## 摘要

学术英语是理工科研究生英语学习的"刚性需求",然而目前相关研究视角多局限于外语教学内部。本研究以外语教育规划为视角,从价值分析、目标分析和执行分析三方面建构中国理工科研究生学术英语素养的本土理论,拓展研究视角,丰富现有理论,并从实践角度,回答三大基础问题:为什么教、教什么、如何教,以咨借鉴。

本研究旨在回答以下三个研究问题: (1) 理工科研究生学术英语素养的价值建构如何? (2) 理工科研究生学术英语素养的内涵要素有哪些? (3) 理工科研究生学术英语素养发展的影响因素有哪些?影响路径如何?

本研究采用定性、定量、定性的混合路径研究,以及探索性、验证性、阐释性的线性研究设计,采用文献法、探索性访谈、话语分析、问卷调查、深度访谈的研究方法,最终实现定性研究与定量研究之间的三角验证,保证研究结论的信效度,并通过遵守自愿、保密、忠实三大原则,确保本课题的研究伦理。

本研究首先在理清三个核心概念"理工科研究生"、"外语教育规划"及"学术英语素养"的基础上,梳理相关理论,建立了理工科研究生学术英语素养概念框架。其次研究者进行了探索性数据采集,包括国家及高校的规划文本、对理工科研究生、研究生导师及学术英语教师进行的探索性访谈,为后续研究做准备。再次,本研究以话语分析为基础,结合访谈法,分析相关政策文本和探索性访谈数据,回答第一个研究问题:即理工科研究生学术英语素养的价值建构。此外,研究者汇报了学术英语素养内涵要素量化研究工具的修编及验证模型的建构过程,回答第二个研究问题,即理工科研究生学术英语素养的内涵要素。最后,研究者汇报了学术英语素养影响因素的量化研究工具修编和验证模型建构,以及影响因素与内涵要素间路径模型的建构过程,并结合定性数据,回答第三个研究问题,即理工科研究生学术英语素养发展的影响因素和影响路径。

本研究得到以下研究结论: (1) 我国理工科研究生学术英语素养价值建构在宏观层面突出的表现为主体性丧失,在中观层面没有很好地融入研究生培养体系及高校国际化进程,在微观层面,没有很好地将"工具价值"转化为"人本价值"; (2) 理工科研究生学术英语素养内涵要素体现为静态和动态两个层次。在静态层次上,理工科研究生学术英语素养包括学术英语知识、学

术英语技能和学术英语能力三个方面,在动态层次上,三方面要素通过实践相互转化;(3)理工科研究生学术英语素养的影响因素包括学术英语信念、学术英语实践、学术英语环境和英语学习经历,其中学术英语信念作用最大,无论是内涵要素还是影响因素都并非孤立存在,不仅仅需要重视单个因素的直接效应,更要重视各因素在影响路径中的转化作用。基于以上结论,研究者修订了理工科研究生学术英语素养的概念框架,建构了理论模型。

本研究在理论层面,尝试以外语教育规划为视角,从中国理工科研究生学术英语素养及发展实践中建构相关理论,以期理顺我国研究生学术英语素养在外语教育规划宏观、中观及微观层面各要素间的关系,指导实践。但是,本研究依然存在研究对象范围有待扩大、研究内容有待深化以及研究工具有待改进等局限。今后可采取针对性的措施,如将研究对象拓展至更多地区和类型院校中的理工科研究生、进一步探讨理工科研究生学术英语素养内涵要素的转化机制、各影响因素的协同作用机制等课题、加强语料库技术、参与式观察、跟踪调查等研究方法的综合运用等,以便更加深入地探寻这一课题,完善现有理论,更好地指导实践。

关键词:外语教育规划:理工科研究生:学术英语素养

## **Abstract**

Academic English learning is a "must" for graduate students majoring in science and engineering. But the present studies restrict the research interest within language learning and teaching. This study intends to construct China's local theory for academic literacies for Chinese graduate students majoring in science and engineering by conducting the values analysis, the objective analysis and the implementation analysis from the perspective of foreign language education planning to broaden the research horizon and enrich existing theories. This study also sheds some light on three basic questions in practice: why to teach, what to teach and how to teach it.

The purpose of this study is to answer the following three questions: (1) What is the value construction of academic English literacies for graduate students majoring in science and engineering? (2) What are the key elements of academic English literacies for Chinese postgraduate students majoring in science and engineering? (3) What are the influencing factors of academic English literacies for Chinese students majoring in science and engineering? What is the effective path?

In view of the above-mentioned research questions, this research adopts a mixed- method approach. It employs a "qualitative-quantitative-qualitative" sequential research design. By literature analysis, exploratory interviews, discourse analysis, questionnaires and in-depth interviews, the research realizes triangulation between various research methods to ensure the reliability and validity. Besides, this study conforms to the ethics of researches by adhering to the principles of willingness, confidentiality and fidelity.

Firstly, based on the three core concepts of "Graduate students majoring in science and engineering", "Foreign language education planning"and"Academic English literacies", this study proposes relevant theories and establishes the conceptual framework of academic English literacies for graduate students majoring in science and engineering. Secondly, the researcher conducts exploratory data collection, including national planning texts, the university

planning texts, and the exploratory interview data with graduate students, their tutors, and academic English teachers in preparation for the follow-up research. Thirdly, this study answers the first research question by a discourse analysis of relevant planning documents and exploratory interview data, namely, the value constructions of academic literacies. Fourthly, the researcher answers the second question by the construction of the verification model, namely, the key elements of academic English literacies for graduate students majoring in science and engineering. Finally, the researcher answers the third question by the construction of the verification model and the path model with reference to the qualitative analysis of interview data, namely, the influencing factors and the influencing path of academic English literacies.

This study draws the following research conclusions: (1) The values construction of academic English literacies for Chinese graduate students majoring in science and engineering suffers from the loss of subjectivity at the national level, and insufficient integration into the postgraduate cultivation system and the internationalization process at the university level, and the poor transformation of "instrumental values" to "humanity values" at individual level. (2) The elements involved in academic English literacies of science and engineering graduates are presented at two levels: the static level and the dynamic level. At the static level, the academic English literacies for graduates majoring in science and engineering include academic English knowledge, academic English skills and academic English ability. At the dynamic level, the three elements are transformed through practice. (3) The influencing factors include academic English belief, academic English practice, academic English environment and English learning experience. Among them, academic English belief has the greatest effect. We should not only pay attention to the direct effect of each individual factor, but also the transformation effect of all the factors in the impact path. Based on the above conclusions, the researcher revises the conceptual framework of academic English literacies for graduates majoring in science and engineering and constructs a theoretical model.

Theoretically, this study attempts to explore the theory of foreign language education from the perspective of foreign language education planning in order to rationalize the academic English literacies of postgraduate students in China at

the macro, meso and micro level of foreign language education planning and guide practice. However, this study still has limitations on the scope, the content, and the research instrument. In the future, we can take measures such as expanding the research subjects, further exploring the transformation mechanism, applying more research instruments such as coups technology, participatory observation, field study in order to explore this topic in more depth, improve the existing theories and better guide practice.

**Keywords:** Foreign Language Education Planning; Graduates majoring in science and engineering; Academic English Literacies