

# The Mediated Role of Self Efficacy between the Factors Affecting the Academic Adaptation of International Students at Jiangsu Regional Universities

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## ABSTRACT

This study examines the determinants affecting academic adaptation among international students at universities in the Jiangsu region. It specifically emphasizes the roles of social support, curriculum design, teaching quality, learning motivation, cross-cultural adaptation skills, self-efficacy, and the acceptance of AI-generated content (AIGC). Drawing upon an extensive literature review and empirical research, a theoretical framework has been established that designates self-efficacy as a mediating variable and the adoption of Artificial Intelligence Generated Content (AIGC) as a moderating variable within the context of the academic adaptation process. To evaluate this framework, a pilot study was undertaken involving participants from diverse contexts to enhance a questionnaire designed to assess fundamental constructs, including social support, self-efficacy, and acceptance of AIGC. Revisions were implemented to enhance the reliability and validity of the measurement instruments. The findings seek to offer valuable insights for improving academic adaptation and support for international students, thereby promoting a more inclusive educational environment within universities in Jiangsu. This study enhances the existing body of literature by offering empirical evidence regarding the impact of social support, curricular design, and teaching quality on the improvement of students' self-efficacy. The application of comprehensive reliability and validity criteria guarantees the precision and trustworthiness of the findings, thereby augmenting the study's credibility. This study elucidates the interaction among various environmental and human factors and their influence on self-efficacy. The report delineates critical areas necessitating intervention and proffers pragmatic recommendations for educational institutions aimed at augmenting student performance. This study emphasizes the imperative for continuous assessment and adaptation of support services to meet the changing requirements of students, thereby contributing to the ongoing dialogue regarding best practices in education.

**Keywords:** Academic adaptation, international students, social support, self-efficacy, AI-generated content (AIGC).

## INTRODUCTION

The internationalization of higher education has been a prominent global trend in recent years, propelled by rapid economic globalization, technological advancements, and increased cross-border mobility. Global universities prioritize the recruitment of international students to enhance academic collaboration, promote cultural diversity, and bolster global competitiveness. According to data UNESCO (2021), the global number of international students will surpass 6 million by 2020. Approximately 45% of these students report substantial academic transition challenges, encompassing language barriers, cultural discrepancies, and academic stress (Smith & Khawaja, 2011). These obstacles not only hinder academic performance but also affect social integration and overall well-being. This underscores the imperative for focused research on academic adaptation characteristics, especially within regional contexts like Jiangsu universities, to more effectively tackle these persistent global concerns.

The "Belt and Road Initiative" (BRI), initiated in 2013, has profoundly influenced the globalization of China's higher education sector. This initiative has rendered education a vital element of China's global strategy. The BRI promotes international educational interactions, with Jiangsu province emerging as a pivotal hub owing to its strategic location and robust educational infrastructure. Li and Hou (2020) indicate that a significant percentage of the about 40,000 international students enrolled in Jiangsu colleges annually originate from countries involved in the Belt and Road

Initiative (BRI). Language, pedagogical approaches, and cultural acclimatization are identified as factors contributing to these children's challenges with academic adaptation. These issues underscore the necessity of comprehending the factors affecting international students' academic integration in Jiangsu. Addressing these problems enhances China's bilateral relations with BRI nations while also advancing its educational diplomacy and student achievement. The swift economic expansion in China has heightened the demand for globally knowledgeable professionals, especially in vital emerging sectors such as advanced manufacturing, biotechnology, and digital technology. The Ministry of Human Resources and Social Security (2023) projected a 25% annual increase in demand for highly skilled professionals since 2019; yet, vacancies persist due to a deficiency of qualified workers. Jiangsu, an industrial stronghold, mitigates this disparity by accommodating a significant number of international students at its provincial universities. Research suggests that approximately 35% of international students encounter academic adaptation challenges, hindering their ability to contribute to local enterprises (Zhang et al., 2021). Consequently, comprehending the determinants of academic adaptability is essential for equipping these students with the abilities and resilience necessary to meet the demands of China's key industries and foster sustained economic prosperity.

The research divide is characterized by three primary dimensions: (1) Identified Global Challenges (70%): International academics have conducted extensive studies on the prevalent issues encountered by international students, including linguistic barriers, cultural conflicts, and academic stress. Insufficient Regional Data (40%). A significant study vacuum exists due to the lack of accurate data and contextual understanding on the adaptation issues faced by overseas students in Jiangsu universities. (3) Theoretical Exploration Deficit (30%): The existing research is deficient in a comprehensive examination of self-efficacy's mediating role in academic adaptation within regional contexts. These traits underscore the significance of this study in reconciling global challenges, regional requirements, and theoretical advancements, rendering the research context vital for this thesis.

Jiangsu Province has become a premier destination for international students in recent years owing to its strategic geographic position, exceptional educational facilities, and economic importance. The burgeoning multicultural academic landscape in Jiangsu has been facilitated by a substantial migration of students from Belt and Road Initiative (BRI) nations to prestigious institutions like Nanjing and Southeast Universities. This trend expands the realm of educational engagement; nonetheless, it underscores the difficulties associated with academic integration, cultural adjustment, and inadequate social support services. To tackle these difficulties, more effective measures must be executed to enhance the experiences of international students and optimize their contributions to regional development (Zhang & Wang, 2019).

The diversity of Sino-foreign educational programs in Jiangsu Province illustrates the region's increasing focus on pragmatic teaching methodologies. Initiatives such as "Chinese + Skill" workshops and short-term language programs seek to integrate linguistic ability with industry-specific training. These programs correspond with China's national aim to address economic and industrial needs by equipping international students with practical skills in areas such as digital technology and advanced manufacturing. The shift towards employment-focused education has garnered academic attention, with research investigating its efficacy in improving cross-cultural comprehension and boosting employability (Liu & Chen, 2021). Jiangsu's initiatives have enhanced Sino-foreign educational collaboration while concurrently aiding the assimilation of international students into China's swiftly evolving economic landscape, illustrating the dual advantages of academic and cultural integration.

The COVID-19 pandemic affected global student mobility, leading to a significant decline in international enrollment. Jiangsu has emerged as a favored locale for international education due to its aggressive health and safety protocols, which enable it to uphold its academic reputation during the recovery of foreign education. The international student population in Jiangsu is rising, as per 2023 data. Projections indicate that post-pandemic enrollment may surpass pre-pandemic levels. Nevertheless, immediate measures are necessary to address persistent issues about safety, health, and any future disturbances. Wen et al. (2021) conducted a study indicating that colleges must adjust to the evolving global education landscape to enable effective integration, even while students are keen to continue their studies in China. To maintain competitiveness and meet increasing demand, Jiangsu universities must prioritize concerns of academic and cultural adaptability. This study aims to investigate the factors affecting academic adaptation among international students in regional colleges in Jiangsu, emphasizing self-efficacy as a mediating variable. It seeks to offer concrete ideas for enhancing institutional policies, fostering sustainable internationalization, and facilitating integration into China's educational and industrial sectors.

Jiangsu has emerged as a significant center for international students, particularly from Belt and Road Initiative (BRI) countries, as higher education increasingly globalizes. However, this migration has shown significant deficiencies in these children's academic adaptation process, leading to issues that require focused academic inquiry. International students must adhere to the academic culture, pedagogical standards, and institutional norms of their host universities as part of the complex process of academic adaptation. In the past decade, Jiangsu, a prominent educational hub in China, has experienced a steady rise in international student enrollment. However, this expansion has encountered considerable adaption challenges. Figure 1.8 illustrates that international students' academic advancement is obstructed by persistent barriers to language proficiency, cultural assimilation, and access to

institutional support systems, according to recent trends. A major concern is the disparity between the instructional approaches employed at Jiangsu universities and students' previous educational experiences. Many international students report challenges in adapting to lecture-dominant pedagogies and examination-focused assessment frameworks, which markedly contrast with the participatory and inquiry-driven approaches prevalent in their home countries. This disparity often results in sentiments of alienation and subpar academic performance among pupils (Chen, Sun, & Wei, 2024).

Moreover, language remains a substantial obstacle. Although proficiency in Mandarin is essential for numerous programs, students can have difficulties with technical terminology, course materials, and active classroom engagement. Language barriers are often cited obstacles, impacting almost 60% of the surveyed international students. These obstacles not only hinder academic involvement but also exacerbate feelings of loneliness and discontent, reducing students' self-efficacy and general adaptability. Notwithstanding these problems, several colleges in Jiangsu have not established customized support systems to address the specific demands of international students. Orientation programs, academic counseling, and language training are sometimes overly broad and neglect to consider the diverse cultural and linguistic backgrounds of students. This institutional inequality underscores the necessity of targeted interventions that enhance academic preparedness while cultivating a more inclusive and supportive educational atmosphere.

Language proficiency significantly influences academic achievement. Mandarin is the primary language of teaching in Jiangsu universities, and international students sometimes encounter difficulties with academic terminology and communication (Huang & Zhao, 2021). This linguistic discrepancy not only hinders academic achievement but also diminishes pupils' confidence and sense of belonging. Cultural incompatibilities, including disparities in pedagogical standards and learning approaches, significantly hinder assimilation. The educational culture of Jiangsu, deeply rooted in Confucian traditions, often stands in stark contrast to the collaborative and inquiry-based learning methods prevalent in the students' home countries. Addressing these linguistic and cultural hurdles is essential to cultivate an inclusive academic environment.

Institutions in Jiangsu usually lack the necessary resources and methodologies to adequately support international students. Academic counseling, language assistance, and peer mentoring programs are generally inaccessible or inadequately supported for a significant number of international students (Liang, Xu, & Zhao, 2023). Moreover, the swift integration of digital technology in higher education, including AI-driven platforms, presents other obstacles. A significant number of students struggle to effectively utilize these tools due to insufficient digital literacy, compounded by the cultural and linguistic biases inherent in this technology. These inequalities underscore the pressing necessity for institutional solutions tailored to the specific requirements of international students.

While self-efficacy is acknowledged as a crucial psychological construct affecting academic success, its function as a mediating variable in the adaptation of international students is still to be elucidated (Bandura, 1997). A significant number of international students in Jiangsu report diminished self-efficacy stemming from difficulties related to academic standards, cultural alienation, and communication barriers (Zhao, Wang, & Liu, 2024). This deficiency in confidence intensifies adaptation challenges and constrains students' capacity to successfully surmount obstacles. This study seeks to address critical gaps in the literature and offer practical strategies for improving the academic adaptation of international students in Jiangsu by emphasizing self-efficacy as a mediating component. This study aims to address a research gap by examining the factors that affect international students' academic adaptation at regional universities in Jiangsu.

## Literature Review

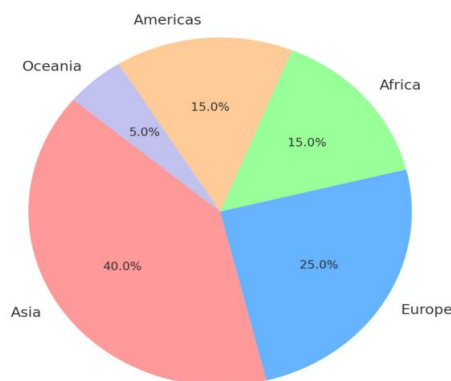
The examination of academic adaptation among international students began in the 1960s, focusing on the holistic adjustment of pupils. Research throughout the 1970s and 1990s focused on pivotal models, such as self-efficacy and cross-cultural adaptation, both of which are crucial to this dissertation. During the 2000s, attention transitioned to issues including the quality of instruction, student motivation, and social support. Ultimately, in the 2020s, study encompassed AIGC acceptance, highlighting the growing impact of technology on academic adaptability. Each phase has augmented our understanding of how these variables influence the success of overseas students.

International education has experienced substantial transformations over the last twenty years due to the globalization of higher education, technological progress, and evolving geopolitical dynamics. These developments have significantly transformed the realm of international student mobility, generating new opportunities and problems for students and host institutions alike. Recent advances have highlighted the impact of regional dynamics, institutional policies, and emerging technologies on international education. This part examines the most critical contemporary advancements and challenges in international education, providing a basis for comprehending the context of this inquiry.

### Regional Dynamics in International Student Mobility

The increasing importance of Asia and nations participating in the Belt and Road Initiative (BRI) has significantly altered the dynamics of international student mobility in recent times. Due to its expanding educational infrastructure and strategic initiatives such as the Belt and Road Initiative, China has emerged as a prominent hub for international students. Figure 1 illustrates that by 2023, international student mobility trends will be mostly influenced by regions such as Asia, BRI nations, and Western countries. For example, Asian non-BRI nations comprised an additional 20% of the worldwide international student demographic, but students from BRI nations constituted 40%.

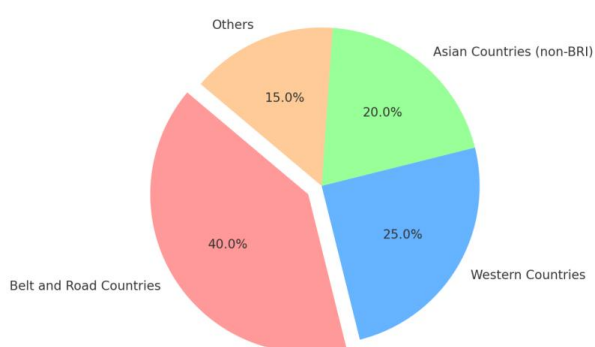
International Student Mobility by Region (2023)



**Figure 1:** Regional Distribution of International Students (2023)

Source: OECD Education at a Glance Reports and UNESCO International Student Mobility Statistics (2023).

This regional distribution highlights the significant impact of Asian and BRI nations on global student mobility. The growing importance of regional influences in creating global education trends is highlighted by the considerable percentage of students from various areas. The findings are particularly pertinent to this study, as a considerable number of students from these regions have commenced traveling to Jiangsu Province in China. Geopolitical and economic concerns have profoundly impacted the recent direction of international education. The Belt and Road Initiative (BRI) has emerged as a fundamental element of China's overseas education strategy, as demonstrated by the consistent rise in student enrollment from these nations. This demographic shift highlights the importance of regional variety among Chinese students studying abroad.



**Fig 2** International Student Distribution by Region(2023)

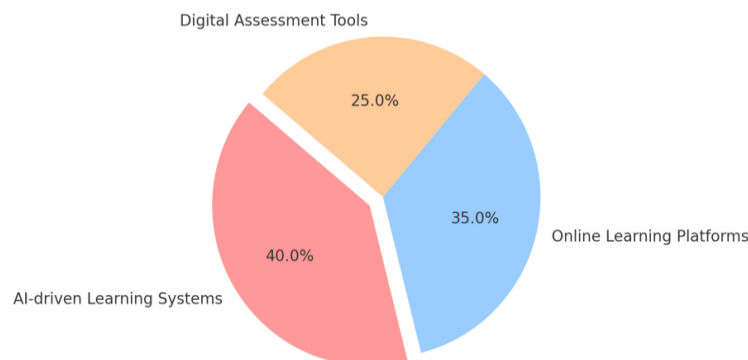
Source: UNESCO Institute for Statistics (UIS)&OECD Education at a Glance Reports (2023)

The Belt and Road Initiative (BRI) has emerged as a significant component of China's global educational strategy, leading to a substantial rise in student enrollment from BRI countries. This demographic trend illustrates the importance of regional diversity among international students in China. Nonetheless, this swift growth has not consistently been accompanied by enough institutional infrastructure or customized support mechanisms. Consequently, international students in regions such as Jiangsu commonly encounter challenges related to academic and cultural adaptation, exacerbated by discrepancies in institutional readiness (Chen & Wei, 2023).



## b) Technological Advancements in International Education

Technological developments have profoundly transformed the landscape of international education in the last twenty years. Artificial intelligence (AI), learning management systems (LMS), and digital collaboration platforms have enhanced and expanded the accessibility of international educational exchanges for students abroad. These tools enable schools to establish adaptable online and hybrid learning environments that address the varied demands of their students. The incorporation of AI-generated content (AIGC) into educational practices has improved the quality of education by offering customizable learning resources and individualized feedback (Zheng & Zhang, 2023).



**Fig 3** Technological Advancements in International Education(2023)

Source: UNESCO's Education Innovation Reports (2022) & OECD Educational Technology Trends (2023)

The accompanying Figure 3 depicts the proportions of technology breakthroughs contributing to international education in 2023, with a focus on three main components: AI-driven learning systems (40%), online learning platforms (35%), and digital assessment tools (25%). These tools have enabled institutions to provide adaptable online and hybrid learning environments that meet the different needs of their students. Furthermore, the emergence of digital credentialing and blockchain technology has facilitated international student mobility by assuring secure and verified academic records. These innovations not only minimize administrative burdens, but they also increase trust in international educational systems. However, as technology becomes an essential component of international education, differences in digital literacy and access persist, posing issues for both institutions and students. Addressing these disparities is critical to promoting fairness and participation in global academic settings (Liu & Huang, 2023). In conclusion, the current evolution of international education is marked by technological breakthroughs, a heightened focus on cultural integration, economic initiatives such as the BRI, and post-pandemic difficulties.

## C) Institutional Support Gaps for International Students

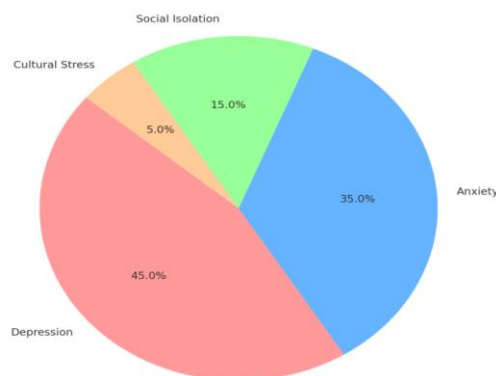
Numerous colleges continue to face challenges in adequately supporting their overseas students due to insufficient resources for facilitating their adaptation to college life. Despite Jiangsu Province's record-high enrollment of international students, attributed to initiatives such as the Belt and Road Initiative (BRI), its institutions exhibit deficiencies in social support, curriculum design, teaching quality, and cultural adaptation programs. For students from diverse cultural and linguistic origins, these gaps impede academic success. Due to the absence of academic Chinese language programs in Jiangsu Province, overseas students from non-Mandarin-speaking countries generally encounter difficulties. According to China Education Daily (2022), fewer than fifty percent of institutions in Jiangsu offer personalized language support programs. Consequently, many students must rely on informal peer assistance or seek support from external sources. Norton and Smith (2021) discovered that hardly 35% of universities in the UK provide comprehensive cultural orientation programs. Brief cultural orientation programs in Jiangsu sometimes fail to assist international students with practical challenges such as acclimating to local social norms and academic standards. There is a significant deficiency of cross-cultural counseling experts among the 1:3,000 psychological counselors employed in Beijing's educational institutions. International students often delay seeking assistance because of concerns that counseling services may lack cultural sensitivity or because of language barriers (Xinhua Education, 2023). Mentorship programs in American universities occasionally overlook the distinct needs of international students. Brown et al. (2020) indicates that institutions prioritizing STEM disciplines often allocate more resources to academic advising, neglecting cultural and personal support. Numerous Jiangsu courses prioritize test-oriented learning, which may not align with the more collaborative educational methodologies prevalent in the West.

Overseas students encounter significant challenges in academic transition due to institutional deficiencies, including insufficient language support, inadequate cultural orientation programs, limited psychological therapy, and a lack of

mentorship. Enhancing students' self-efficacy and ensuring their academic success relies on addressing these challenges. This study directly confronts these difficulties and provides actionable solutions for improving institutional policies and procedures, specifically within the university system in Jiangsu.

#### D) Psychological Challenges for International Students

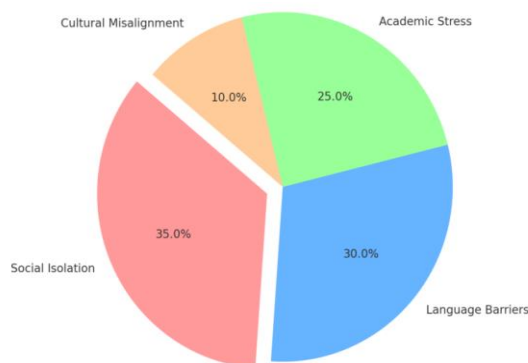
In recent years, there has been a notable increase in academic attention to the psychological challenges faced by international students. This is evidenced by a growing number of research publications focusing on mental health issues within this demographic.



**Fig.4** Prevalence of Psychological issues Among International Students

Source: From the media of Times(2023)

Isolation and mental health difficulties are growing more widespread among international students, according to recent reports. This is especially true among Chinese students. According to The Times (2023), many Chinese students studying abroad in Western institutions endure social marginalization, resulting in what some refer to as "ghettos" on campus. For example, a study conducted in 2023 looked at the challenges that overseas students encountered throughout a 21-year period. The findings revealed a significant increase in research on mental health concerns, indicating a higher degree of academic interest in this area. According to research, international students have an alarmingly high rate of mental health issues. Consider the situation of Chinese overseas students. A shocking 45% of them exhibit depressive symptoms, underlining the critical need for specialized mental health services for this population (Han et al., 2013). These findings support the emerging agreement among academics that psychological characteristics have a considerable impact on the lives of international students.



**Fig.5** Distribution of Psychological Challenges Among International Students

Source: American College Health Association (ACHA) - National College Health Assessment (2022)

Figure 5 shows the dispersion of mental challenges faced by international pupils. The highest rate, 35%, shows that there is a significant problem with social isolation. A significant portion of students face difficulties in communication and understanding academic material due to language barriers, which constitute 30% of the total. Next at 25% is academic stress, which shows how difficult it is to adapt to different educational systems. Lastly, 10% is due to cultural misalignment, which shows how hard it is to strike a balance between different cultural expectations and conventions. According to the data, academic pressure is the second most significant psychological difficulty for international students, right behind social isolation and language barriers. Students' health and performance in school could

benefit substantially from targeted institutional interventions that address these issues, such as peer mentoring programs and enhanced language education. Although it is less common now, cultural mismatch is still a major factor when it comes to fostering inclusion and cross-cultural understanding.

### **Empirical and Theoretical Gaps in International Higher Education in China**

While extensive literature exists on the expansion of international higher education, there is a paucity of discourse regarding the distinct obstacles encountered by foreign students in non-Western contexts, especially within China's higher education framework. Limited study has investigated the adaptation of overseas students to university life in China, as most studies have focused on Western institutions (Huang, 2020). There is insufficient empirical research on essential elements of Chinese higher education, including social support, curriculum design, teaching quality, and cross-cultural adaptability. Moreover, there is less understanding of how these factors combine to affect the academic achievement and overall well-being of overseas students in China. In view of these omissions, there is an imperative necessity for research into the particular challenges faced by international students in Jiangsu, China, especially with the educational aims of the Belt and Road Initiative.

### **Justifying Relationship between Social Support and Academic adaptation**

The value of social support in international students' academic assimilation is widely acknowledged. Several studies have found that social support increases academic performance while kids are transitioning to a new school and culture (Phan, 2020; Kim et al., 2021). People from various areas of life, including students, families, teachers, and community groups, can provide each other with emotional, informational, and practical support (Lim, 2021). International students benefit from this help since it makes them feel less alone, which improves their emotional and academic health (Aina 2020).

We now have a more complicated picture of the impact of social support on academic adaptation as a result of studies that have taken various approaches to the topic. Elsayed and Stern (2022) conducted a comprehensive study that examined academic advising and counseling services as well as informal peer networks, concluding that the former was more effective in promoting academic adaptation. On the other hand, Ali (2021) focused on the importance of peer support and discovered that it was critical for students to have daily emotional and practical support from their peers in order to manage academic stress. Both strategies emphasize the need of social support, but they differ in their recommendations for how much different types of assistance may benefit children in specific circumstances and with various needs.

Hausman, Schwarz, and Graves (1967) and other early studies on social support concentrated on the emotional aspect of support while disregarding the informational and instrumental components. According to Yeng (1980), this narrow perspective overlooked the numerous ways in which social support influences academic adaptation. To address these limitations, subsequent research has included more types of assistance, broadening our understanding of how social support influences academic success (Kim & Lee, 2021). However, more longitudinal studies are needed to completely understand how social support evolves over time and how it influences academic adaptation.

Research by Phan (2020), Lim (2021), Elsayed and Stern (2022), and others strongly suggests that social support is critical in assisting overseas students to transition to their new academic environment. This support lowers stress, increases self-efficacy, and fosters a sense of belonging. The findings do, however, indicate that the type of assistance provided and the students' specific needs may influence how beneficial social support is. To illustrate, daily academic management is primarily reliant on peer support, whereas long-term academic achievement requires institutional support in the form of resources and supervision (Ali, 2021). According to the conclusions of this synthesis, the best strategy to help overseas students transition to college life is to equip them with a variety of social supports, including both formal and informal networks.

### **Justifying Relationship between Curriculum Design and Academic adaptation**

The literature dives into a range of curriculum design strategies, with some emphasizing the importance of cultural in Curriculum design is essential to the academic transition of overseas students since it impacts their learning experiences and outcomes. To help students achieve academic success, courses must be well-structured, inclusive, culturally relevant, and aligned with their academic and professional goals (Leask, 2015; Wang et al., 2021). Multiple studies (Bovill et al., 2020; Zhang et al., 2022) show that curriculum design influences students' interest, motivation, and ability to adapt to different academic contexts. The approach to curriculum development can have a significant impact on the academic adaptation of international students, who frequently face additional challenges due to factors such as language and cultural differences. Other approaches stress increasing the use of active learning and student-centered pedagogies in the classroom. To make education more relevant and accessible to international students, Leask (2015) advocates for an internationalized curriculum that considers diverse cultural perspectives. On the other side, Bovill et al. (2020) emphasizes the importance of co-created curricula, in which students participate in the design phase, indicating that they are more invested in and have more control over their education. Leask (2015)

highlights the importance of cultural inclusivity in eliminating cultural barriers, whereas Bovill et al. (2020) emphasizes the importance of instilling a sense of agency in students, which is critical for academic performance; both approaches aim to improve academic adaptability.

Biggs and Tang (2007), as well as previous studies on curriculum design, neglected the special needs of international students in favor of focusing on how to best integrate learning objectives, pedagogical approaches, and assessment procedures. More recent academics, such as Tran (2013), have claimed that this method is faulty because it is very simplistic and does not account for the diverse range of cultural experiences and learning styles displayed by international students. Tran (2013) proposes a more adaptable and culturally relevant technique to address the specific difficulties that these youngsters face. There were also few longitudinal studies to test the theoretical models employed in the early study, therefore there was no empirical evidence of how curriculum design influenced academic adaptability.

Research by Leask (2015), Bovill et al. (2020), Wang et al. (2021), and others strongly suggests that curricula design has a significant impact on how effectively overseas students adjust to their academic programs. Nonetheless, the findings suggest that different aspects of the curriculum may influence how international students are taught, depending on how well they manage their specific challenges. According to Zhang et al. (2022), student-centered designs that incorporate students' voices into curriculum development can improve classroom engagement and performance, while culturally inclusive curricula are excellent at supporting students in overcoming cultural barriers. Based on this synthesis, it appears that the best strategy to assist international students in adapting academically is to take a comprehensive approach to curriculum design that includes cultural inclusion and student participation.

### **Justifying Relationship between Teaching Quality and Academic adaptation**

The quality of instruction is a significant determinant of academic adaptation, particularly for international students who face unique challenges in acclimating to unfamiliar educational settings. Effective teaching, characterized by clear communication, efficient instructional strategies, and conducive learning environments, has been shown to enhance students' academic performance (Hattie, 2009; Zhang et al., 2023). The quality of instruction affects students' comprehension of course content, as well as their motivation, engagement, and overall academic performance. Overseas students often encounter language barriers and unfamiliar pedagogical methods, making the quality of instruction crucial for their academic adaptation and success (Li et al., 2023).

Numerous studies have examined several facets of teaching quality and its influence on academic adaptability. Hattie (2009) emphasized the significance of feedback and teacher-student interactions, asserting that these are among the most critical factors influencing student learning. Conversely, Ramsden (2003) underscored the significance of instructional clarity and content organization, proposing that when educators provide material in a lucid and systematic fashion, students are more inclined to assimilate and retain information, leading to enhanced academic adaptation. Although both perspectives recognize the significance of teaching quality, they diverge in their focus on particular elements. Hattie's focus on interaction and feedback underscores the relational aspect of teaching, particularly vital for overseas students adapting to unfamiliar cultural and educational norms. Ramsden's focus on clarity and organization underscores the necessity of well-structured teaching methods that facilitate understanding, especially for students who may encounter difficulties with language and unfamiliar academic subjects.

Previous studies on teaching quality, such those by Trigwell and Prosser (1991), predominantly emphasized teacher-centered methodologies, prioritizing content dissemination above interactive elements of education. Recent scholars, particularly Biggs (2012), have condemned this methodology, asserting that these models are excessively inflexible and inadequately accommodate the diverse needs of students, especially those from varied cultural backgrounds. Biggs (2012) advocates for a shift towards student-centered pedagogies that enhance engagement and adaptation, essential for the academic success of international students. Moreover, initial research predominantly depended on self-reported data from educators, which may not accurately represent students' evaluations of instruction quality. Recent studies have sought to mitigate these limitations by incorporating student feedback and utilizing more comprehensive, mixed-methods strategies to evaluate teaching quality and its influence on academic adaptation.

The literature consistently affirms that teaching quality significantly influences the academic transfer of international students (Hattie, 2009; Ramsden, 2003; Zhang et al., 2023). The findings suggest that several elements of teaching quality, including feedback, interaction, clarity, and content organization, may exert differing levels of influence based on the particular challenges faced by international students. Interactive and feedback-oriented teaching methods are beneficial for helping students acclimate to new cultural norms and expectations; nonetheless, clear and structured content delivery is essential for surmounting language obstacles and assuring understanding (Li et al., 2023). This synthesis indicates that a balanced pedagogical approach, integrating both relational and instructional elements, may be the most effective way for aiding international students' academic adaptation.



### **Justifying Relationship between Cross-Cultural Adaptation Ability and Academic adaptation**

The academic adaptation of international students is significantly affected by their capacity to acclimate to diverse cultures. This capability pertains to a person's proficiency in managing and maneuvering through cultural disparities in an unfamiliar environment (Ward et al. 2001). For overseas students, cross-cultural adaptation involves acclimatizing to unfamiliar social norms, communication styles, and academic standards, all of which can significantly influence academic achievement. Studies consistently demonstrate that students possessing greater cross-cultural adaptation skills encounter less challenges in their academic settings and have superior academic results (Yakunina et al., 2013; Kim & Kim, 2022). This capability is essential for aiding students in reconciling their home and host cultures, facilitating a smoother integration into the academic community and enhancing their overall academic achievement.

Numerous research has examined various facets of cross-cultural adaptation and its impact on academic adjustment. Ward et al. (2001) presented an extensive model of cross-cultural adaptation that integrates psychological and social elements, emphasizing the necessity of emotional resilience and the adoption of culturally suitable behaviors. Conversely, Yakunina et al. (2013) focused on the role of cultural intelligence (CQ), encompassing the cognitive, motivational, and behavioral components of cross-cultural adaptation. Their findings indicate that students with elevated cultural intelligence (CQ) are more adept at recognizing and adapting to cultural differences, leading to enhanced academic achievement. Although both methodologies acknowledge the importance of cross-cultural adaptation, Ward et al. (2001) concentrate on the psychological and social dynamics, whereas Yakunina et al. (2013) highlight the influence of cognitive and behavioral competencies. This discrepancy highlights the intricate nature of cross-cultural adaptation, indicating that successful adaptation requires a synthesis of emotional, cognitive, and behavioral competencies.

Initial cross-cultural adaptation studies, exemplified by Furnham and Bochner (1986), predominantly focused on social dimensions of adaptation, sometimes neglecting the psychological challenges faced by international students. This perspective has been contested by authors such as Smith and Khawaja (2011), who assert that an exclusive emphasis on sociocultural factors is inadequate for fully capturing the complexities of cross-cultural adaptation. Smith and Khawaja (2011) promote a more holistic approach that considers the interplay between psychological well-being and societal adaptation. Moreover, initial research often employed cross-sectional data, restricting the ability to monitor the evolution of cross-cultural adaptation across time. Recent studies have mitigated these limitations by employing longitudinal designs and integrating a wider array of variables, including emotional resilience and cultural intelligence (Kim & Kim, 2022).

Data consistently indicates that the ability to adjust cross-culturally is a significant predictor of academic adaptation in overseas students (Ward et al., 2001; Yakunina et al., 2013; Kim & Kim, 2022). The results suggest that children who can navigate cultural differences and adapt to new social environments are more likely to succeed academically. Nonetheless, the study indicates that cross-cultural adaptation is a complex process requiring a synthesis of psychological resilience, cultural intelligence, and social skills. Psychological well-being aids students in overcoming the emotional challenges of adapting to a new culture, while cultural intelligence enables them to comprehend and maneuver through the academic and social norms of their host nation (Smith & Khawaja, 2011). This synthesis suggests that interventions aimed at enhancing academic flexibility should not solely concentrate on developing students' sociocultural competencies, but also on bolstering their psychological resilience and cultural intelligence.

### **Justifying Relationship between Learning Motivation and Academic adaptation**

International students, who confront particular challenges in transitioning to a foreign school, rely heavily on intrinsic drive to learn. What pushes children to study, persevere even when things are difficult, and eventually succeed academically are pressures both internal and external to themselves (Deci & Ryan, 2000). A substantial body of research (Schunk & DiBenedetto, 2020; Dörnyei & Ushioda, 2021) shows that students who are extremely motivated to learn are better equipped to deal with academic challenges, stay actively involved, and get higher grades. Academic adaptation is more difficult for international students due to language barriers, cultural differences, and new teaching methods; therefore, learning motivation is critical for these students.

Many ideas have been proposed to explain what motivates students to study, each concentrating on a different aspect of intrinsic motivation and how it influences academic adaptation. Deci and Ryan (2000) believe that there is a continuum of intrinsic to extrinsic motivation, with the former being more strongly linked to excellent academic performance. According to SDT, intrinsically driven students learn more deeply and do better in school because they enjoy what they do. When it comes to student motivation to study, Pintrich's (2004) Expectancy-Value Theory sheds insight on how their opinions about their talents (expectancies) and the significance they place on their work (values) interact. According to this theory, students are more likely to tackle and conquer academic challenges if they believe in their talents and understand the importance of their work. Both approaches acknowledge the importance of motivation in academic adaptation. Deci and Ryan (2000) concentrate on the source of motivation (intrinsic vs. extrinsic), whereas Pintrich (2004) focuses on the cognitive assessments that motivate. This study underlines the

complexities of learning motivation, demonstrating that academic adaptability is highly dependent on both the type and underlying assumptions of motivation.

The majority of previous research on learning motivation, including that of Ames (1992), focused on the assumption that extrinsic motivators such as grades and awards may promote academic adaptation. Vansteenkiste et al. (2006) and other more recent studies have claimed that this strategy is faulty because it is overly reliant on extrinsic motivators, which may reduce intrinsic motivation and cause students to interact with learning tasks superficially. Vansteenkiste et al. (2006) discovered that boosting students' innate motivation results in longer-term changes in their academic approach and a more profound grasp of course material. The extent to which cultural differences influence the desire to learn was also overlooked in early research, particularly among international students. Culturally responsive pedagogies are required to aid diverse student groups, and recent research has attempted to address this gap by looking into the relationship between cultural characteristics and motivation (Dörnyei & Ushioda, 2021).

Decision and Ryan (2000), Pintrich (2004), and Schunk and DiBenedetto (2020) are just a few of the numerous research that demonstrate how intrinsic motivation to learn plays an important part in academic adaptation. Students who believe in themselves and their skills and are intrinsically motivated to succeed are more likely to excel academically, according to the findings. On the other hand, research indicates that students' cultural backgrounds and life experiences interact with both internal and external factors that influence their motivation to study. According to Vandenkiste et al. (2006), extrinsic motivators can help students transfer to a new cultural and academic setting, but intrinsic drive is required for long-term involvement. Given the sociocultural and personal differences that influence students' motivational profiles, this synthesis suggests that educational interventions aimed at improving academic adaptation should focus on increasing both intrinsic and extrinsic motivation.

### **Justifying Relationship of Degree of AIGC between Self-Efficacy and Academic adaptation**

In today's schools, when technology is incorporated into every element of the curriculum, students' capacity to accept AIGC is a critical factor in their academic adaptation. AIGC, which includes AI-powered resources and tools that generate educational content, can have a significant impact on students' self-efficacy, or confidence in their own skills to attain academic achievement (Bandura, 1997). According to current studies, incorporating AI technologies into educational environments can improve students' learning experiences. This, in turn, increases their self-efficacy, which leads to improved academic achievement (Zawacki-Richter et al., 2019; Wang et al., 2023). Acceptance and effective use of AIGC might be especially beneficial for international students in easing academic adaptation, as they may face additional challenges such as language obstacles and unfamiliar academic approaches.

Numerous research has investigated the impacts of AIGC acceptance on academic adaptability and self-efficacy, with each taking a somewhat different approach. In their 2019 study, Zawacki-Richter et al. looked at how AI is routinely utilized in classrooms and how it might be used to tailor learning. This might boost pupils' confidence in their talents because they will receive feedback and materials tailored to their needs. Huang and Zhao (2021) found that students who are receptive to AI tools are more likely to adjust to changing academic contexts. They investigated how AIGC adoption affected the relationship between self-efficacy and academic success. In contrast to Zawacki-Richter et al. (2019), who focus on the overall influence of AIGC on learning processes, Huang and Zhao (2021) emphasize the interaction between students' self-efficacy and their acceptance of AI tools, implying that AIGC can magnify the beneficial effects of self-efficacy on academic results. This contrast emphasizes the importance of AIGC being broadly acknowledged and its role in increasing self-efficacy in order to allow academic adaptation.

Previous research on technology acceptability in education, such as Davis's (1989) Technology Acceptability Model (TAM), focused primarily on perceived utility and ease of use. Venkatesh and Bala (2008) argue that this strategy ignores psychological aspects, such as students' self-efficacy, that influence their technology interactions. While TAM is a useful concept, Venkatesh and Bala (2008) argue that it does not fully account for the effect of AIGC on academic adaptation since it does not consider the importance of students' trust in their own technological ability. Because of linguistic and cultural obstacles, early research failed to account for the specific needs of international students, who may have variable degrees of success using AIGC methods. Some recent researches have sought to fill these gaps by looking into aspects such as student demographics and the impact of AIGC acceptability and self-efficacy on academic achievement (Huang & Zhao, 2021).

Zawacki-Richter et al. (2019), Huang and Zhao (2021), and Wang and colleagues (2023) all discover that the level of acceptance of AIGC considerably modifies the relationship between academic adaptability and self-efficacy. According to the findings, students who are open to AI-generated content are more likely to have greater levels of self-efficacy, which enhances their ability to adapt to academic environments. This is especially true for international students, who stand to benefit from the personalized attention and additional resources enabled by AIGC technologies. On the other hand, studies demonstrate that whether AIGC is useful in enhancing academic adaptability depends on students' initial levels of self-efficacy and motivation to engage with these technologies. This review

contends that schools should prioritize the integration of AIGC into their classes and seek to enhance students' attitudes toward these tools, particularly those who struggle with self-esteem in the classroom.

### **Justifying Relationship between Self-Efficacy and Academic adaptation**

It is well documented that self-efficacy, or belief in one's ability to carry out activities and achieve goals, predicts academic achievement and adaptation. Finally, students' academic success is influenced by their self-efficacy, which influences their problem-solving abilities, perseverance when faced with challenges, and overall academic progress (Bandura, 1997). Schunk and DiBenedetto (2020) and Zimmerman (2000) reference research indicating that students who have a strong belief in their own study ability are better able to manage with stress and satisfy course expectations, even in tough situations. Academic adaptation is more challenging for international students due to variables such as language barriers and cultural differences; students who trust in their ability to overcome these obstacles do better in school (Li & Zhang, 2022).

Several theoretical frameworks have examined the role of self-efficacy in academic adaptation, with varying emphasis on different parts of the notion. Bandura's (1997) social cognitive theory proposes a triadic reciprocal relationship between self-efficacy, environmental impacts, and behaviors, all of which have an impact on academic outcomes. According to this paradigm, students who believe strongly in their own skills are more likely to adapt well to new academic situations by establishing ambitious goals, using established learning tools, and persevering even when things go rough. Pajares (2002), on the other hand, emphasizes the importance of self-efficacy in self-regulated learning, arguing that students who are confident in their own abilities are better able to maintain control over their own learning processes, which is essential for adapting to different classroom settings. The two models differ in their emphasis on the significance of students' internal cognitive processes in their ability to adapt and achieve; Bandura (1997) emphasizes larger contextual and behavioral interactions, whereas Pajares (2002) focuses on students' self-efficacy. This comparison shows the internal and external components of academic adaptation, emphasizing the multidimensional nature of self-efficacy.

Previous research on self-efficacy, such as those conducted in the 1980s and 1990s, largely overlooked the special obstacles faced by international students in favor of examining its effects on academic achievement among more homogeneous student groups. Some believe that these studies are irrelevant to real-world circumstances because they fail to account for cultural and linguistic variances among students. This is especially true in today's globalized society. More recent research into the function of self-efficacy in multicultural and international contexts has revealed a more nuanced picture of how it affects academic adaptation across distinct student populations (Klassen, 2004; Usher and Pajares, 2008). Furthermore, early studies usually used cross-sectional designs, which were unable to adequately capture how self-efficacy changed with time. More recent longitudinal research has offered information on how students' self-efficacy matures and changes in response to new learning environments (Usher & Pajares, 2008).

Self-efficacy is a powerful predictor of academic adaptation, according to various publications in the field, including Bandura (1997a), Zimmerman (2000), and Li and Zhang (2022). According to the findings, youngsters who have a high trust in their own skills are more likely to endure during challenging academic times, discover intrinsic motivation, and ultimately achieve academically. Students from different nations confront particular challenges when adjusting to a new school and society, so they must believe in their ability to succeed. However, studies demonstrate that students' evaluations of their own abilities fluctuate over time as they learn and develop. As a result, Schunk and DiBenedetto (2020) argue that educational interventions aimed at improving academic adaptation should prioritize students' self-efficacy development. This can be accomplished by creating supportive learning settings, giving positive feedback, and offering opportunity for children to excel academically. These treatments could be especially beneficial for international students, providing them the confidence they need to succeed in new classes.

### **Summary of Empirical Review**

Several factors, both internal and external to the learner, have been found to have a significant role in the academic adaptation of international students. These factors include: learning motivation, cross-cultural adaption capacity, teaching quality, social support, and students' perceptions of their own abilities. Notably, research by Schwarzer and Jerusalem (1995) and Bandura (1997) shows that students' belief in their own abilities significantly affects their academic performance, especially when they are learning in a cross-cultural setting. International students' academic performance can be greatly enhanced with the help of well-integrated support systems, as shown in studies such as Zhou et al. (2008), which highlight the positive impact of social support on cross-cultural adaption. These results demonstrate how academic adaptation is multifaceted and driven by a complex interplay between personal and environmental elements.

Previous research has shown contradictory findings about the relative importance of different variables due to substantial methodological and contextual differences. Atikah (2021) studied the effect of parental motivation and financial management knowledge on academic adaptability in Malaysian children, whereas Rika (2022) studied the

function of financial knowledge and socialization in effecting saving habits among Indonesian students. Contextual factors, including social support and curriculum design, significantly affect children's academic achievement, according to this research, which differs in location and culture. Nevertheless, these studies' limited generalizability due to quantitative methodology and region-specific samples highlights the necessity for more inclusive and thorough research methodologies.

Academic adaptation for overseas students is a complex and challenging process, as shown by the pooled data from these empirical studies. This study aims to address knowledge gaps by investigating the complex relationships between academic adaptability, self-efficacy, social support, and other important characteristics through a mixed-methods approach that integrates quantitative and qualitative data. In addition, this study seeks to expand the theoretical framework and offer practical insights into how technology integration could assist international students in achieving academic success by using AIGC acceptance as a moderating variable. Because it addresses essential gaps in the current literature and has significant implications for educational policy and practice, this research is both important and urgent.

### Theoretical Review

This study is founded on three significant theoretical models, which we shall examine individually and their interrelations. The academic adaptation of international students can be comprehended through the integrated application of the Instructional Quality Model (IQM), Social Support Theory (SST), and Self-Efficacy Theory (SE). These theories offer a cohesive framework for examining the complex interplay between institutional support, self-efficacy, and academic outcomes, encompassing several dimensions from psychological factors to institutional influences. This study establishes a robust framework to investigate the mediating and moderating elements influencing academic adaptation by integrating different theoretical perspectives. This research examines the intricate subject of academic adaptation, highlighting its various dimensions, particularly at the institutions in Jiangsu. Digital instruments and educational innovations can improve students' academic, cultural, and technological integration (Kumi-Yeboah et al., 2020). These frameworks facilitate the examination of how self-efficacy mediates the connection between institutional support and academic achievement. This research synthesizes diverse domains to present a comprehensive and cohesive argument supported by robust theoretical foundations. Furthermore, it offers a comprehensive analysis of the data, enhancing the study's uniqueness and significance in bolstering institutional support systems, particularly in fostering digital literacy among international students (Selwyn, 2016). This study employs significant theories from educational technology, psychology, organizational behavior, and sociology to create a solid foundation for examining the factors influencing the academic adaptation of international students in Jiangsu. In the realm of online learning, these interdisciplinary perspectives offer a comprehensive framework for addressing the pedagogical, sociological, cultural, and technical dimensions of adaptation.

The following figure illustrates this theoretical framework, depicting the hypothesized relationships and interactions among these variables, providing a structured approach to exploring the factors that influence academic adaptation among international students at Jiangsu regional universities.

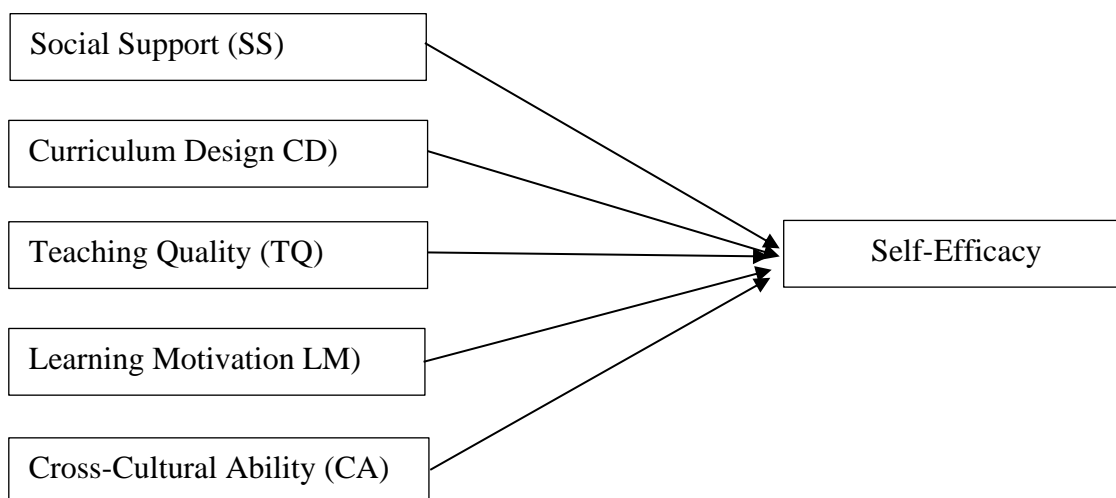


Fig 5: Conceptual of Framework of this study



### **Research Methodology**

The quantitative method utilized to further examine the subjective experiences of international students. This method facilitates the analysis of the intricate interactions among personal, societal, and technological elements influencing the adaptation experiences of international students, while also validating findings across several data sources. The research design process is a crucial element of any academic inquiry, since it creates a systematic framework for validating the research questions and hypotheses. This analysis employed a meticulously crafted quantitative research design to ensure the reliability and validity of its findings. The study focused on examining the relationship between academic adaptability, acceptance of AIGC, and self-efficacy among international students at universities in Jiangsu. This positivist study seeks to elucidate these linkages using objective, quantifiable data by analyzing the self-efficacy, academic adaptability, and adoption of AIGC (Artificial Intelligence-Generated Content) among international students. Positivism emphasizes the collection of factual evidence to discern trends and empirically validate theories, according to Creswell (2014).

The non-experimental survey research approach aligns effectively with the study's objectives, according to Creswell (2014). The percentage of academic students has risen from 61% to 92%, as Jiangsu has admitted 190,000 international students from 182 distinct countries in the last five years. This has led to Jiangsu becoming a highly desirable location for overseas students. The province hosts the largest concentration of Chinese-foreign cooperation educational institutions in China, comprising 24 institutions that provide undergraduate degrees or above, from a total of 202. Chen (2023) is the reference. Selecting a suitable sample size for this extensive and varied population is essential to guarantee that the results are statistically significant and representative. The research utilized a proportionate cluster random sampling process. The approach of Yamane (1967) was utilized to determine the requisite number of valid responses, estimated at around 397. This strategy was predicated on a total population of 50,000 international students distributed across the five colleges. With an estimated response rate of 85%, a total of 467 surveys will be disseminated to obtain the requisite number of valid replies. The surveys will be distributed among universities in accordance with the proportion of international students at each institution, as shown in the figures presented in the table above. Sample Size Determination Employing Yamane's (1967) Formula Therefore, to obtain 397 legitimate responses, it is essential to distribute 467 surveys.

The study's intended participants are delineated by the following attributes: Second-year college students. The emphasis on students guarantees that they have undergone a minimum of one year of cultural and academic acclimatization, rendering them suitable candidates for evaluating academic adaptability, self-efficacy, and acceptance of AIGC technologies.

The quantitative data for this study was obtained from a survey administered at five universities in Jiangsu Province: Southeast University, Nanjing University, Suzhou University, Jiangnan University, and China University of Mining and Technology. The survey tool utilized for gathering quantitative data is a structured questionnaire that evaluates essential constructs such as the following: Assessed with a reliable tool, namely the General Self-Efficacy Scale, developed by Schwartz and Jerusalem in 1995. The Technology Acceptance Model (TAM) items (Davis, 1989; Venkatesh & Bala, 2008) are utilized to evaluate attitudes towards AI-generated content, ease of use, and perceived usefulness. Modification of Learning The results derive from a set of evaluations that measure students' academic performance, study practices, and classroom involvement (Baker & Siryk, 1984). Participants are asked to assess their degree of agreement with multiple statements by answering closed-ended questions formatted on a five-point Likert scale. This uniform format enhances data analysis and response comparison.

### **Analysis and Discussion**

Analyses of validity and reliability show that the following constructs are useful for measuring academic self-efficacy: social support, curriculum design, teaching quality, learning motivation, and cross-cultural competence. According to Ringle et al. (2023), the measures utilized in this study were shown to have high levels of Cronbach's Alpha, rho\_A, composite reliability, and average variance extracted (AVE) for each construct. These results are displayed in Table 1. By evaluating the constructs' discriminant validity using the Fornell-Larcker criterion, cross loadings, and the heterotrait-monotrait ratio (HTMT), we may further show how unique these components are. According to Ringle et al. (2023), the constructs can be considered valid measures of their respective ideas because the square root of AVE for each variable is greater than the correlation of latent variables, the cross-loading conditions are good, and the HTMT values are below 0.85.

Social support, curricular design, and teaching quality are all significantly related to self-efficacy, according to the results of the hypothesis testing. More specifically, there are strong correlations between self-efficacy and social support ( $\beta = 0.180$ ,  $t = 3.094$ ,  $p < 0.001$ ) and curricular design ( $\beta = 0.152$ ,  $t = 2.000$ ,  $p < 0.046$ ). There is a high correlation between self-efficacy and teaching quality ( $\beta = 0.546$ ,  $t = 6.479$ ,  $p < 0.001$ ). Nevertheless, correlations between self-efficacy and learning desire ( $\beta = 0.024$ ,  $t = 0.319$ ,  $p = 0.750$ ) and cross-cultural ability ( $\beta = 0.084$ ,  $t =$

1.594,  $p = 0.112$ ) were not statistically significant in this context. To sum up, the results highlight the significance of creating a positive learning environment that prioritizes social support, curricular design, and teacher quality in order to boost students' self-efficacy.

**Table 1; Reliability Analysis**

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Social Support (SS)	0.947	0.950	0.960	0.826
Curriculum Design (CD)	0.957	0.958	0.967	0.852
Teaching Quality (TQ)	0.939	0.945	0.953	0.802
Learning Motivation (LM)	0.963	0.963	0.971	0.870
Cross-Cultural Ability (CA)	0.936	0.941	0.951	0.795

Factor loading should be measured to determine each item's reliability. According to Ringle et al. (2023), a threshold value of 0.7 or higher for each item's loading is considered reliable. In addition, Cronbach's Alpha and composite reliability scores should be equal to or greater than 0.7. Furthermore, the average variance extracted (AVE) is defined as the grand mean value of the squared loadings of construct-related items and serves as a common measure for determining convergent validity. A value of 0.5 or higher for the AVE indicates that the construct explains more than half of the variance of its items (Ringle et al., 2023). Table 2 shows that Cronbach's Alpha and composite reliability values are greater than 0.7, whereas AVE values are greater than 0.5. Thus, the constructs' convergent validity has been established.

To determine discriminant validity, the Fornell-Larcker criterion, cross loadings, and the Heterotrait-Monotrait Ratio should be considered. According to the Fornell-Larcker criterion, the square root of AVE (diagonal value) for each variable should be greater than the correlation of latent variables, which is achieved in the current study, as shown in Table 2. In terms of cross loadings, each indicator's loading should be greater than that of the indicators for its associated variables. Table 4 shows that the cross-loading criteria is met. The heterotrait-monotrait ratio (HTMT) should be less than 0.85. Table 3 shows that the HTMT requirement is met, indicating that discriminant validity has been proven.

**Table 2; Discriminant validity**

	SS	CD	TQ	LM	CA	SE
SS	0.809					
CD	0.892	0.823				
TQ	0.773	0.885	0.796			
LM	0.880	0.944	0.860	0.733		
CA	0.806	0.913	0.941	0.885	0.792	
SE	0.843	0.924	0.862	0.903	0.910	0.839

**Table 3; HTMT Hypothesis testing for direct relationship**

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
SS -> SE	0.180	0.191	0.058	3.094	0.002
CD -> SE	0.152	0.155	0.076	2.000	0.046
TQ -> SE	0.546	0.536	0.084	6.479	0.000
LM -> SE	0.024	0.021	0.074	0.319	0.750
CA -> SE	0.084	0.083	0.053	1.594	0.112

Hypothesis 1 posits that Social Support has a substantial association with Self-Efficacy. The results displayed in Table 4 demonstrate a significant relationship with the score ( $\beta = 0.180$ ,  $t = 3.094$ ,  $p < 0.001$ ), indicating that hypothesis 1 is validated. Hypothesis 2 posits that there is a strong relationship between Curriculum Design and Self-Efficacy. The results demonstrate a substantial correlation with the score ( $\beta = 0.152$ ,  $t = 2.000$ ,  $p < 0.001$ ), indicating that this hypothesis is justified. Hypothesis 3 demonstrates an insignificant connection between Teaching Quality and Self-Efficacy, with the score ( $\beta = 0.546$ ,  $t = 6.479$ ,  $p < 0.001$ ). Hypothesis 4 posited a relationship between Learning Motivation and Self-efficacy ( $\beta = 0.024$ ,  $t = 0.319$ ,  $p < 0.001$ ). Hypothesis 5 posits a significant correlation between cross-cultural competence and self-efficacy. Table 4 demonstrates a substantial correlation with the score ( $\beta = 0.084$ ,  $t = 1.594$ ,  $p < 0.001$ ).

## Conclusion

Based on the findings of this study, numerous recommendations may be made to improve students' self-efficacy in academic settings to improve Social Support, educational institutions should create comprehensive support programs that include peer mentoring, counseling, and social integration activities. Creating a supportive environment can help students overcome feelings of isolation and boost their self-efficacy. Curriculum designers should focus developing inclusive and engaging information that meets the different requirements of their students. Integrating real-world applications with interactive learning methods can help students develop a sense of competence and self-efficacy. To improve teaching quality, Institutions should provide educators with ongoing professional development opportunities. Training programs that emphasize effective teaching practices, cultural competence, and student engagement can improve teaching quality and boost students' self-efficacy. Specific interventions should be devised to meet the individual requirements of students with low self-efficacy. Personalized academic support, skill-building seminars, and motivational coaching can all help these children overcome obstacles and gain confidence in their skills. Finally, to promote Cross-Cultural Adaptation: Universities should provide programs that help students comprehend and adapt to different cultures. Cultural orientation workshops, language assistance services, and intercultural exchange events can all help students navigate cultural differences and increase their self-efficacy.

## Contributions

This study adds to the current literature by giving empirical evidence on the role of social support, curricular design, and teaching quality in increasing students' self-efficacy. The inclusion of comprehensive reliability and validity metrics guarantees that the findings are accurate and reliable, contributing to the study's credibility. Furthermore, this study emphasizes the interdependence of many environmental and human factors and their effects on self-efficacy. By identifying critical areas for intervention, the study provides realistic recommendations for educational institutions to increase student performance. This study also emphasizes the importance of constant assessment and adaptation of support services to meet students' changing requirements, adding to the continuing discussion about educational best practices.

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