

# The Dilemma of Higher Education in the 21st Century: Elite to Massive

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**Abstract.** Amid the globalized higher education transition from elite to massive, new dilemmas have been identified and need to be addressed in the current time, which requires analysis and reference to previous instances of educational systems that have experienced the shift. This paper explores and integrates the key issues in terms of higher education in the 21st century through literature review and comparative study, summarizing them in three dimensions: students, educational institutions, and society. To tackle these issues, it is necessary for higher education to undergo a change which is both sensitive to quality and quantity. This article has the potential to strengthen the insights of future researchers and educators into higher education and inspire their will to overcome existing dilemmas in both research and practical fields.

**Keywords:** Educational transformation; Massive education; Educational resources; Talent structure; Value of diplomas.

## 1. Introduction

Mass higher education has become a dominant trend and social characteristic of the 21st century on a global scale, especially in developing countries [1]. China, the world's largest higher education system, has increased its gross enrollment rate in higher education from 30% in 2012 to 57.8% in 2021 [2]. The educated population will reach 240 million in 2022, while the average years of education for the new workforce will reach 13.8 years, changing the quality structure of the workforce significantly [2]. This widespread phenomenon can be attributed to social competition, popular perceptions, and the irresistible development of globalization. The notion of the omnipotence of education, represented by Claude Adrien Helvétius, has been in vogue since the 18th century [3]. This theory, dating back to Plato, though it exaggerates the role of education in human growth and denies genetic merit, has greatly influenced the current value of education. In 1961, Schultz proposed the theory of "human capital," arguing that education is an investment that can bring huge profits, followed by Bourdieu arguing in 1992 that capital presents three basic types: economic, cultural, and social [4,5]. Cultural capitalism refers to the use of cultural knowledge by people to consolidate their position in the hierarchy or to ensure that those in the lower class are excluded, which in a way sets the stage for the subsequent pursuit of diplomas [5]. However, the screening hypothesis was presented in 1973 by Taubman and Wales from social problems such as inflated diplomas, over-education, and high unemployment in recent years, stating that education is a sieve whose function is not to improve people's cognitive level but to distinguish various kinds of people with different abilities [6]. Despite their initial intention to ameliorate related problems, this theory psychologically pushes the public to pursue educational level even more, as the classes in society tend to stabilize in development and globalization that leads to more intense competition, which starts with education.

The unbalanced supply and demand of degrees have led to the transformation of higher education from elite-oriented to massive. In comparison, the expansion of many colleges and universities and the opening of marginalized majors have gradually eroded society's belief in the value of higher education, however The broad definition considers elite education a pattern to cultivate elite consciousness and ability of high potential population, which emphasizes the intelligence and foundation of the educated targets [7]. Those who have the opportunity to receive it account for a tiny percentage of their peers, for example, only 7% in the UK, which is in line with the theory that the talent structure of society should be pyramidal [8]. Elite consciousness should not be taught equal to

privileged ideas, while elite ability shall not be reflected in material pursuits. Compared to mass education, cultivating students' social responsibility, humanistic spirit, and scientific quality is quite essential for elite schools. In 1973, Martin Trow proposed the idea of classifying the development of higher education into "elite," "mass," and "universal" stages using the gross enrollment rate of higher education as an indicator, divided by 15% and 50%, which started the era of distinguishing educational patterns from quality to quantity by international organizations and academics [9]. Nevertheless, the massification of higher education should be a concept that unifies quantity and quality. The qualitative changes include a series of changes in the philosophy of education, the expansion of educational functions, the diversification of training objectives and educational models, the conditions of access, the way of management, and the relationship between higher education and society. As the number of people accessing higher education has increased, many problems have gradually emerged, one notable shift being the vertical shrinkage of the average educational resources received by individual students. Despite the insistence of educational institutions to follow suit, issues (e.g., limited space and staff numbers) should continue to have a serious impact on the quality of higher education. Social perceptions of popularization are also mixed, with many arguing that it has devalued diplomas and affected the demographics of society. There are few studies on the dilemmas faced by higher education, but those that study its massification are yet to be perfected [10-13]. Therefore, this paper will take a comparative method of higher education in elite and massive backgrounds to analyze the deficiencies of this global transformation, thereby seeking ways to improve it.

## **2. The plight of high school and university students**

To bring higher education towards the massive model, multiple institutions are responding to the social demand for expansion. On the one hand, more new universities are being established while independent colleges are being upgraded to universities, thus increasing the number of students; on the other hand, existing universities are expanding their enrolment to meet the demand. The top students in high school, especially those who can be admitted to excellent universities without the expansion, are arguably the victims, since the growing numbers of peers are competing with them for educational resources and employment opportunities. Good institutions are constantly raising their admission requirements to screen students, which would let students spend a huge amount of energy on their standardized scores. This premature push is one of the causes of academic stress as well as anxiety for students. University students have already considered that the decline in educational resources that become the biggest change and challenge [14]. There are fewer course options available to them than those in the elite model. Several universities in China, for example, have drastically reduced the number of elective courses after the expansion due to the difficulty of coordinating a large number of students or even used their system to select courses on behalf of students [15]. Some universities have increased the class size of lecture courses while reducing the number of seminar hours or increasing the number of students per seminar, and even canceling the tutorial or practical sessions, resulting in students receiving much less attention from educators. In the US and Europe, schools have been forced to reduce academic advisors or life counselors per student due to the increase in the population [16]. After enrollment expansion, those responsible for three or four students now have to take care of up to seven, which improves the difficulty of devoting enough time and energy to each. In addition, extra-large module sizes, for some courses containing thousands of students, can lead to a lack of curriculum cohesion. The intensity of competition for scholarships, honors, and other awards, has become greater for students who are in need or motivated. For those in the middle and later stages, it is easier to develop a negative feeling of oblivion.

At the level of postgraduate education, a growing number of people have started or at least considered taking up further studies, because the expansion has made it difficult for undergraduate students to find jobs as their diplomas are no longer competitive enough. Some institutions have responded to public opinion by expanding the number of master's students, which has led to the

popularisation of postgraduate education, followed by a decreasing percentage of their employment offers, leading to greater competition for the Ph.D. degree. However, not everyone is suitable for academic research. Such developments in further education have affected the motivation of students, who should have chosen to study at the postgraduate level for reasons of genuine interest in a particular field or promise of achievement, but now do so blindly or simply for employment, many even going so far as to change majors to get a master degree. The disciplines that accept changes of specialism are generally not very restrictive in terms of expertise, which results in a loss of talent in some fields and a gain of talent in others that are not the most in-demand [17]. The situation is distorted and confusing so that more and more students in higher education are plunged into anxiety over their future choices. From the perspective of sieve theory, such a model does not place students in positions that truly suit them. In addition, it takes more educational resources to train a postgraduate student than those universities that are expanding can casually guarantee [18]. For graduates of elite education, the standards of graduates of mass education are significantly lower than before, causing them inevitably a sense of unfairness that the same diploma is “of a different standard” or “under distinct criteria.” In contrast, the diminished value of the undergraduate diploma can tarnish their reputation. In short, countries have encountered many inevitable setbacks on the road to transforming higher education into a massive model, with the most important issues for students focusing on four perspectives: educational resources, admission conditions, academic motivation, and psychological issues.

### **3. Dilemma faced by educational institutions**

Despite the quantitative shift towards mass pattern, the concept of higher education, the form of pedagogy, the academic standards, the management jointly with strategy, and the function along with size of institutions have remained at the stage of elite mode, without qualitative change. This uneven educational transition has brought out issues for various institutions. One of the most significant problems is that the management and the absorption of staff have not kept pace with the rapid expansion of student numbers, which has led to an unreasonable teacher-student ratio, an increase in the teaching load of teachers as well as in the pressure to manage students, along with an inevitable decline in the quality of teaching. An experience increasing number of talented graduates and experienced educators are avoiding the teaching profession due to this kind of pressure, although it is accompanied by rising salaries and allowances [19]. The high threshold for recruitment to educational institutions, coupled with the fact that many of the top students in the field are not interested in being teachers, has led to a degree of staff discontinuity. From the economic perspective, the fattening in the number of students drives consumption, and the expansion of enrolment drives infrastructure and contributes significantly to the growth of the resident's gross domestic product (GDP). However, the benefits to the resident government do not bring substantial benefits to education. Almost globally, schools benefit mainly from increased tuition fee income and government funding, a portion of which is allocated per-student basis [20]. When the two are added together, the marginal cost would be very low if no new campus, dormitory, or hardware purchase is made, resulting in students settling in crowded accommodations and large-size classes with insufficient and outdated equipment. However, most universities are still determined to do what is best for their students, so the fixed interest on annual bank loans is bound to weigh heavily on them [21].

Another unignorable problem is that the existing teaching content and format have not been transformed in parallel, which is mainly reflected in the university's curriculum and its approach to education. Firstly, there is a discrepancy between the existing curriculum and the training objectives. The change from elite to mass should be more quantitative than qualitative. However, the curriculum of many universities has shifted in the direction of training advanced specialists as the number of students has increased, reflected in the absolute predominance of skill courses, a well-developed system, and abundant teaching resources. Moreover, institutions nowadays tend to train people with certain orientations, such as employability, political capability, and professional skills. Nevertheless,

the authentic goal of higher education should be to cultivate well-rounded and high-quality talents, which is something that needs to be highlighted by the university.

Secondly, the curriculum affects the development of students' personalities. Higher education is aimed at adults whose cognitive level, attitude and approach to learning, and choice of learning content, make them present a more self-controlled and personal development-oriented character. From this point of view, Hong Kong, some of the Nordic countries, as well as the United Kingdom and the United States have done well in their ability to provide individualized career planning for almost every student, as reflected in the high degree of freedom in the choice of electives and the deployment of career advisers [22]. The school's curriculum must reflect its implicit quest for creativity and attract a better intake of students with this highly rewarding possibility. Finally, many universities have an old and outdated curriculum setting, which is not suitable for training highly qualified people for the times. For this reason, the university should make reforms as soon as possible, setting pedagogy with high quality as a core task, and adapting to the needs of economic, social, and technological progress, thus forming a mechanism for updating teaching content. In addition, it is essential to improve the structure of subject clusters, disciplines, and knowledge to achieve three-tier optimization from the curriculum system to the main courses [23]. The improvement should meet the needs of overall optimization, openness, precision, and personalization. In summary, the dilemmas faced by educational institutions include staff and student management, economic issues and hardware, and the approach to pedagogy and curriculum, all of which can be improved by transforming higher education to synchronize quality with quantity.

#### 4. Social Perspectives

The impact of the transformation of higher education on society has been most visible, dramatically changing the perceptions of the masses and the fabric of society. The change in the value of diplomas is one of the most obvious characteristics. Michael Spence argues that diplomas have a signaling value. Still, to meet the criteria for signaling one's competence to the outside world through a diploma, requirements for universities and their policies should be met, such as the need to be rigorous in terms of curriculum and graduation. It does not seem to focus on whether the admission is lenient or strict [24]. Massive education does not guarantee such a rigorous exit, even if the requirements for graduation are dropped continuously due to the lower quality of the student and the increased difficulty of management.

However, society's understanding is disjointed, and a large number attribute the gold value of a diploma to the entry requirements of the university, thus giving birth to a distorted market despite of diplomas. For example, it seems that in the case of English-speaking countries, the diploma value in public opinion declines in order of USA, Canada, UK, Australia, and New Zealand [25]. This is the consequence of paying only attention to entry requirements when there is not much difference between these five countries if considering graduation requirements. It is thus clear that society is no longer able to properly recognize the value of a diploma, which in turn leads to other issues at various levels, such as the waste of educational resources and the distortion of the talent structure. This is because the situation of reality differs greatly from the economic model. University resources are limited, so at least in China, including other regions where mass education has been fully achieved, it is difficult to achieve a lenient entry requirement to universities, but rather a "strict entry policy" through which thousands of people are selected under cut-throat competition [26]. Even so, plenty of educational resources are wasted. The polarization of the quality of diplomas makes it difficult for the weaker side to find work.

In contrast, a large number of unemployed graduates do not make use of the educational resources they have gained. In terms of the structure of talent, an increase in the number of university students does not mean that the number of elites will also increase, although probabilistically possible, leading the public to wonder about the necessity of cultivating a multitude of less talented "elites" [27]. In terms of achieving educational goals, such mass education does raise the overall quality of a

generation, but these qualities are often developed during the compulsory stage. In contrast, the achievement of the goals is unsatisfactory, as students' ability to independent learning, motivation, and goal-setting skills remain inadequate. At the same time, anxiety and confusion have become two common emotions among university students [28]. Ultimately, the main dilemmas facing higher education at a societal level are the problems arising from the changing value of diplomas, the waste of educational resources, the solidification of the talent structure, and the low achievement of higher education goals.

## 5. Conclusion

With the globalization of mass higher education in the 21st century, the issues are becoming increasingly evident with the growing number of cases. For students, the shrinking of educational resources, the increasing stringency of entry requirements, the gradual deviation from academic motivation, and the growing psychological problems are essential plights to be addressed. For educational institutions, the problems are centered on the increased difficulty of managing staff and students, the gradual deterioration of financial resources and equipment, and the lack of up-to-date pedagogy and concepts. For society, the change in the value of diplomas, the consolidation of the structure of human resources, and the consequences of the difficulty of meeting the objectives of higher education are increasingly affecting the lives and minds of generations. The most fundamental point is that changes in the quality of higher education have not been synchronized with sharp increases in student numbers, a gap that needs to be filled through efforts from diverse fields. This would be a worthwhile pursuit, whose improvement will usher in a better era of higher education in the 21st century.

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