

Assessing the effectiveness of co-op education in Japan

-A panel data analysis at KSU-

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Abstract

The recently observed high university enrolment rate of over 50% in Japan questions the higher education's orthodox role of nurturing the nation's future elite leaders. Instead, it seems to serve the society more effectively through raising the general standard of nation's work force. Consequently, as elsewhere in the world, generic or soft skills have become the key words in Japan, and the concept of "cooperative education (or better known as 'career education' in Japan)" is earning growing popularity among those seeking this new role of higher education

The present paper (1) looks at how students see career education, (2) evaluates it and (3) discusses how we can improve it, by analyzing students' survey data. Over 1300 students answered the two sets of surveys at Kyoto Sangyo University --- at the beginning of the undergraduate program and in the 4th and final year. We traced the students during his/her university career, to see what expectation they had at the entry, how they spent their undergraduate years and what they earned at the exit for the job placement. We also set questionnaire to a limited number of alumni of our intensive career education programs for their feedback about its effectiveness on their career.

Our method and approach can easily be applied in other countries to strengthen their cooperative education programs. Interestingly, our finding seems to suggest that an emphasis on academic study is the most efficient way to develop generic skills and thus the most effective co-op education.

Introduction

Co-op Education (better known as Career Education in Japan and call it henceforth) was first

initiated in Japanese higher education approximately 10 years ago with the Ministry of Education's introduction of the concept in the Report of Central Educational Council titled "On the better relation between primary and secondary education and higher education" in 1999. It has spread rapidly ever since but information on the current situation is rather limited with insufficient accumulation of empirical research as well as lack of development in methods for measuring and evaluating educational effects.

Behind this gap was the unexpectedly rapid change of 1990's Japan in the socioeconomic environment for the young work force in two ways. First, companies began to find that the young work force was not equipped with sufficient basic occupational or generic skills, which is the issue for the career education programs to tackle. Second, a growing number of students were finding it difficult to motivate themselves, which is the issue for the first year experience programs to tackle.. Because the two changes came together the research is falling behind the development.

For the development of career education, empirical research with appropriate analytical methods is essential. In particular, it would help our young work force hold a positive attitude toward work and acquire generic skills. In line with this, the objective of our research is to provide resources for making the current career education more effective.

Methodology

The analytical framework follows three steps. The first step is to clarify what influence the students' traits such as awareness and attitude at the time of entering university can have on their career choices and job hunting activities in particular. The second step is to identify, if the influence exists, what kind of awareness and attitudes they are? And the third step is to suggest the type of education universities should provide.

Data was taken from two panel data surveys targeted at students of Kyoto Sangyo University. The first survey was held when student's entered university in April, 2002 and the other was held in

October, 2006 when the same students were in the 4th and final year. A longitudinal data set of 1345 was created by corresponding students' names and identity numbers of the two surveys. As it was not possible to clarify the number of survey sheets which were distributed for each survey, exact calculation of percentages of responses was also not possible. However as the survey was fundamentally targeted at all students in those years, taking that number of students as the surveyed population would give the estimated recovery rate of 37%.

Data gathered in this research was a set of multiple variables based on the subjective judgments of students. Typically, the data collected in university education as an attainment measure are objective variables on achievement levels of knowledge and technical skill and not the subjective variables of the student's awareness and attitude. A reason for this was the question of whether the personal awareness and attitude of students can be measured objectively among the different individuals. Furthermore, it is anticipated that students' awareness and attitude may be more influenced by extracurricular activities such as club and circles, and part-time jobs than regular classes. And the greater the influence of extracurricular activities becomes, the more difficult it is for the university to intervene structurally and systematically and the nearer the university reaches to its limits of contribution to improve university education.

Even if knowledge and technical skills are assigned as educational targets, there is no problem if the relationship between university education and working career is strong. However, at least in Japan at the present, there seems to be no smooth transition from the knowledge and technical skills attained through university education to those required at work. For this reason, using traits of awareness and attitude as an attainment measure for university education is extremely important.

Giving attention to traits of awareness and attitude is also important as a university strategy. As long as the emphasis is on fundamental academic ability such as knowledge and technical skills, students' successful development at university would be mainly dependent on their academic readiness before university admission, which is unrelated to awareness and attitude. For this reason,

should a relationship between particular attitude traits and study or job seeking attainments become evident, universities can consider not only academic ability, but also these traits as selection criteria at the time of admission. There is evidence that, although slow, such movement is already taking place. Especially in universities which are unable to select new students on academic ability, students are admitted based on these traits. Developing these traits furthermore could improve the employment prospect of the students. In this sense, it is worthwhile to consider developing of attitude traits as one of the important attainment measure of university education.

Results and Discussion

The students were asked about their awareness and attitude twice --- in the first year when they entered university and in the fourth and final year of university career. And the following are the five main results.

First, students were asked about their main interests in university life. In the first year they were asked about their interests and in the fourth year they had to answer whether they were able to maintain the interests. The interest list included academic study, obtaining qualifications, club activities, building friendships and part time job for extra income. The responses were categorized into four groups: (1) those maintained the high motivation (2) those raised motivation (3) those dropped motivation (4) those with low motivation throughout. It was found that; (a) for academic study, 60% of the students succeeded in maintaining the high motivation, (b) for obtaining qualification, 60% of them dropped motivation, and (c) for friendships, 80% of them managed to maintain the interest over the four years. However, with a rising university enrolment rate, we might see less of those encouraging figures and it would be the university's task to provide them the student- friendly environment.

Second, the students were asked about their interest in academic programs. The question asked whether they entered the university with specific academic purpose such as there are lectures of

interest, good language program, good IT program, small class teaching, well known academic staffs, extended qualification program. 69% of the respondents came with one of the specific reasons above, while 31% could not mention any. It is encouraging to know that of the former, 65.3% managed to keep the motivation high till the end. Even more so is the result that the 50.1% of the latter decided to maintain the academic interest despite starting the university program without strong motivation. The result suggests that a considerable proportion of the students come with no clear focus but by giving right advice they can find the focus.

Third, the students were asked about their desirable and actual career path. The desirable career paths are categorized into six; (1) private sector with specific industry and occupation, (2) private sector in general, (3) civil service or teaching, (4) graduate school, (5) no plan yet and (6) others.

As for the actual career path, there are seven choices; (a) full time in private sector, (b) fixed contract in private sector, (c) full time in civil service or teaching, (d) part time in civil service or teaching, (e) self-employment, (f) part time job, (g) vocational school (h) graduate school, (i) repeating the year, (j) still looking (k) others. Several interesting observations can be made. First, among those who are still looking for a job (i.e. 201 students), the proportion of those who had specific plans i.e. (1) represented relatively smaller group (10.4%) than those who did not have specific plan i.e. (2) (26.4%) This implies that if you come to university with a focused career path, you are more likely to find one quickly. At the same time, 22.9% of those still looking for a job started off with no plan (i.e. (5)) at the entry. It may be necessary to support those students throughout the undergraduate program.

Fourth, possible factors influencing a successful job offer were sought using a regression analysis. Dependent variable is the actual job offer and is 1 if he/she has none and 0 otherwise, while independent variables are students' characteristics such as sex and faculty and their awareness and attitude as has been used so far at the entry. There are two independent variables with positive significance --- academic study and desirable career path. The implication is that you are more

likely to receive a job offer if you are focused in academic study and well as future career.

Conclusions

To conclude the paper, there are three points to be learned from our research.

First, it is the significance of “study at university.” The survey question did not directly ask students what kind of knowledge and technical skills they specifically attained through study at university. However, the survey did ask questions about “willingness to make effort to achieve something in university life” at the entry, and whether “they did actually succeed it with enthusiasm” in the 4th year, And the result shows that those who were satisfied with their self-evaluation and thus scored high in these questions about themselves also were doing well in job seeking, which start as early as in the 4th year even before graduation in Japan. It is becoming a main stream in career education to start programs in the 1st year and continue through into 3rd and 4th years when the students start job search activities. It is understood that the students’ quality that career education attempts to nurture such as focused view on career and ability to adjust to social environment are going to influence their future employment prospect in the early part of university career through stimulating their study at university. In other words, through career education, bringing some professional relevance to ‘academic study’ motivate the students.

The second point is a word of caution about the way we analyze the educational attainment of career education. The way questions are set can simply change the way students answer. As with our surveys, if the method is dependent on the students’ subjective judgment, asking if they have reached their own target is not the same thing as asking whether they have reached the university’s target. Furthermore, it is important to note that timing of survey could affect the response.

The third point is when considering how to set up a measure of educational attainment, it is necessary to be well informed about the awareness and attitude of students at the entry. According to the I-E-O (Input-Environment-Output) model developed by Alexander Astin, Founding Director

of the Higher Education Research Institute at UCLA, attainments (Output) are not simply results of the Environment, but by analyzing how much the prior background (Input) affected them, it is possible to measure the exact effects from the environmental factors. (Astin (2002)) Often, when measuring educational attainments, there is a focus on their relationship to the environmental factors only. However, it is evident that not only environmental factors but also students' own nature and background can have an influence. Therefore it is crucial to understand the students' traits of awareness and attitude at the university entry.

We would like to end the paper by adding some comments on an extra follow-up survey carried out after the previously survey students had graduated. The graduates indicated that experiences which were useful for them in selecting their career came not only from programs in the university curriculum, but also through internships and varied experiences within their student lives. The abilities nurtured through these activities were often consistent with those valued by companies. It is thought that even better educational attainments can be made by clearer understanding of what abilities are necessary for the vocational population and developing an education program which relates with this.

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