

Transformation of Education Model: A Case Study of Social Service Projects at Weifang University of Science and Technology

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Abstract: The transformation of the education model is of great significance for enhancing the social service capabilities of universities. Weifang University of Science and Technology, as an application-oriented undergraduate institution, has actively promoted the transformation of its education model by innovating teaching methods, optimizing curriculum systems, and strengthening faculty development. This study adopts a combination of qualitative and quantitative research methods to explore the paths and methods of education model transformation by conducting a case study on the university's social service projects. The findings provide valuable references for other institutions.

Keywords: Education model transformation, Social service capability, Application-oriented undergraduate.

1. Introduction

1.1. Research Background

The transformation of the education model is crucial for enhancing the social service capabilities of universities. With rapid social and economic development, the goal of higher education is not only to cultivate academic talents but also to develop application-oriented talents with practical skills and a sense of social service. Weifang University of Science and Technology (WUST) has made active efforts in this regard. This paper aims to explore the paths and methods of transforming education models in application-oriented universities through a case study of WUST's social service projects, providing references for other institutions.

1.2. Research Questions

This study focuses on the following questions:

- How does WUST's education model transform to enhance social service capabilities?
- What are the main challenges and solutions in the transformation process?
- What are the successful experiences and practical cases?

1.3. Research Methods

This study uses a combination of qualitative and quantitative research methods. A literature review was conducted to understand the theories and practices of application-oriented education and the enhancement of social service capabilities both domestically and internationally. Case analysis was used to conduct an in-depth study of specific projects at WUST. Surveys and interviews were conducted to gather feedback from faculty, students, and the broader community on the transformation of the education model at WUST.

2. Theoretical Foundation

2.1. Application-Oriented Undergraduate Education Theory

Application-oriented undergraduate education focuses on developing students' practical skills and social service awareness. Compared to traditional academic education, application-oriented education emphasizes alignment with societal needs through industry-academia cooperation and practical internships, allowing students to gain practical work experience during their studies.

Key aspects of application-oriented undergraduate education theory include:

Practice-Oriented: Curriculum and teaching content are closely linked to actual work requirements, emphasizing hands-on skills development.

Industry-Academia Cooperation: Collaborating with enterprises provides students with real-world work environments and projects for practical learning.

Diverse Evaluation: Evaluating students not only on academic achievements but also on practical abilities and comprehensive qualities.

2.2. Social Service Capability Enhancement Theory

Social service capability is an important reflection of a university's social responsibility. By carrying out various social service projects, universities can promote the overall development of students and enhance their own social influence and reputation. Enhancing social service capabilities requires systematic top-level design and continuous investment.

Key aspects of social service capability enhancement theory include:

Social Responsibility: Universities should actively undertake social responsibilities, serving society through education.

Capacity Building: Social service projects improve students' social practice skills and service awareness.

Resource Integration: Effectively utilizing internal and external resources to create a collaborative force for serving society.

2.3. Education Model Transformation Theory

Education model transformation involves systematic adjustments in teaching concepts, methods, and curriculum systems to meet new social demands and educational goals. The transformation process must consider multiple factors, including faculty strength, student needs, and societal expectations, and must be continuously improved through scientific evaluation mechanisms.

Key aspects of education model transformation theory include:

Drivers of Transformation: Changes in social needs, technological advancements, and updates in educational philosophy.

Transformation Strategies: Adjusting curriculum, improving teaching methods, and strengthening faculty training to achieve the transformation of the education model.

Effect Evaluation: Using scientific evaluation mechanisms to provide timely feedback and improvements, ensuring the effectiveness and quality of transformation.

3. Analysis of the Current Education Model at WUST

3.1. Overview of the University

Weifang University of Science and Technology is an application-oriented undergraduate institution dedicated to cultivating high-quality talents with innovation and practical abilities. The university actively explores educational reforms and innovations, continuously improving its teaching standards and social service capabilities.

WUST's educational philosophy is "Rooted in the Local, Serving the Society," emphasizing close integration with local economic and social development. The university has multiple specialized colleges covering various disciplines such as engineering, management, and economics, and has trained a large number of application-oriented talents with practical skills and innovative spirit.

3.2. Current Education Model

WUST has implemented several reforms in teaching methods, curriculum design, and faculty development. The university focuses on practical teaching, encouraging faculty and students to participate in research and social service projects to enhance students' comprehensive qualities and employability.

Teaching Methods: WUST employs various teaching methods such as project-based learning, case-based learning, and online teaching, emphasizing students' practical skills and problem-solving abilities. For instance, engineering students participate in real-world engineering projects, applying theoretical knowledge to practical work and enhancing learning outcomes.

Curriculum Design: The university regularly adjusts and optimizes its curriculum based on social needs and students' actual situations. Practical courses such as internships and cooperative education programs have been increased to ensure that students gain practical experience during their studies.

Faculty Development: WUST focuses on faculty development by recruiting high-level talents, providing

teacher training, and encouraging faculty participation in social service projects. The university regularly holds teaching seminars and training sessions, inviting industry experts and renowned academics to provide training for faculty, enhancing their professional skills and teaching abilities.

3.3. Current Social Service Initiatives

WUST actively engages in various social service projects, including technological services, cultural dissemination, and community service activities. These projects not only serve local economic and social development but also provide students with ample practical opportunities.

Technological Services: The university collaborates with local enterprises on technological research and consultancy services, helping businesses solve technical problems and enhance their innovation capabilities. For example, WUST partnered with a local machinery manufacturing company on a "Smart Manufacturing Technology Development Project," providing technological research and consultancy services that improved the company's production efficiency and product quality.

Cultural Dissemination: WUST actively participates in local cultural events to promote local culture. For instance, the university organizes students to participate in Weifang's traditional cultural festival activities, showcasing traditional crafts and performances to promote cultural heritage.

Community Service: The university organizes faculty and students to engage in various community service activities, providing services to the community. For example, WUST students volunteered in a "Community Service Project," offering free tutoring, health consultations, and legal advice to residents, which was well-received by the community.

4. Case Study: Rural E-Commerce Entrepreneurship Training Project at WUST

4.1. Case Selection and Background

This study selects the "Rural E-Commerce Entrepreneurship Training Project" at WUST as a case study. The project aims to help rural youth acquire e-commerce skills and achieve entrepreneurship through professional training and guidance.

The Rural E-Commerce Entrepreneurship Training Project is a social service initiative jointly implemented by WUST and the Weifang Municipal Government. The project provides free training, entrepreneurial guidance, and financial support to help rural youth acquire e-commerce skills, achieve entrepreneurship, and promote rural economic development and farmers' income growth.

4.2. Case Analysis

The project emphasizes the combination of theory and practice in its design and implementation. The training content covers various aspects of e-commerce operations, market marketing, customer service, etc., with experts from e-commerce enterprises invited to provide lectures and guidance. Through theoretical learning and practical operation, trainees master the basic skills of e-commerce operations, with many successfully achieving entrepreneurship.

Project Design: The design of the Rural E-Commerce Entrepreneurship Training Project closely aligns with market

demands and has strong practical relevance. The project team conducted market research to understand the training needs and market opportunities for rural youth, formulating detailed training plans and implementation schemes.

Training Content: The training content includes platform operations, product photography and editing, online marketing strategies, customer service skills, etc. During the training, trainees not only learn theoretical knowledge but also engage in extensive practical operations, enhancing their practical abilities.

Expert Guidance: The project invites several experts from e-commerce enterprises to provide lectures and guidance. Through lectures, workshops, and case studies, the experts share practical experience in e-commerce operations and address the issues trainees encounter during entrepreneurship.

Entrepreneurial Support: The project offers entrepreneurial guidance and financial support to trainees. After completing the training, trainees receive continuous guidance and assistance from the project team and have the opportunity to apply for start-up funds, reducing the risks associated with entrepreneurship.

4.3. Case Summary

The project's successful experiences include:

Market Demand-Oriented: The project design closely aligns with market demands, ensuring the practical relevance and targeted nature of the training content.

Personalized Guidance: The training process focuses on trainees' personalized needs, providing targeted guidance and support to enhance training effectiveness.

Resource Integration: The project leverages resources from enterprises and the government, enhancing the training's effectiveness and sustainability.

The project also faced challenges such as varying trainee backgrounds and limited training resources. To address these issues, the project team adopted flexible teaching strategies and resource integration measures to improve training effectiveness. For instance, personalized training plans were developed based on different trainee backgrounds, ensuring that each trainee could keep pace with the training. Additionally, the project team secured more resource support through collaboration with local enterprises and the government, ensuring the project's smooth implementation.

Through the Rural E-Commerce Entrepreneurship Training Project, WUST has not only helped numerous rural youths achieve entrepreneurial dreams but also promoted local economic development and farmers' income growth, demonstrating the university's capability and responsibility in social service.

5. Paths and Strategies for Education Model Transformation

5.1. Specific Paths for Education Model Transformation

Innovating and Reforming Teaching Methods: WUST should continue to promote the innovation of teaching methods, adopting diversified teaching approaches such as project-based learning, case-based learning, and online teaching to enhance students' learning interest and effectiveness. Specific measures include:

(1) **Project-Based Learning:** Design and implement actual projects to allow students to learn through practice, enhancing hands-on skills and problem-solving abilities.

(2) **Case-Based Learning:** Introduce real cases combined with theoretical teaching to help students understand and apply the knowledge they have learned.

(3) **Online Teaching:** Utilize modern information technology to conduct online courses and blended learning, broadening students' learning channels and resources.

Optimizing and Improving the Curriculum System: Adjust and optimize the curriculum system based on social needs and students' actual situations, increasing the proportion of practical courses to ensure students accumulate practical experience during their studies. Specific measures include:

(1) **Curriculum Adjustment:** Timely adjust and update curriculum content based on market and industry changes to ensure the curriculum's foresight and practicality.

(2) **Practical Courses:** Increase practical courses and internship opportunities such as cooperative education programs and practical internship courses to enhance students' practical abilities.

(3) **Interdisciplinary Courses:** Offer interdisciplinary courses to cultivate students' comprehensive qualities and innovative abilities.

Faculty Development: Strengthen faculty development to enhance teachers' practical abilities and teaching levels, encouraging them to participate in social service projects and provide better guidance for students. Specific measures include:

(1) **Faculty Training:** Regularly organize faculty training to improve teachers' professional literacy and teaching abilities.

(2) **Practical Experience:** Encourage teachers to participate in enterprise practice and social service projects to accumulate practical experience and improve teaching quality.

(3) **Team Building:** Strengthen teaching team building to promote cooperation and exchange among teachers, jointly improving teaching quality.

5.2. Strategies for Enhancing Social Service Capabilities

Building a Comprehensive Social Service Project System: Systematically design and plan social service projects to ensure their continuous advancement and effectiveness. Specific measures include:

(1) **Project Planning:** Develop detailed project planning and implementation plans to ensure scientific and operational feasibility.

(2) **Project Management:** Establish project management mechanisms to clarify responsibilities and ensure smooth project implementation.

(3) **Effectiveness Evaluation:** Regularly evaluate project effectiveness and adjust and improve project content and implementation methods to ensure sustainable development.

Strengthening Cooperation and Interaction with Society: Actively cooperate with the government, enterprises, and the community to integrate social resources and jointly promote the development of social service projects. Specific measures include:

(1) **Cooperation Mechanism:** Establish stable cooperation mechanisms to ensure long-term and effective collaboration.

(2) **Resource Integration:** Fully utilize social resources such as enterprise technology and financial support to enhance project implementation effectiveness.

(3) **Interaction and Communication:** Regularly organize exchange activities with various social sectors to promote mutual understanding and cooperation, jointly promoting the

development of social service projects.

Improving School Management and Operation Efficiency: Optimize management processes and mechanisms to enhance the support and guarantee capabilities of the university for social service projects. Specific measures include:

(1) **Management Processes:** Optimize project management processes to simplify approval procedures and improve implementation efficiency.

(2) **Mechanism Building:** Establish and improve project management mechanisms such as project approval, fund management, and effectiveness evaluation to ensure scientific management.

(3) **Support Measures:** Provide necessary support and guarantees such as funding, personnel allocation, and facilities to ensure smooth project implementation.

5.3. Promotion and Application of Successful Cases

Promotion Strategies for Successful Cases: Promote and publicize successful cases through various channels to enhance the university's social influence and reputation. Specific measures include:

(1) **Media Publicity:** Use newspapers, television, the internet, and other media to widely publicize successful cases, increasing the project's visibility and influence.

(2) **Experience Sharing:** Organize experience sharing sessions and seminars to exchange and promote successful experiences, facilitating learning and reference by other institutions.

(3) **Case Publication:** Compile successful cases into books or publications for reference and learning by educators and various sectors of society.

Learning and Application by Other Application-Oriented Universities: Summarize successful experiences to provide references for other application-oriented universities and promote the development of application-oriented education as a whole. Specific measures include:

(1) **Experience Summary:** Systematically summarize the experiences and lessons of successful cases to form comprehensive research reports and guides.

(2) **Promotion and Application:** Promote successful experiences to other universities through training, lectures, and exchanges to facilitate the development of application-oriented education.

Continuous Improvement: Continuously improve and refine the promotion and application of successful cases based on feedback and suggestions from other universities to enhance overall education quality.

6. Conclusion and Prospects

6.1. Research Conclusions

Through the case study of social service projects at Weifang University of Science and Technology, it is evident that the transformation of the education model is crucial for enhancing universities' social service capabilities. WUST has actively promoted the transformation of its education model by innovating teaching methods, optimizing curriculum systems, and strengthening faculty development, providing better learning and development platforms for students. Additionally, the university has accumulated valuable experience in social service projects, offering valuable

references for other application-oriented universities.

6.2. Research Prospects

Future research should further explore the specific paths and methods of education model transformation, particularly on how to better integrate social resources and enhance school management efficiency. Continuous research and practice are expected to provide more valuable references for the education reform and social service capability enhancement of application-oriented undergraduate universities.

In the future, WUST should continue to deepen the transformation of its education model and enhance its social service capabilities, contributing more to local economic and social development. Meanwhile, the university should actively explore and innovate, forming more replicable and promotable successful experiences, providing reference and demonstration for the application-oriented undergraduate education nationwide and even globally.

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