Applying Information Technology with the Ideology of “Internet + Employment” to the Work-Post Practice for Vocational Students

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Abstract: Modern Information technology plays a positive role in the effectiveness of instruction. This paper taking the “Internet+Employment” platform, an internet platform supported by information technology, as a case to study functions that could be used in the Work-Post Practice of vocational college students. Several areas, such document keeping, data analyzing and post fitting, are identified to support the cooperation of the instructors and students and the management of students practice. The researcher also find that the function of post fitting can be further developed to serve better in the practice.

1. Introduction

Work-Post Practice is a very important course for Chinese tertiary vocational college students, which usually be held in the senior year of students’ college life, after the graduation project and before their graduation. Many scholars use “internship” to refer to the same training students receive in enterprises before their graduation. In this course, students will go to enterprises mostly contacted by themselves through attending interviews or some recommended by the college. In the working post, students work full time and receive salary and other subsidies during the practice period.

As a form of vocational students to get the professional skills and career abilities required on the work post, both vocational colleges and educational departments pay great attention on the quality of this course. The National Plan for the Implementation of Vocational Education Reform issued by Chinese State Council stated that the Work-Post Practice usually last for 6 months and stakeholders in vocational education should try their best to promote the integration of enterprises and vocational education. It also stated that the time period of. In the instruction of this course, students will mainly be instructed by an experienced professional worker in the enterprise. An instructor from the college will work as an assistant instructor during the Practice, to facilitate students to submit some paper works required by the college and give advices when students have problems on their work post.

There is similar practice in international vocational and technical education. Atkinson\textsuperscript{[1]} stated that the Work-based learning is the center part of Australian tertiary vocational education and training system in which students receive their vocational education through institutional work oriented training as well as on the job training, which mostly was practiced through apprenticeship and traineeship system. Darche\textsuperscript{[2]} reported that the Work-based learning works as a facility to serve the 11\textsuperscript{th} and 12\textsuperscript{th} graders in California, by which enable students apply their knowledge gained from classroom to work and helps them to lay a foundation for successes in college, career and life. Work based learning can include internships, apprenticeships, workplace simulations, and other forms of practice in business or nonprofit area.
2. Literature Review

Zhou and Jiang[3] descriptively observed many problems exist in students’ Work-post Practice. Firstly, there is no policy regulation to support the assurance the quality of college and enterprise cooperation. Because the cooperation is based on cultivating students, from which to satisfy the requirements of both parties. Colleges want more enterprises to involve the cooperation and provide posts that fit students major and improve the quality of post. However, enterprises are unwilling to invest more time on the process of education and to assign experienced worker to instruct students because this will increase the cost of production. Without a policy insurance, the cooperation is very likely to confined to form, which means no much real cooperation between colleges and enterprises. Secondly, students need some time to adjust their identity as both students and workers. When they work on post, they are supposed to work under the administration of colleges as well as enterprises. Therefore, it is very hard for students to have a definite identity in enterprises. Because of this double identity, they may refuse to accept the management from colleges and from the enterprises. Poor management of this course will consequently affect the quality of Practice. In the long run of corporation, the poor cooperation will finally lead enterprises refuse to accept students to receive work-Post Practice. Thirdly, the instruction from the college is not enough. Because the work-post practice take place in enterprises, colleges can’t assign each or several students a professional instructor that only works on students’ practice. Students instruction is an extra work for college staff that quite likely to be done after other college teaching tasks. Some colleges instructor may visit the enterprise to get to know students’ practice but can’t provide effective instruction on students work post. In order to improve the quality of the Work-post Practice, vocational colleges should intensify their cooperation on the following aspects.

Ming[4] proposed that before the internship, the college should make teaching decisions according to the school’s own situation, arrange professional teachers according to a certain proportion. Colleges should not only provide professional training for students, but also to give students professional ethics knowledge and security knowledge to prepare for the coming work. They also argued that the qualification of the entrepreneur instructor and assessment to their teaching is the vital assurance to the quality of the Practice. Many scholars proposed using internet and big data technology to support the administration and assessment in the Work-Post Practice to improve the efficacy of the training.

Liu[5] made an empirical research on 28 vocational students majoring preschool education, the researcher found that the Work-Post Practice administration system supported by the mobile technology is helpful to develop deeper Practice reflection of students and is also benefit the communication of students with their instructors. It also enable students to communicate with their classmates in college thus promote students-students discussion therefore promote the quality of practice. Hu[6] descriptively introduced using cloudy computing platform in the college-enterprise cooperation in vocational education system. The researcher argued that the educational cloud technology can facilitate college-enterprise cooperation in resources sharing, curriculum renewing, work-post practicings, productive training, faculty training and collaborative innovating etc, which are main activities of vocational colleges. Specifically speaking, firstly, in the training aspect, the cloud technology can support colleges and enterprises to set up some online courses to pursue virtual training to cultivate students’ career ability and professional qualities as well as the faculty further training. Secondly, the cloud and big data technology make the communication of college with thousands of enterprises possible, because through which colleges are able to fit students in a certain Practice post, observe the dynamic situation of the human resources market timely so as to adjust their curriculum. Thirdly, it supports educational administration and scientific decision through data mining & analysis based on the cloud technology and making predictions to trends.

She[7] researched on using two-line parallel operation mechanism, i.e. the enterprise and vocational college are the equal stakeholders to implement administration to students’ internship before graduation. By using this system, students will receive two management entities, instructed by two instructors, two management lines from the college and enterprise, two lines of assessment
and two certificates, of which one is the certificate for the internship experience and the other is the diploma from the college.

The literature review shows that many scholars focus on the research of vocational education on college-enterprise corporation and using information and big data technology to facilitate the administration and assessment of vocational training programs. Using information and big data technology to improve the quality of vocational cooperative education is the trend in higher education and vocational education system. The literature review also reflected that some scholars studied the administration, cooperation and assessment from the college position, but no scholars made the research on the expectation of students and entrepreneur instructors, two main stakeholders in the whole vocation educational system, on the cooperative education in this course.

3. Research Objectives

This research is aimed to identify how information technology developed with the ideology of “Internet+Employment” can be used to serve the Work-Post Practice in enterprise and college cooperation, by taking the Platform of “Internet+Employment”, a very popular platform used in Chinese higher educational institutions, as a case study.

4. Method

As the widely use of information technology in all human activities, various educational platforms have been used in vocational education. The “Internet+Employment” platform is widely used in over half provinces and over 300 higher educational institutions in China. Approximately 400,000 enterprises registered in this platform. It serves the vocational students mainly in employment after graduation and the Work-Post Practice before the graduation. This research will take “Internet+Employment”, as a case study to illustrate how information technology are serving the Work-Post Practice, a comprehensive course needs the engagement of students, parents, colleges and enterprises.

5. Finding

5.1 Post fitting

Before the practice, students can choose the post from enterprise or other institutions by themselves. For those who can’t find a satisfied post, they can practice in an enterprise contacted by the college, usually will be all kinds of institutions with which the college has set up cooperation relationships. By using “Internet+Employment” platform, enterprises can post their job adverts on the platform and will be automatically sent to students according to the major of them. The announcement for campus employment fairs can also be sent to the platform. Students submit their resumes online. But on the function of the post fitting, there are more to be developed, because at present automatic recommendation is only confined to students’ major. At present, it can’t recognize students’ job intention to make smart fit, by which students can be fit smartly to posts adverted on the platform.

5.2 Administration

The platform supports the administration of students’ practice from the very beginning to the end. Both students and instructors can connect this platform to the mobile phone by downloading an app. The college administrator and the relevant government educational department can monitor the data of all students, college teacher’s instruction documents, and other paper works like contracts and practice plans submitted by students. College teachers also administrate students’ practice in enterprises through this system. If students want to leave a post to another one, they will submit documents on the platform. But during the whole process of practice, once the post was fit, enterprises no longer show its instruction record and other involvement on this platform.
5.3 Document Management

The platform can support the college and college instructors to manage students’ documents. Before students’ practice on the post, each of them is required to submit a contract signed by the student, college and enterprise. The student will write a practice plan when the work begins and a work report when it completes. Every workday on the work post, each student will write a short work reflection on this platform, which will make up some percentage of the final assessment. College instructors can read their reflections and give directions. This make the management of paper works more efficient.

5.4 Assessment

The assessment function on this platform is only limited to college instructors. When the practice complete, college instructors can make comments and give assessments to students. While as the training provider, the enterprise instructors’ comments and assessments are given still on printed paper. This is a shortcoming of this platform apply to the Work-Post Practice and it is something that need to be further developed. Assessments from industry associations and enterprise instructors on students’ performance on the post can’t be made through this platform.

5.5 Data Analysis

Questionnaires can be sent through the platform to students, college instructors, post providers to collect data for analysis. Furthermore, some basic descriptive analysis can be automatically made on this platform. This function enables stakeholders to make scientific decisions. What highlighted this platform on data analysis is that data collected on it can be downloaded as an excel document, which enable experts to do further complicated analysis.

6. Discussion

The case study showed that the “Internet+Employment” platform effectively facilitate the administration of vocational students in the Work-Post Practice mainly in documents keeping, practice post fitting or employment in the work environment, and the data collection and analysis. It improved the efficiency of college teachers and promoted students’ involvement and reflection on enterprise work posts. Liu [8] did a research to study students majoring in pre-school education, whose practice take place in a preschool and supported by a system with mobile technology. The main function of this system lies on picture and video sharing and releasing work diaries. The researcher proved the writing of work diaries in the system impacted students’ comments on efficiency of the system. The comment of efficiency is positively related to the number of diaries students written and effectively promoted students work reflection. Huo and Han [9] studied the work post study supported by Wechat, a very popular social media in China. She proved that this app is efficient in the daily administration of students’ attendance in the work post, and supported college teachers’ distance direction, but is very limited in recording keeping.

The platform is very strong in releasing the available post information of enterprises to students, keeping documents and data of students’ practice, collecting and analyzing data about the practice. But there are several aspects can be further developed to serve the practice better. Firstly, the automatic processing of documents to be improved. At present, some documents such as the three-party contracts should be processed by students or college staff, which takes time and cause great inconvenience to students and college staff. After the whole signing process, the students can submit the contract online and keep the document on the platform. If the process can be conduct online, it will improve the efficiency of work and save students time and energy. Secondly, the function of assessment of enterprise and college instructor is not fully used. The practice is trained by enterprise and advised by a college teacher and assessment is also made by both parties. At present, after the post fitting the enterprise can’t participate online which caused the assessment made by enterprise can’t be processed online. The assessment is still made on paper document and
be submit online. Thirdly, the platform is expected to facilitate the administration of students on post. But it has no such function to monitor students attendance on the post.

Several limitations existed in this research. On one hand, this research takes one of the most widely used platform as a case study, the function of this platform can't represent all internet system that are based on modern technology. The findings can’t be generated to other similar systems. On the other hand, the sample of enterprise instructors is quite small, therefore, the main quantitative method used is descriptive analysis. Once big samples are obtained, researchers can do some more complicated analysis and the results can be generated to a bigger population.

7. Conclusion

The case study method was used to research the main functions of a modern information technology supported platform in the Work-Post Practice in vocational education. There are many new systems and smart apps were born in this new era of technology. Each system has its own advantages and shortcomings. The “Internet+Employment”as one of the most widely used platform in vocational students practice and employment, can be further developed by combining advantages of various platform to meet the requirements in keeping document, distance direction, daily administration of students, assessment records, data analysis and fitting the post.

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References


