 Presentation
16:50-17:00 Closing a Greeting

Prof.Takeuchi from IEEE GOLD Adviser]

17:30-19:30 Banquet

Group	Facilitators	Themes
А	Daisuke Ishii[Hitachi]	What is the difference between research at university and research at work?
В	Takeshi Ohbuchi[National Defence Academy]	As for obtaining Ph.D and getting jobs.
С	Ryota Kimura[Sony]	What the engineers should be in the future?
D	Yosuke Nagase[Sony]	What are the required skills for the engineers?
Е	Kozo Noaki[NTT Docomo]	How can we make GOOD products and services?
F	Shunsuke Yamazaki[Shlumberger]	What are qualities of human resources required for the working place?

3. Workshop

3.1 Attendees

The number of participants in the workshop including staffs was 54.

- Students 41 (28 IEEE members)
- others 7 (7 IEEE members)
- facilitators 6

And the photos in the workshop are attached in later page.

3.2 Summary

Group A

Group A discussed the opinion of "What is the difference between research at university and research at work?" by using brainstorming. We divided the opinions into six categories for instance, the spiritual aspect, networks, the field, time, money, and the commodity making.

As a result, we thought the large difference by the research at university and the research at working place are "The salary was able to be gotten and motivation can be maintained", "The scale of research", "Time cannot be managed for myself", and "Considering the consumer's needs", etc. to exist. However, A group thought about the difference etc. among the research, how to work, the student, and the member of society of the enterprise without putting out a concrete conclusion even as for the time very limit.

Mr. Ishii advised us that this is because of having asked for opinion of wanting you to make the best choice of when you select jobs this time as for no importance and idea of conclusion.

Therefore, for A group, this discussion turned out to be the tips for thinking about "what the work going to be for us" and we should find out in the future.

[Group A representative: Azumi Kano (Chuo University)]

Group B

We discussed "As for obtaining Ph.D and getting jobs." by seven people in total including Mr. Ofuchi, the facilitator in the theme, in group B.

The discussion began from organizing the images which are complete degrees such as bachelor, master, and doctoral. The opinion "The idea that did not exist in the society up to now was able to be invented" and "It has the field (so-called "Professional skills") in which only I was skillful" was expressed for faculty for "The cycle from the problem discovery to the solution was voluntarily advanced scheduling" and the doctor's course for "Limbered up as a researcher", "It is possible to work by being interested about the given problem", and the master.

Afterwards, the discussion of finding jobs from the doctor's course was started. The opinion that there was an image like "It's busier than the master course" and "Finding jobs of the master seems to be easier" from the student participant about the doctor's finding employment was expressed. It turned out 87%, those who completed the doctor's course.

Those who completed master's course, 75% (2012 fiscal year) according to the material of the Ministry of Education, Culture, Sports, Science and Technology that Mr.Ofuchi had the rate of employment in the engineering field, and agreed with the these kid of thoughts. The selection besides requiring the doctor's degree in one side from the participant where the laboratory was working according to the aspired position and the master might be done, and, in a sense, I got the opinion "The gate of finding employment opens on a road different from the master".

It was able to be concluded, "As for finding employment, the person who had felt the pleasure of the research not bad between the faculty and the master should get the doctoral degree if there was social demand in "Sharpened part" obtained by the doctor's course" finally in our group based on above.

[Group B representative: Takehiro Sato (Keio University)]

Group C

The theme "What the engineers should be in the future?" was discussed by eight people in total in group C together with Mr. Kimura as the facilitator. First of all, we difined what the engineer is because the word "Engineer" has a lot of meanings and it's obscure. Ahter the discussion, we defined engineer as a person who achieved the thing that the world requested, a person who had the expertise, and also a person who had the idea that invented the commodities.". Then, we discussed what kind of person an attractive engineer is and we conclude that a person who has a great communication skill and a passion to work. Communications skills mean to have the reception power which indicates embrace other's opinions and the sending power which indicates give the others own opinions. Thus, it became a conclusion that only the person who had flexibility, the logical thinking, technology, and the bargaining power to which the opinion was taken without prejudices was the way it should be as the engineer in the future. Moreover, talent who had zeal like the person who was able to have the will of adamant and the person, etc. who were able to improve himself/herself by keeping sucking in knowledge was also attractive, and the conclusion that these were engineer's the way it should be.

[Group C representative: Yutaro Ishigaki (Tokyo University of Agriculture and Technology)]

Group D

Group D discussed the theme of "What are the required skills for the engineers?".

Mr. Nagase, the facilitator in group D, regarded as a chairman and discussed the theme by nine people. First of all, we gave our opinions about "What are the required skills for the engineers?" and shared with all participants.

Afterwards, the situation and the worry at the manufacturing place were discussed based on the real experience of Mr. Nagase. Next, because the opinion had come out from various viewpoints, we had to focus on two of viewpoints which were technology and humanity. After all, we concluded that the important things are motivation, communications, and the customer aspect. Finally, motivation, communications, and the customer aspect are necessary to create wonderful commodities which are enable to change the human life styles and beyond our imagination. In addition, we have to obtain the global prospective, catch up new technologies, and make ourselves glow.

[Group D representative: Keisuke Shiba (Tokyo Electrical Engineering College)]

Group E

We, as E group, discussed "How can we make GOOD products and services?" by eight people in total including Mr.Noaki from NTT docomo as a facilitator. At first, he introduced one example which is a series of processes from commodity planning to the development scheme and decided what we should discuss. As the flow of the discussion, after we think about "What are good service and the commodity?" individually, and shared with all participants. Three common key words were appeared through the discussion. Those are "Demand in respect easiness to use and plainly", "Acceptability on the price and the charge side", and "Innovation that overturned common sense". Afterwards, We talked about "What are the necessary thing to develop the commodity?". As a result, we concluded that there are two important things which are not only marketing and also developing a new technology as well. We managed to convey this discussion efficiently to be developed by logically sequentially discussing the theme though it was hard to summarize opinions because they were too many. Hereafter, this workshop was great experience for the

student who would start job hunting and also for the student who are going to be a worker next year.

[Group E representative:Kento Kawamura (Meiji University)]

Group F

We discussed "What is the skills required as a worker?" by six people including Mr.Yamazaki in group F. At the beginning of the discussion, he proposed that we should discuss with measurable expression. For example, how many TOEIC score is required for English language skill. He said that showing the standard is able to measure things. First of all, we thought this theme was obscure to make a discussion, so we changed the theme to "What is the ideal student for getting jobs?" Afterwards, ten minutes were given to each participant, and talent's nature "What kind of person you want to work with?" or "What kind of person seem to promote at work?" was enumerated. There were two "Nature that had to have it before the person joined a company" separately for the roughness and "Nature necessary after it had joined a company", and the former was divided into four categories further. First one is "Communications skills" Understanding what companions other than being able the talk, and me were always doing rose without making the conversation become interrupted by the person of the first meeting and about ten minutes as a concrete example. The second was "Mental toughness", and the example included "A skill to find the enjoyment even if you don't want to" and "Honesty that reflected on the failure", etc. "Management ability of time" was third one,."The ability that you can be strict for time." etc. schedule was able to be managed was enumerated concretely. "Inside of the head" included one "It was possible to talk about one hour for what I assumed to be a specialty" and "Capacity" to think logically", etc. at the end. The one chiefly enumerated from Mr./Ms. Yamazaki was enumerated for latter "Nature necessary after it joined a company" and the nature was enumerated a lot of spiritual aspects "Person with a little overreliance" and "Not extra but exceed (You may not do the assignment to a thing not related though it digested ...more than the expectation..)" chiefly. The one that each opinion is brought together judged that it was impossible to squeeze some conclusions to one more than this theme respectively, brought together, wrote the person type of 'Job-hunting life of the ideal' in the thick paper, and tag was stuck on the pertinent section.

[Group F representative: Hiroyuki Kurata (Tokyo University of Science)]

4. Questionnaire

After the workshop had ended, the questionnaire survey was done to the participants.

4.1 Answer

Respondents of this questionnaire are 35 people in total. The breakdown became 34 students and 1 worker.

The following are respondent to a questionnaire's breakdowns.

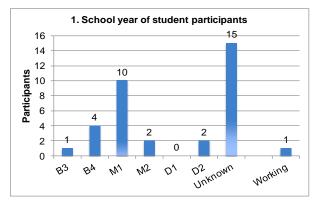


Figure 4.1 School year of participants

4.2 Evaluations from attendees

Three items of the length of the content of this workshop, utility, and time were evaluated respectively by five stages, and the reason was answered by the free description form. Choices of five stage evaluation are as follows.

[1] Content: very good, good, normal, bad, very bad

[2] Usefulness: very useful, useful, average, useless, very useless

[3] Time: very short, short, appropriate, long, very long

The total result in each question is shown in figure (a) to (c).

The answers for each questions is shown below. We could have favorable reviews from more than 90 % of people as well as the 8th workshop. The specific reasons for the answer from students were:

- It was a great opportunity to learn the way of discussion. (M1)

- As I could know the various things, I would like to use this experience to advantage for job-hunting. (M1)

- I'm glad to find some kind of processes to develop services. (M2)

- I was stimulated by the students who have different thoughts from mine.

- Ideas which I didn't come up alone came up through the discussion.

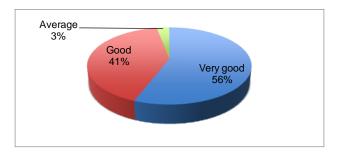
About (3) Length, "enough" was increase very much. The reasons for "short" and "very short" were:

- It was better that we had more time for discussion. (M1)

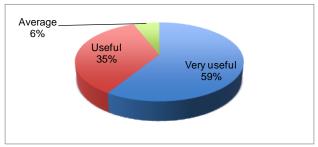
- It's too short to summarize for 10 minutes, and even add 5 minutes more. (M1)

There were many requests for the time for summarize in a discussion.

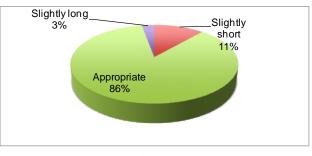
It is thought that it is necessary to examine the appropriate length of time about the time of the discussion and the time of the summary to make it to a good workshop from the future.











(c) Time length

4.3 Project expected for the future

A field interesting of what project expectation of you, and the respondent was answered by the selection type of being able to select each plurals if participating in the project that the academic society would sponsor in the future. Choices are as follows.

(1) Projects that will be expected in the future

-Lectures

-Informal exchange between students

-Practical workshop

-Others

(2) Interesting fields

Electricity, Electron, Information, System, Communication, Material, Physical properties, Physics, Chemistry, Mathematics, Education, Medicine, Management, Economy, Politics, Society, Philosophy, Psychology, art and others

The total result in each question is shown below.

- (1) There were a lot of voices to expect a lecture meeting and an informal exchange as a project that would be expected in the future. The opinion of corporate visit went up as "Other projects".
- (2) A deeply related field to IEEE for instance "Electricity", "Electron", "Information", "System", and "Communication" occupied the high rank as an interesting field.

man engineer by offering the place of a high-quality discussion in the future.

The 10th Career Development Workshop will be holding in about November, 2013.

6. Address of thanks

Sincerely thank you to Mr. Ishii, Mr. Obuchi, Mr. Kimura, Mr. Nagase and Mr.Yamazaki who spares the valuable time and attended as a facilitator in this workshop.

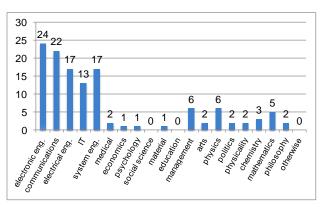


Figure 4.3.1 Interesting fields

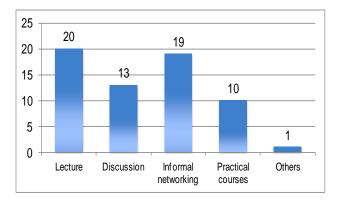


Figure 4.3.2 Projects that will be expected in the future

5. Summary

In the 9th career development workshop, we are discussed by six groups in total, and were able to receive high acclaim from the participant. It will be thought that it wants you to use it as a place in which it thinks about more career construction of the student and the young