

Expectations of Higher Vocational Students and Enterprise Instructors on Cooperation Supported by Information Technology in the Work-Post Practice

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Abstract: A close and high-quality cooperation is the basic condition of an effective training in vocational education. This research took the quantitative method to analyze the expectation of students and enterprise instructors in the cooperative teaching supported by internet platforms. Results suggest most students and enterprise instructor soundly understand the importance of a closer cooperation and the assessment from both parties. There are some differences between students and enterprise instructors on expectations of the same aspects. Though enterprise tutors understand the importance of a close cooperation but their willingness to cooperate with college teachers with the support of information technology is quite limited. And students don't expect much cooperation which will cause closer monitor on student performance on the work posts.

1. Introduction

The Work-Post practice is a course usually taken by higher vocational students in their senior year in college. Basically, it is a half-year training on the work post in an enterprise but instructed by both a college teacher and an enterprise teacher. With the highly development of information technology, some administrative platforms are used in this training to facilitate training and administration of this course. According to Darche and Nayar ^[1] the training on post benefits students' in motivating the career interests, developing career or technical skills as a means to learning and in enhancing general workplace competencies, such as their communication skills, teamwork consciousness and project planning ability.

Ismail ^[2] concluded that in all kinds of learning model require that the instruction needs a good involvement of students, educational institutions and the industrial employers, good engagement of three parties will support students excel in theories, academics and skills in the technical field. By using Fuzzy Delphi Analysis Marwan and Ali ^[3] identified 12 items experts agreed on personal management, learning and work exploration as well as on career building. Improving effective communication skills, building self confidence, gaining better adaption ability to all the changes and doing better in time management are the top 4 personal management abilities. Liao ^[4] proposed that intelligent post fitting technology should be further developed and encourage more students to use a platform supported by internet and big data technology to promote intelligent post fitting.

Many scholars focus on the cooperation of college and enterprise to promote vocational and technical education but rare attention was put on the expectation from students and enterprise instructors on the cooperation.

2. Research Objective

This research is aim to study how students and enterprise understand the cooperation between enterprise instructor and college instruction on the cooperative instruction supported by modern information technology on the post practice, and to compare the differences between students and enterprise instructors on some cooperation area.

3. Method

According to the main available functions of some teaching platforms and some social media like QQ and Wechat, and the present practice in the student instruction, a very short questionnaire was sent to students and the enterprise instructors online right after student finished their practice in enterprises. When the questionnaire was closed, the researcher collected valid data of 55 students and 8 enterprise instructors. SPSS 24.0 was used to analyse the data obtained from respondents. Descriptive analysis was used to compare the difference between students and the enterprise instructors in their expectation on the cooperative instruction.

4. Finding

4.1 The expectation difference between students and enterprise instructors in cooperative instruction

In order to study the expectation of students and enterprise instructors on areas of cooperation and the willingness of cooperate with college teachers, a short questionnaire was sent to students and enterprise instructors. Apart from some demographic questions, 5 core questions were raised. The first one is to get students and instructors opinion on the necessity of cooperative instruction on this course. The second is to get understanding of students and instructors on a close cooperation to the quality improvement. The third one is on their understanding of the assessment made by college teachers and enterprise instructors to the quality assurance of the practice. The fourth question is to survey enterprise instructors' willingness on the cooperation with college teachers. These four questions are designed with five-point Likert Scale. The fifth question is on expected areas of cooperations from students and enterprise instructors. Seven areas were provided for choosing and the last available item is semi-opened to collect other possible areas that students and enterprise instructors expect.

4.2 Students' understanding on cooperative instruction

A good cooperation of enterprise and college is the assurance of quality of vocational training as well as the Work-Post Practice. The data showed almost half students responded agree to have a closer cooperation from the college teacher and the enterprise instructor, and 23.6% of students responded strongly agree to a closer coopation. Only a small part (27%) of students stood at a neutral position and a 2% disagree a closer cooperation. Students expectation on the assessment both from the college teacher and the enterprsie instructor is quite similar, very few students disagree on it and no students express strongly disagree. The comparing chart can be seen from Figure1.

4.3 Enterprise instructors' understanding on coopertive instruction

The results showed 75% of enterprise instructor agreed (50%) or strongly agreed (25%) that it is necessary to have a closer cooperation between collge teachers and enterprise instructor on the Work-Post Practice. There were 25% enterprise instructors stand on the neutral position. No respondents

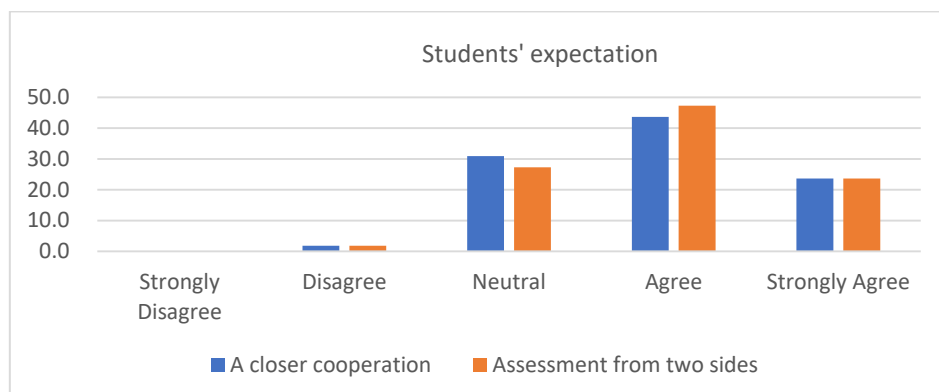


Figure 1 Students' expectation on a closer cooperation and the willingness to receive assesment

agree that the closer cooperation is unnecessary. The result of enterprise instructors' understanding on the cooperation to the quality is very similar. Most respondents agree (50%) or strongly agree (25%) that a closer cooperation would improve the quality of students practice. Nobody expressed disagree on the cooperation to the quality of practice. All enterprise instructors responded that the assessment both from college teacher and the enterprise instructors benefit the quality of practice. The percentage of people expressed agree on the assessment from both sides is much higher than that of other three items. But on their willingness to cooperate with college teachers through some platforms supported by information technology, there are many respondents reply strongly disagree and disagree. Twenty-five percent instructors stand on the neutral position and 37.5% express willing and over 10% expressed they are very willing to cooperate with college teachers on students' practice. The comparison of the four items can be seen in Figure 2.

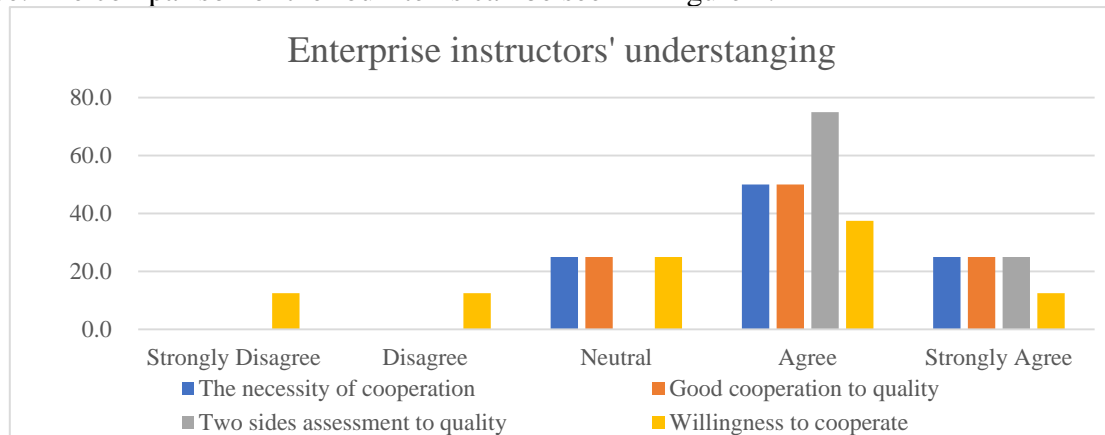


Figure 2 Enterprise instructors' understanding on the cooperation

4.4 Differences in expectation

In order to study the differences of students and enterprise instructors on the cooperative instruction, seven possible areas were listed and a semiopen choice was designed according to the literature and the college practice in teaching based on the administration platform. The seven areas include cooperatively set up the curriculum standards for this course, make up the instruction plan for students, prepare practice documents like the contract signed by students enterprise and college, supervise the process of students practice and give directions, work cooperatively to keep safety of students in the work environment, daily management in the enterprise and when the practice completes cooperatively to make the assessments to students. No instructors listed other possible cooperative areas to this question.

Table 1 The difference of students and enterprise instructors in expectation

	Student		Enterprise Instructor	
	Positive (%)	Negative (%)	Positive (%)	Negative (%)
Set up curriculum standard	43.6	56.4	37.5	62.5
Make instruction plan	43.6	56.4	37.5	62.5
Prepare documents	58.2	41.8	25.0	75.0
Supervise the process of practice and directions	58.2	41.8	25.0	75.0
Assure students safety	45.5	54.5	50.0	50.0
Daily administration	25.5	74.5	62.5	37.5
Student practice assessment	32.7	63.6	37.5	62.5

The descriptive results show that students have a high demand for a closer cooperation between schools and enterprises in the preparation of contract and other internship materials and for the follow-up guidance during the practice process. At the same time, students have the hope that the school will cooperate with enterprises in the formulation of curriculum standards and teaching plans, but do not expect the college to participate in the daily management and make assessment to the internship. For enterprise instructors, they do not want the college to participate in the establishment

of curriculum standards and the formulation of teaching plans, nor do they want to cooperate with schools in providing necessary practice materials and don't expect college teachers to participate the practice processes. Up to half students want to cooperate on student safety management, but half enterprise instructors don't expect college teachers to intervene student safety in the enterprise. Both high percentage of students and enterprise instructors don't hope to give assessments to students. The detailed data can be seen in Table 1.

5. Discussion

5.1 Students and enterprise instructors' understanding on college and enterprise cooperation

The data analysis results showed that both students and enterprise instructors have a good understanding on the cooperative teaching supported by modern information technology. Students as the education and training receiver believe the quality of training will be improved by developing a closer cooperation and both party assessment. Enterprise instructor as the provider in training and further possible employer after students' graduation deeply understand the important role of college-enterprise cooperation. However, what contradicted to enterprise instructors' understanding is their willingness to cooperate with the college enterprise. The number of enterprise instructor who showed their willingness is much lower than their understanding in cooperation. And over 20% of them show they are unwilling or very unwilling to cooperate with the college. This research quantitatively approved the willingness of enterprise to involve deeply in vocational education is far from enough, which has been descriptively described by many scholars^{[5][6][7]}.

5.2 The expectation from students and enterprise instructor cooperation areas through information technology

The most interesting finding in this research is the contradiction in the understanding of cooperation and expectation on cooperative areas, both from students and enterprise instructors. Although most students realized the importance of high quality college-enterprise cooperation, they don't expect much from the cooperation. And in several areas students' expectation is contradictory to that of enterprise instructors.

From the data we can get the following conclusions. Firstly, students don't want much supervision and interference from college when they are on the enterprise post. They treat the Work-Post Practice as other normal class had in college, expecting high quality class but don't want too much engagement and supervision from college teacher. Secondly, enterprise instructors don't want to do much real cooperative work such as setting up curriculum standard and discussing the work content and plan with college teachers. Thirdly, enterprise instructors don't expect college teachers involve much in the process of student practice and giving directions and mentoring. What they only expect to cooperate is the daily administration of students like recording the attendance of students. Lastly, enterprise instructors regard document keeping like the contract signed by three parties as tedious and unnecessary work. Just as Liao stated that at present the enterprises in China are lack of enthusiasm and motivation to cooperate with vocational colleges, they also can't realize cultivating students to meet the labour requirement is one of their social responsibilities. There are a lot of work to do to motivate enterprises to engage in high quality cooperation with vocational colleges.

However, the sample for analysis in this research is quite limited, especially for enterprise instructors, which decided that the results of this research can't be generalized to a big population. Once more samples achieved, some more meaningful and interesting results may be found.

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