Open College-running Model for Cultivating High Quality Vocational Talents in Civil Aviation Transportation

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**Abstract.** The research aim to combine improved education with enterprises in terms of cultivating advanced technical personnel majoring in civil aviation transportation, Sanya Aviation and Tourism College (SATC) starts with open college-running Model by signing joint operation contract with enterprises, setting up an integrative civil aviation transportation vocational education system and jointly setting out training programs and teaching programs in accordance with the professional requirements. We integrate human resources and training equipments in schools and enterprise and implement strict training and examination system to students. Now we have built training bases in more than twenty airports throughout the country for students to conduct open learning. Most of those students who are cultivated with open learning could apply what they have learnt. The average employment rate and the employment rate within the industry of those graduates exceed previous graduates.

**Introduction**

The training of higher vocational talents civil aviation transportation achieves an all-round development in the context of the development in China’s civil aviation industry. China’s civil aviation industry starts to develop right after its reform and opening-up to the outside world. Now the country possesses 1,764 airplanes [1], and it is striding forward civil aviation superpower form civil aviation power. The rapid development in civil aviation industry raises higher requirement for the quantity of civil aviation talents and the cultivation quality. Relevant colleges and experts have already conduct much research and study on how to soundly cultivate high-quality civil aviation talents, which is worthy of our learning [2, 3]. In order to cultivate suitable talents, according to several years’ teaching practice and the advanced open education experience abroad[4,5], our college sets up an open education platform for cultivation charactering college-enterprise joint operation, constructs basic knowledge system and practical skill system, builds three high-level teams(full-time teachers, part-time teachers and instructors) and attaches great importance to train students’ skills in terms of operation, profession, innovation, communication and sustainable development. The objective of this thesis is to discuss how to better combine college and enterprises to cultivate high-quality talents with open education.
The Open Cultivation Platform of College-enterprise Union

The college is run by large enterprise group, and college-enterprise cooperation is highly stressed, which has formed a complete and smooth college-enterprise cooperation mechanism and become the prominent advantage and a bright spot in its school running.

Carry Out an All-round College-enterprise Cooperation and Joint Construction and Highly Stress Talents’ Order Training

The college actively carries out an all-round cooperation and joint construction with enterprises to explore the road for college-enterprise cooperation in running school, cultivation, employment and development so as to achieve deeply integrated development.

The Civil Aviation Department of SATC has signed college-enterprise cooperation contract with many subordinating enterprises of Hainan Airlines Group such as Hainan Airlines Company Limited, Capital Airlines, Grand China Logistics Company, Haikou Meilan International Airport, Sanya Phoenix International Airport to comprehensively and jointly build majors like Civil Aviation Transportation, Air Crew, Aviation Logistics, Airport Operation and Civil Aviation Security Technology. The college and the enterprises jointly set up the major co-building teams, jointly work out personnel cultivating program, develop courses and textbooks, conduct teachers training and talents exchanging, construct practice bases and jointly promote practice and employment. All of those make all-round college-enterprise cooperation possible.

The college pays great importance to talents’ order cultivation and has conducted order cultivation with many companies such as Hainan Airlines, Shenzhen Airlines, Haikou Airlines, Hainan Airlines Sales Company, Hainan Airlines Tiantian Logistics Company regarding the majors like Air Crew, Civil Aviation Transportation, Civil Aviation Security Technology and Logistics Management.

Adhere to the Concept of Win-win Situation for Both College and Enterprises and Form a Long-term Mechanism for College-enterprise Cooperation

The college adheres to the concept of win-win situation for both college and enterprises to make sure that the enterprises could benefit from the college-enterprise cooperation and stimulate the cooperation motivation so as to form a form a long-term mechanism for college-enterprise cooperation.

The Requirements of College Student Enrollment are that of the Enterprises’ Recruitment. The college and enterprises control and monitor the whole process of talents’ cultivation quality since the students’ enrollment. Enterprises take part in the students’ interview of partial majors before the College Entrance Examination to select excellent candidates with professional qualification standard. For example, Hainan Airlines’ flight attendants selection is put before the College Entrance Examination by the college. The college’s Admissions Office, Flight Attendant Teaching and Research Office and the Flight Attendant Recruitment Team of Hainan Airlines Group form the enrollment team to successively examine the candidates’ image, foreign language abilities, psychological quality and comprehensive retesting according to college’s enrollment process that is based on the flight attendant recruitment process of Hainan Airlines Group. The Group signs the order cultivation contracts with those qualified students, which makes sure that the students have been employed when they register into the college and also realize the enterprises’ objective of pre-reserving the talents.
The College’s Academic Education Synchronizes with the Enterprises’ Training. According to the job requirements of all majors’ professional posts and professional qualification standards, the college brings the teaching programs into the contents before taking a enterprise’s post to ensure students’ employment right after graduation. For example, the academic education of flight attendant majors is combined with the training of new flight attendant, which shortens the cultivation period of flight attendant, omits the graduates’ pre-job training, saves training cost and achieves the direct docking for the college’s students being the enterprises’ employees.

The College Shares the Training Facilities with the Enterprises. All the facilities, the comprehensive practical training center, flight simulation training center, crew working simulation training center, training rooms, built by the college are not only for its own teaching, but also for the in-service training of all worker of Hainan Airlines Group such as pilots and flight attendants training. At the same time, the college provides the in-service training works here with accommodation, greatest convenience and best service, which saves training costs for the enterprises, enhances the mutual trusts between the two parties and stabilizes the cooperation bond.

Mutual Employment of College Teachers and Enterprise Instructors

In order to achieve the purpose of making sound college’s basic theoretical education and effective job qualification practice, the member enterprises of Hainan Airlines Group select technical experts to come to the college and teach the skill practice lessons for majors like Air Crew, Airport Operation Management and Civil Aviation Security Technology. The English courses and all kinds of professional theoretical courses for the enterprises’ workers will be taught by the college teachers. For instance, the college’s Flight Attendant Teaching and Research Office is responsible for not only the academic education, but also responsible for 4000 new flight attendants’ training and in-service flight attendants’ recurrent training for Hainan Airlines Group each year, including courses or projects like professional English, service psychology for ground service department, service quality and service awareness. The enterprises’ training instructors take charges of training the in-service flight attendants as well as the college students’ professional skills, which reaches the purpose of mutual employment of teachers and complement of capacities.

The College and Enterprises Jointly Implement Scientific Researches

The college and enterprises jointly implement scientific researches and share the results. For instance, majors such as Airport Operation Management and Flight Attendant co-develop the professional textbooks with HNA Airport Group, HNA Cabin and Ground Service Department, and jointly develop the experimental manuals in accordance with the courses. Besides, they study scientific research task together and share the results. Those help to promote the college’s scientific research level and its service ability for enterprises while solving the partial practical problems in enterprises’ production and service process.

Putting Capacity First and Cultivating High-quality Applied Civil Aviation Transportation Department Talents

On the basis of building college-enterprise cultivation platform, the college reforms its teaching modes and adopts multiple methods to demand and evaluate students and to improve students’ quality.
Assess Students’ Quality in Various Methods

In higher vocational education of civil aviation, capacity and capacity levels need to be assessed by proper methods. Except theoretical exams, the Civil Aviation Transportation Department of the college has also adopted the following methods to demand and assess students: for example, English Certificate and Computer Level Certificate, Job Qualification Certificate of the Industry, Students’ Appraisal Report for Substituted Post Exercitation, Students’ Appraisal Report for Quality.

Innovate Talents Training Modes

Civil Aviation higher vocational education should take multiple measures to reform teaching, innovate talents’ training modes, reinforce students’ skills cultivation and improve talents cultivation quality.

Skill-oriented Talents’ Cultivating Program. Skills cultivation not only needs students to master basic knowledge and skills, but also needs students to take part in the teaching activities and operation during the teaching process to gradually master the essentials of skills. This demands us to change the traditional teaching method of teachers’ knowledge passing into that of students’ skill mastering. The main difference between those two teaching methods is the participation degrees of students. In the teaching practice of Civil Aviation in SATC, three levels have been divided to develop professional courses according to the differences of knowledge application, which are basic knowledge, core skills as well as professional quality and strong points. Basic knowledge refers to some basic knowledge and theories students majoring in civil aviation management should master, which is theory teaching. Core skills refer to operational skills must be mastered for all posts, which can be gained by combining theory leaning and practice, and its contents usually consist with the examining contents of working license. Professional quality is needed by all posts, which is mainly to train students’ communication skills, service awareness and safety consciousness and it can be achieved by formative education of relevant courses and systems. Based on this, the college develops more than thirty professional courses including Overview of Civil Aviation, Civil Aviation English, Civil Aviation Passenger Traffic, Check-in and Luggage Transport, Communication and Service Etiquette, Civil Aviation Freight Transport, Aircraft Load and Balance, Civil Aviation Computer Reservation, Air Transportation Geography, Terminals Management, Service Psychology and Airport Operation Management.

Integrative Teaching Modes of ‘Teaching, Learning and Practicing’. In order to cultivate students’ professional skills and practice operational skills, teaching mode of learning by practice needs to be conducted. As for the whole time arranging, practical teaching periods should not be less than 50% of the whole teaching time, and the substituted post exercitation periods should not be less than half of a year. On the basis of extensive research, combining teaching practice experience and enterprises’ needs, Civil Aviation Major of the college adopts the teaching period’s mode of “1.75 +0.25+1”, which means there will be 1.75 semesters (about 64 weeks) for students to learn systematic theories and skills, 0.25 (about 9 weeks) for them to practice professional skills and one semester to conduct substituted post exercitation in enterprises. All of those have formed the teaching mode of gradually learning, taking in and improving through the manner from singleness to system, from class training to independent operational practice, from campus practice to off-campus working on regular posts.
During the course teaching progress, integrative teaching modes of “teaching, learning and practicing” must be conducted with actual productive task as the carrier and actual working capacity as the objective. Integrative “teaching, learning and practicing” is to organically combine theoretical teaching contents with practicing contents and create a teaching environment where students could see, touch and operate so that they can learn through teaching and operate through learning. The stresses of the reform of talents’ cultivation modes are practice, openness and profession in teaching, in which experiment, practical training and internship are the three keys.

The integrative teaching modes of “teaching, learning and practicing” adheres to the theory of “people oriented”, and let the students truly experience being masters. Making specific productive tasks and post requirements as the carrier and combining students learning with their future development stimulate their inner learning motivation, improve their learning interest and let them consciously build knowledge system. During the teaching process, teachers should encourage students to think independently, train their innovative awareness and pay more attention to discussion in class so that students could have more chances to practice and learn how to learn, how to solve and how to behave when taking part in the process.

**High-quality Double-qualified Teachers.** Teachers are the executors of education and the keys of forming learning style and school spirit. The quality of teachers influences the cultivation quality of students. High-quality teachers should possess rich production experience. Teachers coming from production activity and working for production could not only bring latest technological standard, quality system and management theories to the enterprises, but also could demand students with the quality requirements and conduct codes needed for production so that students can develop good habits in advance. The team of high-quality double-qualified teachers could be built by employing technical experts, industry leaders being the part-time teachers or supervisors from enterprise, and by regularly sending full-time teachers of the college to enterprises for training or production.

**All-round Examination and Evaluation.** Examination and evaluation system is the baton for talents’ cultivation and the standard for higher vocational school to measure students’ skill levels. To achieve the objective of cultivating students’ skills, reform should be conducted in the following two aspects: Firstly, change the traditional close-book examination modes. More oral tests, practical operational test and thesis analysis were conducted. For the exam contents, students’ understanding to the knowledge and skills must be tested and practice of actual skill application must be stressed according to the professionalism and actual needs to train qualified senior applied talents.

And then implement all-round students’ evaluation mode. In the process of skill-oriented talents cultivation, students’ comprehensive qualities need paying attending to. They should not only pass the exam and have job certificate or internship appraisal, but also get instructors’ or teachers’ quality evaluation.

**Results and Conclusions**

According to the statistics of Sep. 1st, 2011, the average employment rate of graduates in 2009, 2010 and 2011 reaches more than 95%, and among those graduates, many work in Airlines Company, airports, air transportation, freight agent enterprise and international logistics company. Employment rate within the industry reaches more than 85%. Students could use what they have learnt, and the outstanding graduates
gradually become the college’s brand and unique feature. The majors of Flight Attendant and Aviation Logistics of the college have become the national teachers’ training base recognized by the Ministry of Education.

The college stresses capabilities training, optimize knowledge structure, enrich social practice and strengthen skills cultivation to greatly improve students’ skills for learning, practicing and innovating. Besides, the college aims at educating students to master knowledge and skills and learn how to take actions, how to survive and live and how to behave so as to help students actively adapt to the society and create good future. Skill training is the requirement for talents’ cultivation. Only by further reforming the teaching, conducting teaching innovation, letting social needs, people’s development needs and industry needs being the guidance, getting rid of unitary theoretic teaching and examination mode and comprehensively cultivating students’ capabilities could the needs for social development be met and could more qualified talents be produced[6]. SATC has made continuous study, reforming and innovation in this aspect and it gradually steps on a new school running road by merging college and enterprises together.

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References


