

Cultivation Practice of Financial Top-notch Innovative Talents in Local University

-Taking the "Financial Innovation Class" as an example of Hubei University of Economics

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Abstract—At the end of 2010, the Financial Innovation Class of Hubei University of Economics was selected as the experimental program of top-notch innovative talent cultivation in ordinary colleges and universities in Hubei province. After nearly eight years of training practice, Financial Innovation Class adheres to the training features of Internationalization, Comprehensive Qualities, Engineering and Personalization, with outstanding results in talent training and successful reform of talent training mode.

Keywords—Finance major; Top-notch innovative talents; Internationalization; Comprehensive Qualities; Engineering; Personalization

I. THE FOUNDING BACKGROUND OF FIC¹

Throughout the history of modern education, China's education of colleges emphasizes the cultivation of specialized talents, and especially in local colleges and universities, there exists the "emphasis on knowledge to give, but less on ability to guide; Catering to the needs of the masses, but ignoring the personalized training" phenomenon. Faced with the situation of increasingly diversified social demands, increasingly diversified talent demands, increasingly differentiated disciplines and majors, and increasingly individualized development of students in today's market economy, there is no doubt that talent cultivation in local colleges and universities is faced with many greater difficulties. [1] Taking the job market as an example, the knowledge graduates master is disjointed from the knowledge they use. On the one hand, a large number of graduates face the problem of difficult employment. Many companies, on the other hand, report "unsatisfactory talent". This not only exposed the direction of local university education, ways and methods, but also for the local colleges and universities education how to truly cultivate "thinking and ability" and "practice, practical and pragmatic" type talents, for

the society conveying "interdisciplinarity interdisciplinary talents, knowledge, comprehensive and solid foundation, strong innovation ability of innovative talents" puts forward a new topic. In terms of importance, the training of top-notch innovative talents by local universities is of great strategic significance for promoting socialist modernization, building an innovative country and realizing the great Chinese dream of reviving the Chinese nation. [2]

Under the above premise, according to the ministry of education promulgated in 2010 "National Medium and Long-term Education Reform and Development Plan Outline (2010-2020) in the proposed" to form all kinds of talented people "in the situation of top creative talents constantly emerging, the eighteenth big report made it clear to "improve the level of innovative talent training", for the implementation of the "Science and Education Promotes Province", Hubei province, the strategy of "Talents Strengthen Province", the response of Hubei province "Common Colleges and Universities in Hubei Province Top Creative Talents Cultivation Test Plan", meet the objective needs of financial talents for the development of the times.[3] Hubei University of Economics has announced the establishment of a pilot program for the cultivation of top-notch innovative talents in finance--FIC.

II. THE REASON OF "FOUR CHARACTERISTICS"

A. Internationalization

The "Internationalization" of FIC requires students to keep up with the trend of international financial field. A large number of innovative and top-notch talents in the international financial field can enable our country to have a super first-class and sensitive sense of future development trend in the financial field, which is a strong guarantee for our country's economic development to follow other big countries and even surpass other big countries to become the world's first power. According to the world organization for economic co-operation and development (OECD) 2016 data and famous one of the big four accounting firm KPMG an analysis published in 2014, the

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¹Financial Innovation Class: a class organized by Hubei University of Economics' experimental plan for the cultivation of top-notch innovative talents in finance, referred to as "FIC".

internationalization of information network technology under the lead of the social economy development, makes the international market with the talent demand of cross-cultural education background in nearly 10 years continue to grow at a speed of more than 7% per year on average, especially those with a bachelor degree or above education background of cross-cultural and technical personnel, in is shown on the competitiveness of the international labor market, the employment rate keeps over 90%. Therefore, in a practical sense, to cultivate international talents, it is necessary to continuously optimize the allocation of education resources in China, occupy the forefront of education in the world, and cultivate internationalized talents with high competitiveness in the international employment market. Internationalized personnel training needs to constantly guide students to carry out self-innovation and cultivate the awareness of innovation.[4] The ultimate goal of cultivating international FIC students is to make FIC students have international awareness and strong international competitiveness. This kind of talent can stand on the local land and keep an eye on the world, adding the brightest colors for the construction of the future of the motherland and its own development.

B. Comprehensive Qualities

The "Comprehensive Qualities" is divided into two aspects, one is the synthesis of education, the other is the synthesis of trained talents; The synthesis of education is divided into curriculum synthesis, teacher synthesis and the synthesis of the first and second classes. The establishment of FIC combines subject synthesis and curriculum synthesis. The "Comprehensive Qualities" of FIC requires FIC students not only to be the top performer in the financial field, but also to make achievements in other fields, to become the top-notch innovative interdisciplinary talent in the financial field. With the rapid development of the times and society, unilateral top-notch talents can no longer meet the needs of some industries. The comprehensive and integrated features of modern science and technology reflect the cross-integration of multiple disciplines, which requires more practitioners to have solid basic knowledge, wide knowledge range and strong comprehensive ability, and to quickly transform scientific and technological achievements into productive forces.[5] In order to develop the national economy and play an important role in the development of FIC, it is necessary to cultivate the FIC students to be a combination of innovative top-notch interdisciplinary talents.

C. Engineering

Engineering is also proposed for the subject curriculum. Financial talents cultivation, is actually in the process of training senior financial talents, from the training objectives to the teaching curriculum, teaching content selection, teaching teacher selection, from the implementation of the education to the education decisions, finally to the education system, giving full consideration to the requirements of the nature of financial engineering, engineering work, fostering the talent of innovation spirit and practice, based on the idea of engineering ability to solve many problems in real life. Engineering education and comprehensive qualities education complement each other, so the FIC students have a solid theoretical

foundation, a wide range of knowledge and practical application of knowledge in all aspects. Engineering education also emphasizes the spirit of innovation and the improvement of comprehensive qualities. The "engineering" of FIC requires FIC students not only to master theoretical knowledge well, but also to reasonably use knowledge in mathematics, statistics, metrology and other fields in practice to build models. This is a high quality talent whose theory and practice are closely combined.

D. Personalization

Personality is a relatively fixed characteristic formed under the influence of certain social conditions and education environment. It is a kind of innate talent, or potential. Biologically speaking, personality is a reflection of one's "temperament" and "character". Temperament is greatly influenced by genetic factors and it is more difficult to change, while character is the tendency of an individual in behavior, and it is the character formed by people who are influenced by environment and adapted to their environment during their growth. From this perspective, there is actually a greater connection between personality and innovation ability: innovation ability is the embodiment of good personality, and in turn, innovation ability promotes the formation of good personality.[6] The development process of personality is a process of self-innovation which can be explored constantly. The ability of innovation is based on the advantage of individuality. The exploration and development of the innovative ability of FIC students is inseparable from the full thirst for knowledge and enterprising spirit, and these spirits are inseparable from the development direction of their own personality. Therefore, only the FIC composed of distinctive students can further highlight the personal and collective charm, and enable students to achieve better results and higher achievements by developing harmoniously with each other.

III. THE PRACTICAL PROCESS OF "FOUR CHARACTERISTICS"

In September 2011, Hubei University of Economics established the Financial Innovation Class, focusing on cultivating the top-notch innovative financial talents with "Internationalization, Comprehensive Qualities, Engineering and Personalization". The specific implementation measures are as follows:

A. Internationalization

- Class organization. The FIC is established through the school written examination and three rounds of interview selection. In the application and selection conditions, there is a requirement for English, and the interview is a round of pure English interview. Therefore, the students of FIC have a good language foundation, which lays a solid foundation for the cultivation of students' internationalization.
- International class teaching. The classroom teaching of FIC is full of international features: specially designed international course teaching plan, teachers with rich overseas educational background, the most

authoritative international financial books, all-English class communication. The teaching plan of these international classes enables FIC students to receive the standardized training of international frontier of finance, carry out research learning, expand international vision in theory, which greatly improves the international quality of students in FIC.

- Summer study Tours with an international perspective. During the summer study tour organized by the school, students of the four-year FIC will go to overseas universities (Hong Kong, Macao, Taiwan, the United States, etc.) for two weeks to three weeks of study and exchange. During the study, FIC students can make use of their own in the school of language training, theoretical knowledge, practical ability advantage fully experience the domestic colleges and universities in China, such as different teaching methods, cultural customs, field in-depth study visit Shenzhen stock exchange, the Hong Kong monetary authority, the New York stock exchange and other large domestic and overseas financial institutions. In practice, expand the FIC and students' international vision, guide the students spontaneously contrast on-the-spot learning book knowledge and different, further deepen students' understanding of financial and for their future development have a clearer judgment, Let students truly experience, understand, have "Internationalization" characteristics.
- Lectures by overseas experts. The school regularly invites distinguished professors or experts engaged in teaching work overseas to give lectures to students, so that students can keep pace with international current events, international latest financial knowledge and hot spots. This can cultivate the students' keen sense of international finance and make them more international.

B. Comprehensive Equalities

- Class organization. The FIC was established through the school written examination and three rounds of interview selection. The selection process is not aimed at finance majors, and other majors can be selected equally. Therefore, FIC itself is composed of 30 students from different majors. The construction of the whole class laid a solid foundation for the students of FIC to integrate.
- Comprehensive curriculum setting. FIC curriculum have an introductory economics, intermediate microeconomics, intermediate macroeconomics, econometrics, finance, international finance, financial economics, investment, corporate finance and other core curriculum, at the same time, more other professional core courses, such as accounting basis, legal basis, management, financial statement analysis. These non-financial professional courses, as the comprehensive initiation education of students of FIC, make students of FIC tend to be comprehensive step by step, and enable future FIC students to become the top-notch comprehensive innovative talents in the complex

field. This is the inter-disciplinary talent urgently needed in this era.

- Comprehensive selection of teachers. The teachers of FIC are all the teaching experts with compound majors. They guide students to gradually experience, comprehend and spontaneously pursue comprehensive qualities with their integrated characteristics, so as to cultivate students of FIC in a more efficient way.
- Integrated teaching contents. For FIC teaching of the course content, teaching teachers agree with largest integrated into a target, the definition of professor is more than just books, more have their actual comprehension, or case analysis, or class debate, strive to make the content is not thin, make the students get the comprehensive knowledge of curriculum content, self-education integrated consciousness.
- First and second class learning. Students of FIC is guided by the teacher's teaching in class, and the integrated teaching of the teacher has given its integrated characteristics. In addition, the university library's collection of tens of thousands of volumes and lectures in various fields enable students of FIC to acquire and accumulate more comprehensive knowledge in the second class. The synthesis of the first and second classes, the cultivation of the students of FIC tend to inter-disciplinary talent development.

C. Engineering

- Class organization. The FIC was established through the school written examination and three rounds of interview selection. The first threshold in the selection process requires students to have certain specialty in mathematics because the cultivation of talent engineering cannot be separated from students' good mathematics foundation. At the same time, the interviewer praises and favors students who are good at mathematical modeling, statistics and other fields who have participated in the competitions. Therefore, FIC is composed of 30 students who have excellent mathematical and statistical skills. The construction of the whole class lays on a solid foundation for the students of FIC.
- Cultivation plan. In the curriculum setting of FIC, in order to help students solving problems in extracurricular practice and practice activities, students need to continuously study the curriculum knowledge of mathematics, statistics, econometrics, financial engineering, etc.. At the same time, in many activities such as mathematical modeling contest and Chinese university students' innovation and entrepreneurship training program, students of FIC can be listed first and get good awards to further deepen the cultivation of "engineering".
- Scientific research practice. The every summer vacation is the busiest time for students in the FIC. When the summer vacation is approaching, students of FIC will organize their teammates to declare

summer research activities and provide data for supporting for scientific research projects. After the summer study tour, students of FIC will go to their research destinations and conduct field research activities, including questionnaires, interviews and other forms to obtain the research data they want. After data is obtained, data consolidation is needed. At this time, students of FIC can make full use of the knowledge of mathematics, statistics, econometrics, financial engineering and other courses learned in school, trying to establish the optimal model, drawing conclusions, and helping finishing the paper and research report of students. In the summer research activities, the students of FIC have greatly improved their ability to solve problems by using engineering, and have made continuous progress towards "engineering".

- Summer internship. Every sophomore of FIC, during the summer vacation will participate in the internship in financial institutions they choose such as bank of communications, securities companies, insurance companies and other institutions for internships, with their knowledge of mathematics, statistics, econometrics, financial engineering they have learned for two years. It is a more than test that can test their own capabilities and an efficient way to check leakage fill a vacancy. During the internship period of one month, the students of FIC will spontaneously learn and practice themselves by discovering their own shortcomings. Naturally, the engineering characteristics of students of FIC will also be sublimated in this internship.

D. Personalization

- Class organization. The FIC was established through the school written examination and three rounds of interview selection. In the interview process, the interviewer is not only concerned with the three figures of college entrance examination score, but also has higher requirements on individual personality characteristics, such as critical thinking and innovative thinking. Therefore, FIC is composed of thirty students with thirty different personalities, which lays on a solid foundation for the FIC students to give full play to their individual brilliance in the future.
- Class management. FIC's class management is mainly conducted in the way of students' self-management and instructor's participation. When the class management work encountered problems, not only the counselor would make suggestions, all students in the class would express their own views. They give advice for the class management work together and each suggestion is filled with each classmate's different individuality characteristic. In this way, the problems of class management can be solved most efficiently. At the same time, FIC students'

personalized characteristics have also been highlighted for FIC students to add new color.

- Life planning. FIC students have different personalized characteristics. So each person's pursuit will naturally be different. FIC students who graduate each year will take part in the postgraduate examination, hoping to further develop themselves in domestic universities. Some study abroad and serve the motherland after that. Also some of them will enter the society directly, realizes their own entrepreneurship ideal through the society which is the biggest university to train themselves. FIC students with different life plans set up their own network in different regions, and through continuous learning, mutual help and continuous progress, thus making their personalization exert the maximum effect.
- In order to promote the personalized training, the college has introduced an innovative education guidance system -- "Tutorial System",^[7] that is, a special tutor for each student, who will answer questions about the student's courses, competitions and learning life. Such system settlement is quite beneficial to the individual development of students. Teachers can train students to develop their strengths, avoiding their weaknesses and achieve different personalities in different fields according to their characteristics.

IV. CONCLUSION

A. Results of Talent Cultivation

After seven years of practice, the pilot program for the cultivation of top-notch innovative talents in finance of Hubei University of economics has made remarkable achievements in innovation and promotion, and cultivated top-notch innovative talents in the financial field who can meet the needs of the society for financial talents.

1) Remarkable innovation ability

From 2015 to 2017, the students of FIC won a total of 62 national awards and 24 provincial awards, including national English competition, translation competition, mathematical modeling competition, "foreign research society" cup writing competition and various paper competitions. Beyond that, they also have won 2 second prize and 7 third prize in American college student modeling contest and published 26 scientific research papers in various journals such as Time Finance, Contemporary Economy and Value Engineering. In 2017, students of FIC have won two national level projects, three provincial level projects and 10 university-level projects in the application of college students' innovation and entrepreneurship training projects. The proportion of scientific research projects and awards is much higher than that of other classes, and the students of FIC have proved the correctness of the training program of top-notch innovative financial talents by practice. And, in the process of continuous practice and perfection of the cultivation plan, these proportions will be able to achieve greater breakthroughs.

2) Excellent results of study

Among the FIC graduates in 2015, the proportion of college students who were admitted to 985 and 211 universities rose to 16.67% and the proportion going abroad to 20%. In the FIC of 2016, the proportion of college graduates who were admitted to 985 and 211 universities is 23.33%, while the proportion going abroad is 43.33%. In the FIC of 2017, 40% of the graduates went to 985 and 211 universities, and 13.33% went abroad. It can be seen from the data that the total enrollment rate of the FIC is increasing year by year, and the rate of studying abroad is also higher and higher, and the proportion of talents who start their own businesses and obtain employment after graduation is also high. However, no matter what path the students take, the "Four Characteristics" brought up by the school will be their great competitiveness in the future study and work life, which is the most precious wealth of their life.

B. Perfecting Suggestion

Through FIC graduates feedback, as FIC students graduated and they entered society, their study and work life show some FIC lack in the talent training plan: in terms of "Internationalization", in each year in Hong Kong and Macao travel and study Tours program, students and teachers accompanying interact together very well. However, after the study tour, the teachers did not guide the students to carry out in-depth self-analysis and thinking, which was not done well. As a result, a small number of students could not obtain as high as they should, and their progress could not reach the ideal level. In terms of "Comprehensive Qualities", though the school has carefully selected many other colleges' basic courses for FIC, such as legal foundation, accounting foundation, financial statement and other featured courses. However, because a small number of students do not pay enough attention, the mastery of these courses is not good. Over time, they will fail to show the synthesis of the training plan. On the engineering side, each FIC class will go to the bank for an internship during the summer vacation of their sophomore year. During the internship, a large number of excellent student interns emerged. However, due to the lack of guidance from teachers and mutual communication between students, students can not share their valuable experience in work, so they can not get further improvement and sublimation. In terms of personalization, FIC's counselors have always been excellent teachers and education staff. Under their guidance, FIC students will bring their strengths into full play in their fields. However, few students lack communication and communication with counselors, so counselors do not know enough about them and can not better guide their personalized

development. This is very unfavorable to the development of students.

Therefore, specific Suggestions are given based on the deficiencies: in terms of "Internationalization", after each year's study tour program, the school should give special time to hold the exchange meeting for FIC students to freely exchange their feelings of study tour and conduct profound self-analysis, which will benefit the future development of FIC students. "Comprehensive Qualities" aspects, the school could be increased by increasing the intensity and strengthening the frequency of checking classes, improving class standards to strengthen the FIC students on non-financial professional foundation course management, drawing the attention of students to the these basic courses, which are very important for the FIC students to understanding the future in other specialties and developments. In the aspect of "Engineering", the school should strengthen the guidance of the team practice teacher, and promote students to communicate with each other and share their daily experience in work. Such practice work is highly efficient. In terms of personalization, the school should promote FIC students to communicate more with their tutors, so that the tutors can better understand students and guide students' personalized development.

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