

The Application of Service Learning in the Cultivation of University Students' Innovation Literacy

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Abstract: The issue of how to cultivate college students' innovation literacy is explored in this study by constructing a service learning model that is optimized by the amoeba management model, with the aim of providing a new idea and method for the innovation education of college students. Significant effects and important theoretical and practical value are attributed to the model.

Keywords: Service learning; Amoeba management; College students; Innovation literacy

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Introduction

Service learning is an education model that combines learning and service, which allows students to enhance their knowledge, skills, attitudes, and values by reflecting on their own experiences in participating in social service (Eyler & Giles, 1999). Service learning is an education method that is conducive to innovation, which can provide college students with an open, diverse, practical, and reflective learning space, stimulate their innovation motivation, and cultivate their innovation ability (Furco, 1996). This study introduces the amoeba management model into the education field for the first time, aiming to explore the application of the amoeba management model in service learning, and its impact on college students' innovation literacy.

1. Theoretical Model Construction

This study uses the amoeba management model as the theoretical basis, which is a management method that mainly applies to the field of enterprise management. It divides the organization into several small units, each group or unit is responsible for a business or a part of the business independently, has an independent profit and cost management system, can autonomously formulate business plans and goals, and evaluate and adjust the business results. This model is conducive to innovation, can improve the organization's flexibility, efficiency and competitiveness, and promote the organization's sustainable development (Inamori, 2011; Li, 2014).

At present, there is a lack of research on the combination of the amoeba management model and service learning at home and abroad. Therefore, based on the relevant theories of the amoeba management model and service learning, this study constructs a theoretical model suitable for the cultivation of college students' innovation literacy, namely the service learning model optimized by the amoeba management model. This model introduces the concept and method of the amoeba management model into the organization and implementation process of service learning, with the aim of improving the effect and quality of service learning, and then enhancing the innovation literacy of college students. The core content of this model is to divide the service learning process into six steps, namely investigation, preparation, participation, reflection and connection, evaluation, presentation and celebration. Each step applies the relevant principles and skills of the amoeba management model, forming a complete service learning cycle.

2. Research Design and Implementation

2.1 Research Object and Sample Selection

This study adopted a quasi-experimental research method, that is, without randomly assigning experimental and control groups, it compared and analyzed the changes in college students' innovation literacy before and after the application of service learning. Specifically, this study conducted an innovation literacy test on all participants before and after the service learning, to measure their levels in three aspects: innovation personality, innovation thinking, and innovation practice. At the same time, this study also used semi-structured interview and participatory observation methods, to conduct in-depth interviews and observations with some participants and instructors, to collect their feelings, experiences and suggestions on service learning, as well as the role and impact of the amoeba management model in service learning. The research object of this study was all undergraduate students of the ideological and political education major in the first (61 people) and second (65 people) grades of a university in Shandong Province, who participated in the "College Student Growth Training Camp" project, which was the practical activity of service learning. This study used the method of total sampling, and took all participants as the research sample, to ensure the universality and representativeness of the research.

2.2 Implementation Process

This study's process encompassed six phases:

Phase 1: Investigation. Participants underwent a background survey and an innovation literacy test to assess their innovative traits and establish a baseline for later analysis.

Phase 2: Preparation. Before the start of service learning, this study conducted a series of preparatory work for all participants, including recruiting group members, training peer leaders, and developing group plans. The recruitment of group members is conducted through voluntary registration, with each group consisting of approximately 12 members divided into 10 groups. The training of peer group leaders is conducted through the guidance and demonstration of guidance teachers. Each group is equipped with two students of the same grade as teaching assistants, responsible for leading each group member to participate in the design and implementation of activity plans. Before each activity, the guidance teacher will provide guidance and training to the student teaching assistants. The development of group plans is carried out through group discussions and consultations. Each group determines the theme, objectives, content, and methods of service learning based on their own characteristics and needs, while also considering the principles and techniques of the amoeba management model.

Phase 3: Participation. After the start of service learning, this study conducted continuous tracking and supervision of all participants to ensure the smooth progress of service learning. Each group carried out about five service learning activities according to their own plan, with each activity lasting 2-3 hours on or off campus. The content included group games, communication and sharing, and the methods included group discussions, role-playing, etc. The goal was to improve the innovative personality, innovative thinking, and innovative practical abilities of college students. During the participation process, each group applied the relevant principles and techniques of the Amoeba management model, such as conducting goal management before and after each activity to clarify the purpose and significance of the activity, as well as the expected and actual results of the activity; Conduct meeting management before and after each event to communicate and coordinate the preparation and execution of the event, as well as summarize and provide feedback on the event. The instructor observes and evaluates the activities of each group to understand the progress and problems of the activities, as well as the strengths and weaknesses of the activities.

Phase 4: Reflection and Connection. Post-activity, groups engaged in critical analysis to draw lessons and insights, again utilizing amoeba management methods to refine activities and foster collaborative innovation.

Phase 5: Evaluation. A second innovation literacy test and service learning reports assessed the impact of the service learning on students' innovative capabilities, using amoeba management for self-assessment.

Phase 6: Display and Celebration. Achievements were publicly presented, and gratitude was expressed towards all involved parties to celebrate the service learning journey and its contributions to students' innovative literacy and community spirit.

Each phase built on amoeba management techniques to enhance college students' innovation literacy through service learning, with continuous assessment and adaptation to foster improvement and collaboration.

3. Effect Evaluation and Suggestions

Through the empirical test and evaluation of the effect and impact of the service learning model optimized by the amoeba management model, it is found that: there is a significant positive correlation between service learning and innovation literacy, that is, there is a significant difference in the level of innovation literacy of college students before and after participating in service learning,

and the higher the degree of participation in service learning, the higher the level of innovation literacy; there is a significant positive correlation between the amoeba management model and innovation literacy, that is, the level of innovation literacy of college students in the service learning group that uses the amoeba management model is higher than that of college students in the service learning group that does not use the amoeba management model, and the higher the degree of application of the amoeba management model, the higher the level of innovation literacy.

Therefore, service learning and the amoeba management model have a significant positive effect on the improvement of college students' innovation literacy, which indicates that service learning under the amoeba management model is an effective model and tool for cultivating innovation literacy. In order to better apply service learning and the amoeba management model in the cultivation of college students' innovation literacy, the following practical suggestions are put forward: first, improve the participation and initiative of service learning. Measures such as strengthening publicity and guidance, providing diversified and flexible service learning opportunities, and establishing incentive and reward mechanisms should be taken to stimulate college students' interest and motivation for service learning. Second, introduce the amoeba management model to optimize service learning. The concept and method of the amoeba management model should be introduced into the organization and implementation process of service learning, such as treating the service learning group as an independent operating unit, giving group members more autonomy and responsibility, and encouraging group members to conduct goal management, meeting management and other activities, to enhance the collaboration and innovation of service learning. Third, strengthen the reflection and connection of service learning. Through group discussion, personal journal, teacher feedback and other ways, review and analyze the process and results of service learning, to extract the experience and lessons of service learning, as well as the gains and feelings of service learning.

References:

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