

The Effectiveness of Structured Discussion in Cultivating the Core Competencies of Innovative Talents in the New Era: A Case Study of Second Language Courses

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Abstract: Facing the profound and complex changes in the era, higher education has been entrusted with the mission of cultivating talents capable of adapting to rapid development and achieving a high level of self-reliance and self-improvement. To meet this challenge, this article combines practical cases to explore the core competencies that innovative talents should possess in the new era, as well as the teaching design of structured discussions that help improve core competencies. By conducting a detailed analysis of the practice of structured discussions in “Basic English Reading II”, this article aims to provide beneficial theoretical guidance and practical experience for the cultivation of innovative talents.

Keywords: Innovative Talents in the New Era; Structured Discussion; Higher Education; Second Language Teaching

1. Core Competencies of Innovative Talents in the New Era

To design teaching activities that foster innovative talents, it is important to first clarify the qualities that innovative talents should possess. The qualities of innovative talents in the new era are diverse. This article, in conjunction with the report released by the Chinese Academy of Sciences in 2021^[1], divides the core competencies into three aspects:

The first aspect is intelligence. Innovative talents need to have logical thinking and theoretical abstraction abilities to deeply understand complex problems and propose innovative solutions^[1]. Meanwhile, with the knowledge, theories, methods, technologies, and means of different disciplines penetrating extensively in a wide range of disciplines, improving the importance of the ability to integrate interdisciplinary knowledge and knowledge transfer^[2]. In addition, non-logical thinking abilities, such as intuition, inspiration, and insight, are conducive to the generation of breakthrough ideas in the innovation process; critical thinking and problem-solving abilities enable innovative talents to deeply analyze existing knowledge and viewpoints, and then propose feasible solutions when facing complex problems^[3].

As for the interpersonal cognition, one must first have a proper self-identity and a positive perception of one’s ability, because innovation entails numerous attempts and mistakes. The creative talents should always have confidence and motivation in the face of all the challenges and failures and should also be able to regulate the direction^[1]. Also, the skill of communication and the formation of the cooperation network is also crucial for innovative talents. Thus, innovative talents should be able to communicate with others and manage resources in order to solve tasks and find the partners on the wider range in order to create innovative partnerships to support the project.

Concerning the values and attitudes, emotional intelligence and stress coping are critical skills for innovative talents^[4]. Innovative talents can only keep on pushing forward the process of innovation by keeping on the positive attitude when encountering failures and by working hard while being disciplined. Meanwhile, innovative talents should approach their activities with a rational and practical mindset, venture into the unknown, and have the intrinsic motivation to see exploration as a way of self-fulfillment. Also, innovative talents should have a sense of responsibility for the society, then understand and accept the effects of innovative activities on society and the environment.

2. Practice of Structured Discussion in the “Basic English Reading II” Classroom

2.1 Course Background and Student Analysis

“Basic English Reading II” is a course offered in the second semester of the first academic year of university. Students have already mastered the ability to locate, compare the correctness, and sort out the logical relationship between detailed information in the prerequisite course. In order to improve students’ logical thinking and critical thinking, open-ended questions have been used as regular after-class as-

signments in “Basic English Reading II”. In the 2022-2023 academic year, students scored the lowest in comparative questions in this course. Students’ low-scoring homework often only summarizes the problems of the compared parties and only summarizes the comparison between the two parties without comparison, when the comparison of complex ideas involves summarizing, inducing, analyzing, synthesizing, and other thinking processes. It shows that students’ knowledge transfer and logical thinking abilities urgently need to be improved. In order to pave the way for students to develop the ability to compare in subsequent learning and help students develop core competencies of innovative talents in the new era, the course designed a structured discussion module in the 2024 teaching period.

2.2 Design of the Structured Discussion Module

In innovative talents developing, the main task of lower-grade courses is to enlighten innovative consciousness^[1]. The design aims to cultivate students’ abilities in knowledge integration and transfer, logical thinking, and interdisciplinary awareness. By doing so, the module enables students to approach topics and practical problems with intersecting and penetrating thinking. This approach allows them to find new perspectives and propose innovative solutions when faced with challenges.

The structured discussion module covers six class periods, of which the first four are the material analysis stage, and the last two are the structured discussion stage, with the discussion topic being “The Similarities and Differences of the Development of Emerging Technologies Today and in the Past.” The material is an academic explanatory text titled “Radio Automation.”

(1)The material analysis stage is divided into three rounds of learning. The first round focuses on language points and content summary. The second round focuses on a deeper understanding and analysis of the material content. In this round, students start to associate whether there are similar situations in today’s world to the 1940s in the material. The third round focuses on the analysis of the article structure, guiding students to analyze the logical relationship between paragraphs.

(2)The structured discussion stage is divided into four parts. In the first part, the teacher launches the discussion project, introduces the theme, purpose, and process of the structured discussion to students. Students choose a topic, select an emerging technology in the present for comprehensive comparison. Subsequently, the teacher guides students to divide the work within the group through discussion, clarifying that each group member is an active material searcher and opinion contributor, and on this basis, group members freely choose to serve as the group leader, timekeeper, reporter, or recorder. In the second part, students discuss the similarities and differences between the past and present in groups. Students first engage in non-communicative individual thinking, then in non-interruptive round-robin speaking, and finally in collective discussion, classifying and summarizing the discussion results. In the third part, students further organize the discussion results, choosing one of the mind maps, such as fishbone diagrams or tree diagrams, to draw the report outline on paper. In the fourth part, each group takes turns to report the discussion results, and after the report, other groups ask questions and evaluate the members of the reporting group.

3. Evaluation of the Implementation of Structured Discussions

In terms of intelligence, structured discussions have received positive feedback in enhancing students’ abilities to integrate and transfer information. Compared with the student assignments from the 2022-2023 academic year, the students’ abilities to integrate information and transfer information have shown significant improvement in the reports of this discussion, reflecting the growth of students’ logical thinking and interdisciplinary learning abilities. In terms of integrating information, most groups were able to organize and integrate complex and non-professional information from the internet for the selected topic, summarize it according to task requirements, and integrate information and viewpoints from different members into a systematic diagram for presentation. In terms of transferring information, students were able to guide the entire logical discussion by transferring the logical framework from the reading material, which prevented most groups from only summarizing the compared parties and from only summarizing the comparison between the two parties without comparison. In the learning archives of those weeks, “connecting knowledge” and reflections on the logic of the report content were mentioned multiple times, showing that students’ interdisciplinary learning awareness and metacognitive abilities have been enhanced.

In the other two dimensions, on the interpersonal cognition dimension and the emotional value dimension, a large number of students gave positive evaluations of the structured discussions in their learning archives for those weeks. By sorting out the learning archives of those weeks, it was found that the most frequently mentioned feeling about structured discussions was that the new group division method

improved the efficiency of coordination and cooperation and the participation of members. It is also worth highlighting that many students mentioned they would try to use this division method when conducting future group activities. On the value and attitude dimension, after the teaching weeks of structured discussions, students' participation and enthusiasm when engaging in more difficult and complex "big" activities have further increased, indicating that students' spirit of diligence and self-discipline as well as the internal driving force to pursue excellence have also been enhanced in the process of solving difficult problems.

4. Conclusion

The structured discussion module has been proven to be effective in enhancing the students' information integration and transfer skills, their interdisciplinary learning skills, and their problem solving and teamworking skills. Through comparison of the students' historical assignments with this report, and through the analysis of the feedback from the learning archives and subsequent classroom performance, the author has validated the efficacy of this teaching design in nurturing talents for the new era. But we should also admit that the creation of innovative talents is a slow and multilayered process which implicates the efforts of the universities, teachers, and the entire society. It is expected that the findings of this paper may offer some implication and suggestion to the teaching design in second language courses in higher education.

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