

A Survey on the Internship Status of Students Majoring in Civil Aviation-Take Sanya Aviation and Tourism College as an Example

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Abstract. The post practice of students in higher vocational colleges has become an important issue concerned by the government, society, schools and practice units. In order to strengthen the management of students' post practice and ensure the effect of students' practice, this paper takes students majoring in civil aviation at Sanya Aviation and Tourism College as research objects, and conducts a survey from four aspects: the students' basic situation, the school training situation, the students' concern about the internship and the students' satisfaction with the internship unit. After summarizing the results, this paper analyzes the factors and reasons that affect students' internship, and finally attaches importance to planning and layout, and strengthens guidance and supervision. Measures are explored to ensure the accurate connection with the industry, improve the course setting, broaden the scope of practice, innovate the practice mode and protect the rights and interests of students.

Keywords: Integration of enterprises with vocational schools and universities · Post practice · Status research

At present, China's aviation industry has ushered in the peak of development. However, compared with other enterprises, aviation enterprises are still unbalanced in regional distribution and relatively small in number. As a high-tech intensive industry, the aviation industry has high requirements on the quality of front-line technical staff. Some posts need to go through strict training and get corresponding certificates before they can take up posts. Due to the particularity and rigor of relevant posts, there are relatively few professional counterpart internship units and post. Job intensity also makes some posts lack of qualified personnel, resulting in the demand and supply can not be effectively linked. In order to further understand the current situation of vocational civil aviation students' in-post internship, effectively promote employment, and provide basis for the adjustment and implementation of talent training program, provide guidance for improvement of internship management efficiency, the school has deepened the integration of industry and education, and explored and implemented several cooperative projects in school-enterprise cooperation to promote student training according to the Guidelines of the General Office of the State Council on Deepening the Integration of Industry and Education issued by the State Council no. 95 (2017), the relevant contents of the Regulations on the Management of Students' Internship in

© ICST Institute for Computer Sciences, Social Informatics and Telecommunications Engineering 2019 Published by Springer Nature Switzerland AG 2019. All Rights Reserved G. Sun et al. (Eds.): eLEOT 2019, LNICST 299, pp. 399–410, 2019. https://doi.org/10.1007/978-3-030-35095-6_43 *Vocational Schools* jointly issued by the Ministry of Education and five other departments. In this paper, the questionnaire is designed from the three aspects of the school's cultivation status of students, students' concerns and satisfaction with the internship unit. Through the survey, we get to know the problems existing in the internship process and seek appropriate solutions. In this survey, 310 students of grade 2016 were given questionnaires in the form of questionnaire star. A total of 298 questionnaires were collected, with a recovery rate of 95.8%, among which 297 questionnaires were valid, with an effective recovery rate of 99.7%.

1 Research on Post Practice Status and Statistics

1.1 Basic Information of the Students

According to the research needs, the collected questionnaires were summarized, screened and counted. Among them, male students account for 49.49%, while female students account for 50.51%. 75.42% of the students are over 20 years old, and 24.58% are between 18 and 20 years old. Due to the difference in the number of majors, the number of collected questionnaires is also in direct proportion to the number of majors. More than 80% of the internship units are airlines, airports and ticket agencies across the country.

1.2 School Training

This paper studies the training situation of the school mainly from four aspects: training time before the internship, the situation of the counterpart internship, the adaption of the skills learned in school to the position, and the importance of the courses through the analysis of the internship experience. The results shows: 37.37% of them receive training for one week before they start work and what they are trained is not business knowledge, but corporate culture and management system; 39.73% of them receive training for one month before they start work and the training focuses on the update of business and enterprise management system and culture; 22.9% of them receive training for three months before they start work and the span of major and internship is large (as shown in Fig. 1). Only 37.37% of the internship posts are completely related to the major they have learned, while 28.28% are basically related to the major studied (as shown in Fig. 2). 31.31% of them can fully adapt the knowledge and skills learned in school to the needs of internship positions, while 39.39% of them can basically adapt what they learn in school to the needs of internship positions (as shown in Fig. 3). According to the experience of in-post internship, it is believed that the school can adjust the courses and proportion. 70.03% of them think that the professional practice courses should be increased, 47.81% of them believe that professional theory courses should be increased, and 43.77% of them advocate that basic theory courses should be increased, 21.21% of them feel that non adjustment should be made (as shown in Fig. 4). The above data show that the theoretical course, practical course, in-post internship, knowledge system are closely connected with the internship posts and can basically meet the needs of enterprises and employers. However, with the development and reform of the civil aviation industry, the application of modern information technology equipment exerts great impact on the civil aviation professional, which has accelerated the updating of the teaching content, management system and school-enterprise cooperation mode of each major in civil aviation.







Fig. 2. Note: R. for related



Fig. 3. Note: A. for adapted



Fig. 4. Note: A. increase professional theory courses, B. increase professional practice courses, C. increase basic theory courses, D. reduce professional theory courses, E. reduce professional practice courses, F. no change.

1.3 Student Concerns

This paper studies the issues that students are concerned about during the internship from five aspects. Firstly, according to the survey data, during the internship, 43.77% of the students paid the most attention to the issue of prospect for personal development, and 18.18% of them paid the most attention to the issue of employment (as shown in Fig. 5); secondly, during the internship, 75.76% of the students want to improve their communication skills, 75.76% want to improve their ability to analyze and solve problems, 73.06% want to improve their practical skills, while only a few want to improve their ability to live and work independently (as shown in Fig. 6); thirdly, 75.76% of the students believe that the improvement of knowledge and ability acquired during the internship is basically consistent with and beyond the expectation (as shown in Fig. 7); fourthly, 62.97% of the students believe that personal ability and working atmosphere are the most important factors affecting the effect of internship and communication with classmates and supervisors is less important (as shown in Fig. 8); fifthly, during the internship, 67% of the students have signed contracts with the internship units, and the rest of the students have found other employment units or are still hesitating (as shown in Fig. 9). The data results show that students have new understanding and requirements for the internship units, and pay more attention to the self-development of interpersonal communication skills, the ability to analyze and solve problems and practical skills. Students have improved their abilities and gained more than expected during the internship. Even under the background that internship units are short of employees and want to retain employees, there are still some students who do not want to sign contracts. It shows that under the premise that students have certain technical skills, the space for choice is expanding, but there is still a certain deviation in the understanding of the internship process, which overlooks the importance of management in the internship process.



Fig. 5. Note: A. benefits, B. skills upgrading, C. personal development, D. employment



Fig. 6. Note: A. professional knowledge, B. practical skills, C. communication skills, D. ability to analyze and solve problems, E. teamwork, F. self-supplied ability, G. self-discipline, H. code of conduct, I. respect for the elderly and discipline awareness



Fig. 7. Note: A. beyond expectation, B. consistent with expectation, C. below expectation



Fig. 8. Note: A. school supervision, B. professional level of instructors, C. personal ability, D. working atmosphere, E. communication with classmates and teachers, F. the richness of internship content



Fig. 9. Note: A. intention to sign, B. have signed, C. have signed with other units, D. no intention to sign

1.4 Students' Satisfaction with Internship Units

The degree of students' satisfaction with the internship units is the foundation for the further cooperation between the college and the enterprise. The survey data shows that: in terms of internship benefits, 80.48% of interns get a salary between 1000–3500, only 9.76% of them get a salary above 3500 and most of them are satisfied with their salaries (as shown in Fig. 10); in terms of incentive mechanism, 20.88% of students are often rewarded or punished, while 58.92% of them are occasionally rewarded or punished, but all of them acknowledge both incentive mechanism and reward and punishment system (as shown in Fig. 11); in terms of training, more than 84% of students often take part in various training organized by the company regarding professional ability improvement, rules and regulations, corporate culture, etc. (as shown in Fig. 12); more than 80% of the students are satisfied with the accommodation conditions provided by the internship units, medical care for on-duty injury, work environment, interpersonal

relationship among colleagues, and cooperation among colleagues (as shown in Fig. 13). Some students quit their jobs in the middle of the internship. The main reasons for the demission are listed in the order from high to low, including returning to their hometown for development, salary and welfare issues, wanting to change careers and industries, high work requirements, great pressure, and being unable adapt to the management system and culture of the company. Data prove that the benefits, work environment and management system in civil aviation related enterprises and units are relatively complete and suitable for students. Selection and requirements, but the work pressure, work intensity, work requirements and distance from home for civil aviation enterprises. The work pressure, work intensity, work requirements that result in many students finally choosing to quit.



Fig. 10. Note: Intern salary



Fig. 11. Note: A. usually, B. occasionally, C. uncertain, D. none, E. none at all





Fig. 12. Note: A. usually, B. occasionally, C. uncertain, D. none, E. none at all



Fig. 13. Note: A. very satisfied, B. basically satisfied, C. uncertain, D. dissatisfied, E. very dissatisfied

2 Analysis of the Factors and Reasons that Affect the Post Practice of Students [2–4]

2.1 The Origin of Students Is One of the Important Factors Affecting the Choice of Internship and Employment Location

Although students are satisfied with the conditions provided by the internship units, there are still 34.34% mismatch interns. After the investigation and analysis of these students, it is not that the enterprise does not provide positions, but that these students would rather choose an internship in a different professional position in their hometown, rather than leave their hometown to work in an airline or airport. And due to the decentralization of civil aviation enterprises, it is difficult to arrange a large number of students to intern or be employed in a province or region. The origin of students is a very important factor affecting the internship and employment.

2.2 Students' Attention to Internship Units Has Shifted from Integration of Internship and Employment to Seeking Development Prospect and Ability Improvement

With the reform of educational system and mechanism, the improvement of the comprehensive quality of talents required by employers and the influence of new technological revolution, students' internship and employment concepts have also undergone great changes. Students no longer only focus on the employment after the internship, but to seek all kinds of units that are conducive to their own quality cultivation, professional and technical ability improvement and communication ability enhancement. These enterprises have the sense of teamwork, strong competitiveness and good development prospects, thus students can lay the foundation for future career choice.

2.3 During the Internship, Students Pay More Attention to the Guidance and Management of Enterprises Rather Than that of Schools

In terms of professional layout, curricula, ability improvement, quality cultivation, measures guarantee, management system and atmosphere building, the school has completed the work under the comprehensive factors of national policies, regional economic development characteristics and the school's own advantages. In the process of internship, students' learning mode and learning place have changed, but learning content and learning result assessment still belong to the scope of school teaching plan. But after entering the internship, some students have reversed the priority of supervision and put too much emphasis on the important role played by enterprises, while they have one-sided and radical understanding of the schools' supervision, and some students even refuse to cooperate with the schools' management.

3 Measures to Improve the Practical Effect of Students' Post Practice Work

3.1 Attach Importance to Planning and Layout, Strengthen Guidance and Supervision [5–7]

With comprehensive consideration of the development trend of civil aviation industry, school advantages, student source characteristics, professional composition and other elements, the school, colleges and departments distribute internship positions accurately and efficiently. The school ensures that students can learn, make achievements and make use of what they have learned while avoiding wasting high-quality internship resources and affecting the production of enterprises. In terms of student guidance and supervision, before the internship, it can be carried out by selecting internship units, setting internship standards, formulating internship plans and signing internship agreements; during the internship, it can be carried out by filling in the internship log (weekly), tracking and instructing records of the instructor, training records of the internship, the school and other methods; after the internship,

the university and the enterprise should jointly carry out strict assessment on students' internship results. At the same time, the school also introduced the "engineering cloud" internship management platform to timely track the students' internship through the mobile phone app. It is just to ensure the internship is carried out orderly and effectively.

3.2 Connect with the Industry Precisely, Improve the Curriculum and Broaden the Innovative Internship Modes [8, 9]

All majors should precisely meet the needs of industries and enterprises in terms of curriculum setting. The curriculum system inside and outside the university should be improved through the setting of training content system, teaching content system, teaching condition guarantee system, management system and evaluation system. Considering the monotony of internship mode, the school has carried out various internship modes in the spirit of serving regional economic development and meeting industrial needs through the integration of production and teaching, such as post cognition internship, on-campus simulation internship, on-campus production internship, staged production support internship, post training, post following and in-post internship, through the integration project of production and teaching. For example, our school has maintained close cooperation with the Bureau of Hainan Public Security Guard since 2008. The school sends students majoring in security check to protect Boao Forum for Asia Annual Conference every year. The students' excellent performance has been well received by the leaders of the Public Security Department and people from all walks of life. The college also undertakes the security check and explosion protection task at the entrance of Sanya Phoenix Airport and developed it into a productive cognition internship project.

3.3 The University and the Enterprise Make Concerted Efforts to Improve the Protection of the Rights and Interests of Students

According to the "Measures for Promoting School-Enterprise Cooperation in Vocational Schools" [10, 11], school-enterprise cooperation is a kind of win-win cooperation, and internship is also one of the common projects of school-enterprise cooperation, so the protection of the rights and interests of internship students has become the premise and foundation of cooperation. The school should undertake detailed regulation and restriction to the content such as the internship pay, board and lodging, on-duty injury and medical insurance, job intensity, the guidance of professional ability to the students during practice. Before the internship, the university and the enterprise should reach an agreement on the above aspects. When signing the internship agreement, the school may take the following aspects into consideration. For example, the units that accept students' in-post internship should reasonably determine the interns' pay by referring to the payment standard of the same position and the workload, work intensity, work time and other factors and it shall not be lower than 80% of the salary standard of the same post during the probation period; schools and internship units shall not charge students for internship deposits, commissions on internship income, management fees or other forms of internship expenses, and shall not detain students' ID cards; internship units should abide by the national regulations on working hours, rest and vacation; and other arrangements that are inconsistent with the internship.

It is found that internship can help students acquire practical work skills, problemsolving skills, interpersonal skills and post adaptability, which has a significant positive impact on employment ability [12, 13]. In order to effectively improve the effect of onpost internship, we can enhance the depth of school-enterprise cooperation through the school-enterprise co-construction of major, school-enterprise co-construction of courses, and school-enterprise co-management of students. The breadth of school-enterprise cooperation can be enhanced through the cooperation of related and similar professional positions. Through the whole process and stages of school education, the time span can be extended [14], so as to ensure the organization, management, assessment, safety and rights and interests during the internship, and lay a foundation for effective internship and employment.

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References

- 1. Huang, Y.: Legislative thinking on student internship management in vocational schools. Vocat. Tech. Educ. **30** (2016)
- 2. Ma, L.: Confusion and management path analysis of in-post internship. Vocat. Educ. BBS **8**, 7–10 (2013)
- 3. Hou, J.: Construction of evaluation mechanism for students' in-post internship in higher vocational college. Vocat. Techn. Educ. **29**, 62–65 (2014)
- Cheng, Y.: Research and practice of "Wuhua" based enterprise internship management. China Vocat. Tech. Educ. 11, 81–86 (2019)
- Han, X., Gong, X.: Investigation on the current situation of students' in-post internship in vocational colleges: a case study of Zhejiang Province. Vocat. Educ. Newsl. 11, 29–31 (2014)
- Wang, D.: Research on school-enterprise cooperation mechanism based on the "double 11" activity: taking the cooperation between school A and enterprise B as an example. Oper. Manag. 8, 155–157 (2018)
- 7. Zhou, C.: Reflection and connotation expansion of combining work with study. China Vocat. Techn. Educ. 6, 22–25 (2014)
- Dai, Y.: Research on vocational employment guidance course teaching practice in post practice. Acad. Theory 8 (2017)
- Sun, J.: Research report on the current situation of students' management of in-post internship in higher vocational colleges-taking a higher vocational college in Tianjin as the research object. Tianjin Normal University of Vocational Technology (2017)

- Notice of the Ministry of Education and Other Five Departments on the Issuance of "Measures for Promoting School-Enterprise Cooperation in Vocational Schools", no. 1 (2018)
- Sun, G., Lang, F., Yang, M.: Traffic measurement system based on hybrid methods. Electric Mach. Control 15(6), 91–96 (2011)
- 12. Chen, X.: An empirical study on the current situation of students' practice in vocational schools. Educ. Dev. Res. **38**(01), 52–60 (2018)
- 13. Sun, G., Li, X., Hou, X., et al.: GPU-accelerated support vector machines for traffic classification. Int. J. Perform. Eng. 14(5), 1088–1098 (2018)
- 14. Zhu, C.: Path analysis of vocational college students' employability improvement from the perspective of school-enterprise cooperation. Hebei Vocat. Educ. **2**(06), 100–104 (2018)