



Promote the Construction of Youth Community Innovation and Entrepreneurship Education System of Jilin Animation Institute Based on Information + Database Platform

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Abstract. With the national development entering the new stage of the “fourteenth five year plan”, under the catalysis of the application of various emerging technologies such as XR, artificial intelligence and cloud concept, various business models with great innovative value are constantly emerging, which has ushered in a period of rapid development of the cultural and creative industry, and then put forward corresponding major issues for colleges and universities that provide the main carrier of mass entrepreneurship and innovation talents. That is, how to innovate the concept, mode and mode of education in the new era, respond to the requirements and expectations of the state for the mission of higher education, and cultivate high-quality innovative and entrepreneurial talents with professional ability, strong thinking and innovative consciousness. Jilin animation college, as a private art college, summarizes 20 years of school running experience, grasps the positioning of a high-level application-oriented university, relies on the school running characteristics of “integration of learning, research and production”, explores and puts forward the “youth community” education paradigm theory and practices it, so as to provide assistance for the development of cultural and creative industries, and will also provide excellent industrial talents for the revitalization of Northeast China.

Keywords: Innovation · entrepreneurship · practice · education system · research

1 Objectives of Mass Entrepreneurship Education System Construction

The construction of “youth community” is closely combined with the school’s “fourteenth five year plan” development plan to lay a foundation for the realization of the school’s goals of high-level applied university and future industrial university, and strive to build a relatively mature educational model with Jidong characteristics and the ability to inherit Jidong culture and Jidong spirit. “Youth community” will focus on the development of multiple campuses such as Shuangyang and Jingyue in the future, take the construction of diversified projects, activities and course libraries as the core [1], take

information management as the means, and take the whole process scientific evaluation mechanism as the support, fully coordinate the high-quality teaching, scientific research and industrial resources inside and outside the school, and reasonably and scientifically build a set of work operation system.

2 Construction Principles

Centering on the party's fundamental task of Building Morality and cultivating people, learning from the working mode and internal mechanism of the teaching system, we will carry out a complete set of working systems and working systems that are curricular, systematic, institutionalized, standardized and measurable around various in class and out of class projects [2], exhibitions and activities to improve students' growth and development ability, so as to better serve the work of educating people and better respond to the actual needs of the society.

The systematization of the construction of "youth community" refers to the establishment and improvement of a four-level joint system and comprehensive management structure of schools, colleges, departments and classes based on the plans, contents, processes, mechanisms and methods for the implementation of the construction plan. Through a complete chain structure, it systematically records the implementation of the work plan, the issuance of implementation rules, the opening of course details, the evaluation of teachers' teaching activities, the certification of students' obtaining credits The registration of assessment results and other major sections. This aims to link the information system coupling between departments, coordinate the implementation of various courses, and comprehensively improve the effective implementation of construction work [3].

3 Construction Path

The construction of "youth community" is an innovative exploration of educational mechanism and an important measure of teaching reform carried out by the university after summing up years of school running experience. There is no precedent for similar institutions in China. Therefore, the implementation path of the plan should closely fit the current situation of the school development, and carry out scientific and effective demonstration around the school development plan and characteristics. Based on the research on the functions, positioning and objectives of the community, the design will focus on the path planning of the "four + one" mode, break through the "pain points" and "pain points" of the solution system one by one, and gradually improve it in operation [4].

The "four + one" mode refers to the four basic construction guarantees with the construction of the curriculum system project as the core, the establishment of a scientific education evaluation mechanism as the main line, the supporting information-based data management as the support, the design of an effective organizational structure as the basis [5], and a series of achievement systems finally operated around the "youth community".

3.1 Construction of Curriculum System Project

Ideological, political and moral quality: set up projects to strengthen education in ideals and beliefs, cultivate and practice core socialist values and ideological and moral construction. Social practice and voluntary service: programs to improve students' ability in social practice and voluntary service, and enhance their sense of social responsibility, gratitude and dedication. Academic research and innovation and Entrepreneurship: set up projects to improve academic research ability, cultivate innovation and entrepreneurship spirit, and enhance innovation and entrepreneurship ability and literacy. Culture, art and sports: to set up cultural and sports programs to improve cultural literacy, artistic accomplishment and physical fitness. Social work and Leadership: set up projects to improve the comprehensive quality and ability of leadership, coordination, communication, execution, self-service and self-management required by the backbone of students. Skills and practice: set up various projects to improve personalized skills, professional ability and post practice [6].

According to the above six types of project system, first build a qualified project, activity and Exhibition library. Through the evaluation of the existing project foundation of the school, the first batch of warehousing selection will be carried out as the basic condition for the operation of the community. At the same time, a dynamic adjustment mechanism for the project library shall be established. At the end of each semester, the evaluation shall be carried out according to the project development in the semester, the unqualified projects shall be eliminated, and new project sources shall be filled to ensure the timely effectiveness of the project.

3.2 Establishing Scientific Education Evaluation Mechanism

Scientific and effective dynamic education evaluation mechanism is the main line of community operation, and the core of the evaluation mechanism is the credit system. In addition to the credits for professional courses arranged in the teaching plan and the innovation scores for professional ability improvement, students must also complete 32 "community credits" during their school years [7]. Before graduation, students are required to obtain at least 4 "community credits" in ideological, political and moral cultivation projects, at least 4 "community credits" in social practice and voluntary service projects, at least 3 "community credits" in academic, scientific and technological, innovation and entrepreneurship projects, and at least 3 "community credits" in culture, art and sports projects. At the same time, the research of "community credits" will be included in the conditions for awarding awards and giving play to the guiding role of credits and peer influence effect.

Another main line of the credit system evaluation mechanism is the credit settings corresponding to the projects, activities and exhibitions in the project library. The project can be divided into five stars, and each level of the project corresponds to a certain class hour. The star rating of the project is estimated according to the scale [8], coverage, quality and actual effect of the activity, and class hours are set according to the practice, energy and other factors that students need to invest in participating in the project. Since there is no need to consider external factors, the dynamic equations of the evaluation mechanism are:

$$\begin{aligned} \rho \cdot V \cdot C_p \cdot \frac{dT_i}{dt} &= 0.6k_r \cdot A_d \cdot Rad + P(1 - \eta) - h_c \cdot (T_i - T_0) \cdot S - \\ &(k_{e1}T_i + k_{e2}RH_i + k_{e3}) - \frac{L}{V}C_p(T_i - T_0) - A_d \cdot (T_i - T_0) \cdot h_d - \lambda_S \cdot (P_{wu} + P_{sh}) \\ \rho \cdot V \cdot \frac{dRH_i}{dt} &= (k_{e1}T_i + k_{e2} \cdot RH_i) + [A_d \cdot m_w \cdot \sigma \cdot \psi \cdot (RH_S - RH_i)] + [L \cdot \rho \cdot \sigma \cdot \psi \cdot (RH_i - RH_0)] \\ &- (k_{e1} \cdot RH_i - k_{e2} \cdot T_i) - \rho \cdot (RH_i - RH_0) \cdot V_i - \rho \cdot (RH_i - RH_0) \cdot V_R \end{aligned}$$

3.3 Supporting Information Data Management Platform

The “youth community” work implements information management. Through the “mutual creation of the world” online platform developed by the University, the functions of online publishing of community projects, online selection and registration of students, online evaluation feedback, online class hour recording, etc. will be realized. The platform will automatically record the basic information of students, information about participating in community projects, performance information, etc., and gradually form a student growth data pool.

Through the community system, all Jidong students are included in the “mutual creation world” online platform for information management, so as to facilitate the cross domain management of multi campus, multi community and multi platform. The data generated based on the online platform for a long time will become an important accumulation of the school and play a positive role in educating people. In the future, with the further improvement and extension of the functions and attributes of the “mutual creation world” platform, Jidong students can still use the platform to maintain close contact with the school after graduation, and establish an unbreakable bond for the development of the school’s entrepreneurship, employment, industry and other systems.

Entrepreneurship, employment, industry and so on are regarded as influence variables. Applying Laplace transform, it can be listed as:

$$W_1(s) = \frac{T_1}{T_g} = \frac{K_1}{T_1s + 1}$$

4 Design of Mass Entrepreneurship and Entrepreneurship Education Management System Based on “YOUTH Community” Theory

The college innovation and entrepreneurship incubation management system aims to design an integrated system integrating the cultivation of innovation and entrepreneurship ability, the cultivation of innovation and entrepreneurship projects, the management and incubation of innovation and entrepreneurship projects. To realize such a complete system, the early design must work hard from both macro and micro perspectives. From the macro perspective, the selection of architecture, development platform, operation mechanism, module connection, etc. should be rigorous and standardized, and the reasonable design should be carried out from the perspective of software engineering; From

the micro perspective, the design of interface, code, program, document and data table should be in-depth and detailed, and the software design should be effectively improved from multiple perspectives such as CMMI, so as to ensure that the system meets the requirements of friendly interface, easy operation, perfect function, efficient operation, stable performance, safety and reliability, convenient maintenance and easy expansion.

For example, the facial features and facial contour of the 3D animation virtual face model need to be realized through deformation, but the restoration of facial expression action in the initial frame needs to be completed through facial expression action reconstruction. Here, the Laplacian coordinate recovery model is used to complete facial expression and action reconstruction, but the translation invariance of differential coordinates will lead to the fact that the Laplacian coordinate geometry cannot obtain Cartesian coordinates through reverse calculation. Therefore, the matrix coordinate transformation matrix and should be regarded as singular matrices, and the Laplacian operator should be represented by weight, and new vertices should be obtained to facilitate vector transformation of the grid, The rank of the matrix obtained from the Laplace operator of the new vertex is, However, 3D animated virtual face model has certain complexity, so it is necessary to set multiple vertex coordinates to make the face model more realistic. In order to obtain the unique solution of Cartesian coordinates of the face model, a 3D animated virtual face model with connectivity is set, and the grid vertex number and index value are set to constrain geometry. In addition, the constraint conditions for the unique solution of Cartesian coordinates can be expressed as However, 3D animated virtual face model has certain complexity, so it is necessary to set multiple vertex coordinates to make the face model more realistic. In order to obtain the unique solution of Cartesian coordinates of the face model, a 3D animated virtual face model with connectivity is set

$$\begin{aligned}
 R' M(v'_i) &= \sum_{j \in N(i)} p_{ij} (v'_i - v'_j) \\
 &= \sum_{j \in N(i)} p_{ij} [(v_i + k) - (v_j + k)] \\
 &= \sum_{j \in N(i)} p_{ij} (v_i - v_j) \\
 &= M(v_i)
 \end{aligned}$$

Number of table grids. Then the Cartesian coordinate formula can be expressed as:
B/s structure needs to be designed from three levels:

1. presentation layer: that is, the part of computing that directly interacts with people, which is the system interface. The operator can effectively operate through the interactive interface provided by the interface.
2. application layer: that is, the specific content of the operation. Based on the system, different users access different applications, which do not conflict with each other but are closely related. The basic application is the functional realization of the system, while the management application is the mechanism to control the basic application and ensure the rationality and perfection of the system function, entrepreneurship education, entrepreneurship incubation and other processes.

3. data layer: the separation of data layer and program is conducive to program independence and data security. The design of independent data layer is more conducive to the establishment of a clear, convenient and efficient system structure. The system has three types of data resources: resource data, user data and system data; These data have two attributes: preset resources (i.e. the data that exists after the program is written) and update resources (various data generated by the system, administrators, teachers and student users after the system starts running). Database is the pillar of management information system, so the design of database plays a vital role in the operation efficiency, stability, security and expansion performance of this incubation management system. For the database, the determined storage structure and scientific and reasonable physical structure design are powerful guarantees. The database design of the system defines the data relationship and field attributes according to the needs of the system, and designs the needs and permissions of users and the system from the perspective of data integrity and effectiveness.

5 Conclusions

1. The construction of the “youth community” system has broken the restrictions of colleges, majors and classes, and is a reconstruction of the existing teaching organization structure of the school.
2. In order to ensure the efficient and feasible operation of the system, the organizational structure must be redesigned around the construction objectives.

Acknowledgments. Focusing on the orientation and objectives of “youth community”, in terms of organizational structure, student associations can be used as the intermediate link to link the two systems of professional teaching and community education. The construction of student associations is closely combined with the classification of community projects, that is, the six categories of ideological growth and voluntary service correspond to each other. Under the student association, several project groups and activity groups are divided according to the needs of the project, which not only ensures the integrity of the organizational structure, but also reflects the flexibility of community operation. In the community, students can make flexible changes between associations and project groups according to their own development plans, ensuring the orderly progress of various projects and activities.

Project Fund. 2017 Jilin Province Undergraduate Higher Education Teaching Reform Key Project, Project Name: Construction and Practice of Innovation and Entrepreneurship Incubation Platform for Cultural and Creative Students, Project No.: SJ1701.

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