

# Research on Strategies for Improving Information Literacy Education Quality in Universities of Ethnic Regions under Multicultural Backgrounds

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**Abstract:** University students in ethnic regions are the main force in the construction and development of these areas. Their level of information literacy not only affects their personal future development but also impacts the modernization process, social stability, and prosperity of ethnic regions. This paper, based on cultural adaptation theory, examines the current state of information literacy education in universities in ethnic regions, students' attitudes towards information literacy, influencing factors, and existing problems, all within a multicultural context. Furthermore, it proposes strategies and suggestions for effectively improving the quality of information literacy education in universities in ethnic regions.

**Keywords:** Information Literacy; Universities in Ethnic Regions; Cultural Adaptation

## 1. Introduction

Information literacy, also translated as information competence, is defined by the American Library Association (ALA) as the ability of an individual to recognize the need for information and to locate, evaluate, and use the needed information effectively. At its core, it is an adaptation skill to the information society, including the abilities to identify, acquire, evaluate, judge, collaborate, communicate, process, and create information. These skills enable individuals to solve problems, engage in critical thinking, make decisions, and innovate, representing essential capabilities for lifelong learning.<sup>[1]</sup>

Students in universities of ethnic regions are the main force behind the construction and development of these areas. Their information literacy level is crucial not only for their personal future development but also for the modernization process, social stability, and prosperous development of ethnic regions. Therefore, improving the quality of information literacy education and enhancing students' information literacy in these universities is essential for the high-quality development of ethnic regions.

In universities in ethnic regions, minority students engage in cross-cultural learning and living within a multicultural background, making cultural adaptation an important factor influencing their information literacy construction and development. This paper, based on cultural adaptation theory, analyzes the current state of information literacy education in universities in ethnic regions, students' attitudes towards information literacy, and existing problems. It attempts to propose strategies and suggestions for effectively improving the quality of information literacy education in these universities.<sup>[2]</sup>

## 2. Overview of Cultural Adaptation Theory

Anthropologist Redfield first defined the concept of "cultural adaptation" in his 1936 research report "Memorandum for the Study of Acculturation," categorizing related research topics and methods. This work is considered foundational for future studies on cultural adaptation. After the mid-20th century, scholars successively proposed theoretical models of cultural adaptation. Notable examples include Lysgaard's "U-Curve Hypothesis" and Gullahorn's "Double U-Curve Hypothesis" (also known as the "W-Curve Hypothesis"); psychologist Colleen Ward divided the cultural adaptation process into four stages, proposing the "Cultural Adaptation Process Model"; scholar Dieter Danckwortt analyzed

the definition, characteristics, domains, influencing factors, and processes of cultural adaptation, proposing the "Theory of Adaptation to Foreign Cultures"; and scholar John W. Berry borrowed theories and methods from anthropology to propose a cross-cultural adaptation model.

### ***2.1 Cross-Cultural Adaptation Model***

Scholar Berry, drawing on anthropological theories and methods, proposed a two-dimensional cultural adaptation model. This model classifies cultural adapters based on two dimensions: the tendency to maintain their own traditional culture and identity, and the tendency to interact with other ethnic cultural groups. The model categorizes cultural adapters into four types: Assimilation, Separation, Integration, and Marginalization.<sup>[3]</sup>

In the "Integration" model, individuals value both maintaining their traditional cultural characteristics and interacting with other cultural groups. In the "Assimilation" model, individuals are not inclined to maintain their original cultural identity and are eager to engage with other cultural groups. In the "Separation" model, individuals prioritize their original traditional cultural characteristics and are unwilling or avoid interacting with other cultural groups. In the "Marginalization" model, individuals are neither willing to maintain their traditional culture nor accept other group cultures.

When mainstream culture adopts a multicultural strategy, non-mainstream cultural groups tend to adopt an integration strategy. In this scenario, some aspects of the cultures converge, sharing certain traits while retaining their unique cultural features, making this the best type in the cultural adaptation process.<sup>[4]</sup>

### ***2.2 Cultural Adaptation Process Model***

Psychologist Colleen Ward studied the influencing factors of cultural adaptation, believing that the process should consider changes at both the individual psychological and socio-cultural levels, i.e., both individual and social factors. Ward proposed the "Cultural Adaptation Process Model," which divides cultural adaptation into four stages: "cross-cultural transition," "stress and capability deficits," "emotional, cognitive, and behavioral responses," and "manifestation of cultural adaptation outcomes." The initial stage involves cultural adapters undergoing cross-cultural transition. The second stage is characterized by varying degrees of discomfort or confusion due to stress, capability deficits, and other factors in the new environment. In the third stage, cultural adapters respond emotionally, cognitively, and behaviorally to the stress and capability deficits. The fourth stage is the manifestation of cultural adaptation outcomes, reflected in psychological and socio-cultural changes.

## **3. Current Status of Information Literacy among University Students in Ethnic Regions**

### ***3.1 Survey Design and Data Collection***

A survey was conducted targeting students from a university in an ethnic region, focusing on four aspects: information awareness, information knowledge, information skills, and information ethics. The survey aimed to understand the overall status of information literacy among university students in ethnic regions. Quantitative analysis results served as a reference basis, with in-depth interviews conducted specifically with ethnic class students. Based on cultural adaptation theory, the survey analyzed and explained the attitudes and tendencies, influencing factors, and existing problems regarding information literacy education among university students in ethnic regions. It also explored strategies and suggestions for effectively improving the quality of information literacy education. Information literacy questionnaires were distributed through a literature search practice course, collecting 15,370 valid responses. The respondents comprised 0.29% freshmen, 2.74% sophomores, 61.2% juniors, 35.69% seniors, and 0.08% graduate students.<sup>[5]</sup>

### ***3.2 Current Status of Information Literacy among University Students in Ethnic Regions***

Survey results indicated that 90.67% of students recognize information as the primary production factor in today's society and actively seek information when needed, demonstrating strong information awareness and sensitivity to information needs. However, 61.18% of students reported a lack of understanding of the methods and channels for obtaining information. In the multiple-choice question

"main channels for obtaining information," 96.64% of students selected the internet, and 75.26% selected textbooks, indicating a reliance on limited information sources and a lack of knowledge on how to search and use databases. Additionally, 66.71% of students had never used the "advanced search" function in their searches. Many students experienced issues such as an overwhelming number of search results, difficulty in accurately expressing search queries, imprecise search results, and an inability to filter and analyze literature.

Moreover, 78.88% of students were unaware of personal literature management software, indicating significant deficiencies in information knowledge and skills. While 89.53% of students believed they could identify junk, fraudulent, and illegal information on the internet, their primary consideration when searching for information was whether the content met their needs, lacking effective judgment methods for the accuracy of the information. Some students tended to indiscriminately forward unverified information, causing negative public opinion impacts. Additionally, 66.65% of students did not consider bulk downloading of journal articles as illegal, and 74.36% did not view "submitting the same article to multiple journals" as a violation of academic norms. These results highlight a lack of proper understanding in information ethics, necessitating positive guidance.<sup>[6]</sup>

#### **4. Analysis of Survey Results on Information Literacy among University Students in Ethnic Regions**

Due to their remote locations, universities in ethnic regions are relatively underdeveloped in terms of higher education and the construction of informatized and digitized campuses. Additionally, most students come from local prefectures within the region, and some minority class students come from underdeveloped pastoral areas. This results in varied and uneven levels of information literacy among students. The survey on information literacy revealed common issues such as insufficient information knowledge, weak information skills, and diminished information ethics among students. Minority class students, influenced by cultural and linguistic factors, exhibit unique characteristics in addition to the common issues. Based on the survey results, in-depth interviews were conducted with minority class students to analyze their attitudes and tendencies in building information literacy from the perspective of cultural adaptation theory.

##### ***4.1 Influencing Factors and Attitudes of Students' Information Literacy Based on the Cross-Cultural Adaptation Model***

The stronger the awareness and ability of cultural adaptation, the stronger the awareness of building information literacy, indicating a significant correlation between cultural adaptation awareness and the awareness of building information literacy among students. Survey results show that 94.72% of students believe that mastering information technology courses is very important for contemporary college students. Minority class students feel the impact of the new cultural environment after enrollment, clearly perceive the gap in information literacy, and show a positive attitude towards improving their information literacy, recognizing that possessing certain information literacy skills is crucial for their future development.<sup>[7]</sup>

Based on the multicultural hypothesis of the cross-cultural adaptation model, it is proposed that collective self-esteem and a sense of security lead to more favorable intergroup perceptions and higher tolerance for external groups. The higher the identification with their traditional culture among minority cultural groups, the more confident they are in maintaining their culture, making them more likely to interact with mainstream cultural groups or other minority cultural groups and more tolerant and understanding of different cultures. Interviews revealed that most minority students who enter university are influenced by their family environments, demonstrating positive adaptation to the new environment and good learning abilities. They value interactions and exchanges with different cultural groups while maintaining a strong identification with their own traditional culture, fitting the "Integration" type, the most ideal in the cross-cultural adaptation model.

In summary, due to limitations such as the informatization level of basic education, the overall information literacy level of university students in ethnic regions is generally low. Most minority class students tend to fall into the "Integration" type of the cross-cultural adaptation model, showing strong cultural adaptation awareness and a positive attitude towards building information literacy.

#### ***4.2 Problems in Students' Information Literacy Based on the Cultural Adaptation Process Model***

Based on the cultural adaptation process model and combining questionnaire and interview results, we analyzed the problems faced by university students in ethnic regions in building information literacy from both individual and social perspectives.

From the individual perspective, first, the generally low information literacy level among minority class students is due to their pre-university learning environment predominantly using minority languages, with generally low proficiency in Mandarin and English, resulting in limited information sources. Some students come from pastoral areas with low levels of basic education, informatization, and socio-economic development, leading to a relative lack of information literacy capital. In the survey, 62.08% of students reported being unaware of information acquisition methods; interviews revealed that most minority students had little knowledge of computer search techniques and database usage before university. Second, the performance of minority students in cross-cultural adaptation abilities influences their information literacy construction, and their information literacy abilities also influence their cultural adaptation abilities to some extent. Interviews indicated that most students were aware of their gaps and weaknesses, with some minority students experiencing feelings of inferiority, anxiety, and panic due to lower proficiency in Mandarin and information literacy. The stronger the cross-cultural adaptation abilities of minority students, the more likely they are to correct and improve their weaknesses upon recognizing them, consciously improving their information literacy. As their information literacy improves, they gain more confidence, better integrating into mainstream cultural groups and enhancing their cultural adaptation abilities.<sup>[8]</sup>

From the social perspective, first, the information literacy education curriculum system in universities in ethnic regions needs improvement, with current courses being single in form and content. Information literacy courses, such as literature search practice, are mandatory mainly for juniors and seniors, lacking a system that spans the entire university stage. Students have an urgent need for information literacy education, with 81.62% expressing a desire to learn or enhance network information search skills, 83.39% wanting to learn database search and usage skills, and 66.46% hoping to strengthen their understanding of commonly used information resources. Second, there is insufficient integration of information literacy education with professional disciplines. Additionally, targeted guidance based on differences in ethnic culture and basic education for minority class students and regular students is lacking, neglecting the cultivation and guidance of information awareness, cognition, and emotions in minority students during the cross-cultural adaptation process. Finally, the informatized teaching environment in universities in ethnic regions needs improvement, and the construction level of campus networks and database resources needs enhancement.

### **5. Recommendations for Improving the Quality of Information Literacy Education in Universities in Ethnic Regions**

#### ***5.1 Improve the Information Literacy Education Curriculum System***

Universities in ethnic regions should strengthen the scientific and forward-looking nature of organizational management based on ethnic characteristics, improving the information literacy education curriculum system and providing necessary institutional and technical support. This ensures that students can receive systematic information literacy education from enrollment to graduation according to their needs. Information literacy education can be integrated with freshman orientation and career development, deeply embedded in students' daily learning lives. Building on existing literature search courses, increase the proportion of elective information literacy courses, providing graded, categorized, and tiered teaching and targeted guidance for students with needs. Conduct special lectures on network information search skills, database search and usage, and information source recommendations, constructing an information search curriculum system that spans the entire university learning stage.<sup>[9]</sup>

#### ***5.2 Emphasize the Integration of Information Literacy Courses with Professional Disciplines***

Emphasize embedding information technology and literature search courses into the teaching processes of various professional disciplines, enhancing and cultivating students' ability to independently use information technology to learn professional knowledge and solve professional problems. Use professional practice activities, fund project applications, and thesis writing as entry

points, guiding students to consciously establish information literacy construction awareness. Guide students to conduct literature searches based on actual needs, understand the current research status in professional disciplines, and master skills for using professional software to analyze and organize data. Use a project-driven approach to enhance students' understanding and application of professional knowledge, educating and guiding students to consciously improve their information literacy levels.

### ***5.3 Focus on Guiding Minority Students' Information Literacy Awareness***

Fully recognize the unique characteristics of minority students during the cross-cultural adaptation process, encouraging and helping them establish correct information literacy awareness. Strengthen positive guidance to make them fully aware of the important impact of personal information literacy levels on future academic achievements and personal development. Implement dual education on information literacy awareness and cross-cultural adaptation awareness from the perspective of expanding personal development space and achieving self-fulfillment. Avoid the phenomenon of single ethnic cultural circles, encouraging related exchanges and mutual progress among all ethnic groups. During enrollment, cultivate and strengthen minority students' identification with university culture, enhance education on ethnic unity and progress, and through various lectures and activities, make students feel the multicultural atmosphere, strengthening the sense of community of the Chinese nation. Only with the correct awareness of cross-cultural adaptation and information literacy can minority students correct their weaknesses in time, consciously improve their information literacy levels, and confidently integrate into mainstream cultural groups.

### ***5.4 Optimize the Network Information Environment and Enhance Database Resource Construction***

Vigorously promote the construction of online network courses, apply MOOC and flipped classroom models to various disciplines, provide stable campus network support, and encourage students to enhance their information literacy for independent learning. Promote the construction of minority characteristic cultural information resource libraries, collecting and organizing minority historical and cultural literature, building special collections, purchasing books and periodicals in minority languages, and organizing sharing and exchange activities for minority language books to enhance minority students' cultural identity.

## **6. Conclusion**

Universities in ethnic regions have relatively underdeveloped basic education informatization and digitization levels. Some students come from underdeveloped agricultural and pastoral areas, resulting in varied levels of information literacy among students. Common issues include insufficient information knowledge, weak information skills, and diminished information ethics. Additionally, based on the cross-cultural adaptation model, minority class students' attitudes are classified as "integration," indicating a strong awareness of cultural adaptation and a positive attitude towards building information literacy. Four measures are proposed: improving the information literacy education curriculum system, emphasizing the integration of information literacy courses with professional courses, focusing on guiding minority students' information literacy awareness, and enhancing database resource construction.

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