

Exploring Differentiated Instructional Strategies in Higher Education

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Abstract: This study explores differentiated instructional strategies in higher education, focusing on municipal universities in Beijing to address the needs of students requiring special academic and psychological support. Despite standardized cultivation frameworks in universities, significant variations persist among undergraduates in academic planning, cognitive traits, and psychological profiles. A minority of students face challenges due to cognitive misjudgments (e.g., unrealistic self-assessment), goal fixation (e.g., excessive focus on postgraduate exams or studying abroad), psychological barriers (e.g., social withdrawal), or mental health crises, which hinder their academic integration and personal development. Universities must adopt flexible, compliance-oriented differentiated instruction within standardized frameworks to support at-risk students. Strategies should balance personalized interventions with institutional fairness, ensuring equitable opportunities for all students while safeguarding academic integrity.

Keywords: Differentiated instruction; Mental health; Personalized support; Home-school collaboration

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1. Introduction

Research on differentiated instruction in higher education remains an underexplored area requiring urgent attention. While student individuality has been widely addressed in basic education, higher education institutions have paid insufficient attention to this critical aspect. Existing studies often operate under a misconception that the national college entrance examination (*Gaokao*) screening and disciplinary grouping have homogenized the student population. In reality, significant variations persist among undergraduates in terms of academic planning, cognitive characteristics, and psychological profiles—differences that substantially influence their academic performance and developmental trajectories.

Past teaching experience has shown that nearly every class contains some students with special needs, ranging from academic underachievers to those experiencing psychological crises. With the ongoing expansion of enrollment in municipal universities, the absolute number of such students will continue to rise. This study focuses on Beijing municipal universities, examining how differentiated instructional strategies can effectively

support these students in achieving academic success and healthy personal development.

2. Student population characteristics

Beijing boasts exceptionally abundant higher education resources, with 61 public undergraduate institutions offering comprehensive disciplines and robust academic strength. Among them, 25 municipal universities—including Capital Medical University, Beijing University of Technology, and Beijing University of Civil Engineering and Architecture—conduct undergraduate admissions, each with distinct characteristics and serving as popular choices for local applicants ^[1]. Taking Beijing University of Civil Engineering and Architecture as an example, the university aligns its programs with the needs of the capital and national development, offering 35 undergraduate majors, 17 of which are designated as National First-Class Undergraduate Programs. Over the last two years, the university’s enrollment in Beijing has remained stable at approximately 1,300 students, distributed across admission channels as follows: 58.4% through the general batch (2024 data, same below), 6.7% via the “Dual Training” program, 3.0% under the rural special enrollment scheme, 0.8% in the “Overseas Training” program, and 31.0% from other provinces. Notably, nearly 70% of recent graduates enter construction-related industries tied to urban development, while about one-third pursue further studies, with a quarter of them opting for overseas education ^[2].

Under the current educational framework, universities implement well-defined regulations for student cultivation across all departments and majors. While institutional curricula generally accommodate the developmental needs of most students, a small subset—driven by personal circumstances such as employment aspirations, further studies, health issues, or psychological factors—may demand highly personalized solutions rather than standardized systems. However, teachers often lack the capacity or incentive to provide tailored instruction, particularly when such requests risk disrupting institutional order. So, in conventional teaching models, these students may feel marginalized, adversely affecting their academic and personal growth. Although such students are rare and not present in every class, even one such individual can disproportionately consume instructors’ energy and exert an outsized impact on classroom dynamics, necessitating focused consideration. Thus, the question of how to implement reasonable, compliant differentiated instruction for exceptional cases warrants scholarly attention.

3. Categories of students requiring special attention

3.1. Brief summary

The vibrancy and diversity of university campuses stem largely from the multifaceted nature of the student population, which manifests in their personalities, hobbies, thoughts, cognition, habits, and lifestyles. Most undergraduates possess distinct individuality yet adapt well to university life, requiring no targeted academic accommodations. Only a small fraction of students, due to cognitive or mental health challenges, struggle to integrate into the academic environment and thus necessitate personalized teaching approaches. While the number of such students is limited and their specific circumstances lack statistical patterns, the following two major categories (with four subcategories) demand particular attention, as their ideological and psychological issues may lead to severe consequences.

3.2. Categories of students

3.2.1. Students with cognitive misjudgments

The college entrance examination (*Gaokao*) scores serve as the primary basis for most high school

students' entry into higher education. However, individual performance in the *Gaokao* involves a degree of unpredictability—students with similar academic backgrounds may end up with scores differing by tens of points or more. Consequently, a handful of students conclude that they “deserve” admission to more prestigious universities. Unwilling to retake the exam, they view their current institution merely as a stepping stone for further education or employment, harboring resentment or disdain toward their school and major. Some even lack basic respect for classmates and faculty, convinced that their peers are intellectually inferior and their teachers unqualified to instruct them. Without timely intervention, such attitudes can lead to academic disengagement, lack of motivation, and poor performance. Beyond students' self-misperceptions and career uncertainties, excessive parental expectations often exacerbate the issue ^[3]. Some parents, driven by intense concern for their children's future and anxiety about societal competition, impose unrealistic life plans that far exceed the students' actual capabilities. This further distorts students' self-assessment, making it difficult for them to make rational, self-aware decisions.

3.2.2. Students with goal fixation

Some students become overly fixated on specific objectives, such as postgraduate entrance exams or studying abroad, to the detriment of a balanced education. For instance, they may devote excessive time to relevant subjects while neglecting others deemed less critical. Extreme cases involve students focusing solely on English proficiency for overseas applications, disregarding all other coursework. If their target universities require high GPAs, instead of improving their grades through effort, they plead with instructors for leniency, citing study-abroad aspirations. Some even crowdsource information online about which majors or professors are more accommodating to such requests, strategically selecting their courses. Similarly, certain exam-oriented students obsess over English and advanced mathematics, treating other subjects as mere pass/fail obligations. During senior-year internships—a critical period preceding postgraduate exams—they skip classes to cram for these subjects, exploiting loopholes to maintain attendance records. Worse yet, some exploit special exemptions (e.g., self-study claims) to demand full marks for assignments, despite providing no verifiable proof of work. Such behaviors disrupt teaching rules and create inequities for diligent peers.

3.2.3. Students with psychological barriers

Due to varying upbringings and experiences, some students develop psychological issues such as social withdrawal, eccentric behavior, or inferiority complexes ^[4]. These individuals often isolate themselves, avoid group activities, and struggle to fit into their surroundings. Their reclusive and unconventional behavior renders them invisible in classrooms, easily overlooked by instructors. The inability to forge social connections also limits collaborative learning and participation in research or practical assignments, depriving them of growth opportunities through teamwork. Poor communication skills further hinder group discussions, inviting exclusion. In extreme cases, they misconstrue instructors' routine feedback or disciplinary actions as personal attacks, exacerbating negative emotions and further impairing academic performance.

3.2.4. Students with mental health disorders

In 2023, the Institute of Psychology, Chinese Academy of Sciences released the “2022 National Survey Report on University Students' Mental Health Status.” The findings revealed that among nearly 80,000 surveyed undergraduates, the depression detection rate reached 21.48%, while anxiety risk prevalence stood at 45.28%. Mental health issues have undeniably become a persistent shadow over university campuses. The study

identified gender differences: male students exhibited slightly higher depression risks, whereas female students showed greater anxiety vulnerability. Notably, urban household-registered students demonstrated higher risks of both depression and anxiety compared to their rural counterparts. Regarding stress factors, the primary sources emerged as “heavy academic workload,” “missing family members,” and “uncertainty about career suitability” [5]. In recent years, academic pressure and career planning challenges have become predominant stressors, with postgraduate and civil service examinations gradually evolving into the central focus of university life. Intense competition necessitates greater academic commitments, thereby exerting measurable impacts on students’ psychological well-being.

4. Differentiated instructional strategies

4.1. Comprehensive psychological support system

Emphasis should be placed on mental health by integrating psychological education into daily teaching and extracurricular activities. This aims to enhance students’ psychological resilience and stress management skills. A holistic support framework should be established, incorporating mental health workshops, counseling services, and crisis intervention mechanisms. This ensures students proactively seek timely assistance from academic advisors, counselors, or psychologists when facing cognitive or emotional challenges. While addressing practical issues, educators should prioritize psychological guidance to cultivate students’ proper perspectives on life, learning, and values. Concurrently, encouraging participation in campus activities and social practices fosters a sense of social responsibility and teamwork, offering tangible support for holistic development.

4.2. Personalized growth support

First, one-on-one candid conversations should be conducted with at-risk students to understand their thoughts, interests, and academic aspirations. Based on their specific needs, individualized support—including psychological counseling, academic planning, and career guidance—should be customized to help them overcome challenges.

- (1) Cognitive restructuring and psychological counseling are critical to help them recognize the interdependence between personal growth and environmental factors, as well as the pivotal role of proactive agency in success. Concurrently, parent-school communication should emphasize respecting the gradual nature of talent development and selecting educational environments aligned with students’ capabilities.
- (2) Guidance should broaden their perspectives to acknowledge the multidimensionality of personal development. Educators must clarify that university education transcends exam-oriented learning, serving as a foundation for future growth. Strengthened progress monitoring ensures academic requirements are met alongside personal aspirations.
- (3) Confidentiality and professional support are paramount. Schools should provide structured counseling, crisis intervention, and stress management training. Academic pressures should be alleviated by breaking tasks into manageable steps (e.g., semester-by-semester or course-by-course goals), rebuilding confidence to facilitate graduation.

4.3. Home-school collaborative mechanism

Family plays a pivotal role in student development, and parental influence must not be overlooked. A balanced

partnership among schools, families, and students should be fostered through regular communication. Schools can offer academic and psychological resources, while families provide personalized emotional support. Transparent updates on students' academic performance and challenges enable parents to offer informed encouragement, helping students confront difficulties collaboratively. Parents should also be encouraged to monitor students' campus life, creating a cohesive environment for personalized growth.

5. Conclusion

University students represent the hopes of their families and the future of the nation. As such, universities bear the responsibility of fostering the healthy development of all students. Institutions should not merely adopt a standardized approach to attendance, assessment, and graduation/dismissal for all students. Instead, they ought to implement differentiated educational strategies for students with special needs, addressing their individualized academic requirements. However, all these educational measures must remain flexible implementations within the standardized teaching framework of the university. They must not violate any institutional regulations or grant undue privileges to any student, so as to maintain a fair, just, and efficient higher education environment.

Disclosure statement

The author declares no conflict of interest.

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