

Countermeasures of Educational Institutions and Consumers under the Double Reduction Policy and during the COVID-19 Outbreak

Ziteng Li^{1, †}, Shuai Liu^{2, †}, Jiahao Ni^{3, †}, Fan Yang^{4, †}

¹ Institute of culture and tourism Jinan university 250002 Jinan China

² New Channel, 310000 Hangzhou China

³ Pennon, 266000 Qingdao China

⁴ School of Software, Zhaoqing University, 526060 Zhaoqing China

[†]These authors contributed equally.

*Corresponding author. Email: 18402043@masu.edu.cn

ABSTRACT

Without a doubt, a sudden outbreak of COVID-19 and policies enforced in China for the purpose of ensuring high-quality development of the education industry have an unprecedented impact on training and educational institutions. However, this is also an important opportunity for educational institutions to make breakthroughs. In the context of educational institution transformation, not only do parents of students, as consumers need to make correct and rational decisions, but educational institutions should make further improvements and progress to meet social demands. A game of their strategies is a critical issue. Facing the COVID-19 outbreak and the double reduction policy, educational institutions put forward a series of changes and online inquiry learning turns into a trend. At the time of selecting education courses, consumers should establish correct educational concepts and make reasonable decisions that conform to students' abilities. Education cannot be separated from the cooperation between parents and teachers; and the release of a double reduction policy exerts an impact on educational involution. Through joint efforts of the whole society, China's educational undertakings may gradually grow and expand and eventually reach an ideal equilibrium state.

Keywords: "Educational institution" "online inquiry learning" "consumer"

1. INTRODUCTION

2021 is an extraordinary year for educational institutions and the education industry. On one hand, the education industry is stricken by the COVID-19 outbreak. All over China, students are suspended from schools in different places; and traditional offline teaching turns into online lessons. "Although home quarantine leads to improvements in diets and sleep and places a minor influence on online communication, it impairs study/research activities of college students, physical exercises and interpersonal communication in practice" [1]. In addition, national commands of offline gatherings forbidden are also issued, which affects student enrollment and fund circulation in offline educational institutions to diverse degrees. Thus, organizing online inquiry learning lessons becomes a new development tendency of training and educational

institutions.

A qualitative investigation in which teachers and parents of elementary school students are engaged is carried out overseas. It has been demonstrated by this research that teachers may need to "improve exchanges with students' parents", and "design interactive homework to overcome relevant obstacles", that is, "homework is seen as the pressure applied to parents and teaching staff" [2]. High expenditures on extra-curricular tutorials lead to a heavy burden on consumers. To ensure high-quality development of education, the double reduction policy is launched in China. "For students, this policy means that the previous burden is eased and they have more spare time; and for parents and schools, more spare time of students signifies that new education space is formed". [3] There is no doubt that either alleviating the burden on students or being less enthusiastic about capital has a severe

impact on the entire education industry; as far as offline educational institutions are concerned, either of them may affect student enrollment, capital flows and educational resources to different extents. For example, New Oriental is a leading representative enterprise among the current training and educational institutions; its market value and revenues dropped by 90% and 80% respectively in 2021; and consequently, over 60,000 employees were dismissed. "In the last ten-day period of August, it was reported in LatePoint that New Oriental Education & Technology Group announced that it planned to turn its exam-oriented education coaching into quality-oriented education. As planned, it may invest heavily in fields independent of policy restrictions, including PE, art, and programming." [4] Moreover, some small-sized educational institutions directly go bankrupt. In 2020, the number of educational enterprises revoking or canceling reached 70,600. Through comparison, it is clear that offline education has some defects such as slow withdrawal of funds and a high input cost, while online inquiry learning gradually becomes a new trend of educational institution transformation thanks to its flexible forms and teaching methods. "Under the pressure of attending school in China, all relevant parties, including students, parents, teachers, schools and supplementary schools, begin to have a bias against education values. For instance, utilitarianism and comparison mentality, etc. are heatedly discussed terms associated with the education industry." [5]

Under the circumstances of the COVID-19 outbreak and the double reduction policy, how to correctly evaluate the effects of online inquiry learning provided by educational institutions and reasonably schedule extracurricular time of students is an essential issue for consumers in the present educational environment. "Extracurricular learning activities of students are main embodiments of their academic burden in extracurricular time; and too much time of extracurricular learning activities may enhance students' sense of academic burden." [6] Here, results of senior high school entrance examination in a place are taken for example. Among graduates of junior middle schools in a region, scores of more than half of them exceed 7.5 points for written examination questions with a full score of 15 points. This indicates that many graduates of junior middle school fail to correctly express an event in English. Thus, it can be speculated that their three-year English learning in junior middle school involves massive homework and exercises, which does not produce expected results. Perhaps, it can be proved that high-intensity training applies slight influences on some students. [7]

In this paper, online lessons of educational institutions and selections of consumers are taken as examples to discuss relevant issues. In the first stage, backgrounds and advantages of educational institutions'

transformations into online patterns are listed; and in the second stage, both the necessity and feasibility of consumers to make reasonable decisions in a scenario of educational institution transformation are analyzed. In stage three, it is aimed at comparing decisions and changes made by educational institutions facing COVID-19 and the double reduction policy on one hand, and decisions made by consumers about coping with such changes, thus exploring game strategies of educational institutions and consumers when confronting the epidemic and the policy.

2. DEVELOPMENT STRATEGIES OF EDUCATIONAL INSTITUTIONS

2.1 Educational institution transformations

Under dual influences of the COVID-19 outbreak and the double reduction policy of China, a vast majority of educational institutions choose to be transformed into an online pattern, thus catering to the development tendency of online inquiry learning. "In an era of information driven by constant technological innovation, different concepts collide with each other as 'Internet+' is raised; and increasingly innovative technological means enables online education to be more abundant and diversified" [8]. After transformation, the novel online inquiry learning model not only overcomes various defects of traditional training models, but achieves popularity among mass consumers thanks to its innovative teaching modes and convenient and unconstrained learning styles. Although both COVID-19 and the double reduction policy have certain impacts on training organizations, they also promote the development and transformation of educational institutions, and help them swim with the tide and make progress. "During educational reform, teachers who abandon poor and repeated lecturing in a traditional class will devote themselves to optimizing all particulars; in other words, they no longer follow the conventional teacher development mode that considers teachers being great and omniscient. Optimization of various particulars may result in extensive optimization of educational resources overall". [9]

2.2 Emergence of the online mode

In the event where offline training faces severe challenges, educational institutions begin to transform towards an O2O (online to offline) mode. "New teaching models such as Micro-Course Online Videos, h MOOC, the Flipped Classroom approach and bullet screen based teaching are just products of deep integration between network technology development and the research on education and teaching. The emergence of "Internet+ education" aims at enhancing education quality, cultivating more excellent students, making education more equal, more sound, more

popular and more personalized, and enabling educational management to be more scientific and more humanistic" [10]. New online teaching courses set up in educational institutions attract new students and lead to the emergence of many online schools. For example, the number of student users of Xueersi Online School increases by 180% if compared with that of the previous year. Online inquiry learning utilizes new media means based on a network technology to expand relevant teaching approaches, which attracts attention from consumers. Under the overall background where online education turns into a mainstream development tendency, traditional study program improvement by the emerging technical appeals to students, contributes to fostering their cultural quality and research capabilities. For this reason, it is well received among consumers. As known, different courses are developed, such as ppt based live broadcasting video distance teaching at the very beginning, animation based teaching, VR courses and live streaming in various forms. They facilitate the further development of online inquiry learning.

2.3 Online inquiry learning as a trend

In recent years, inquiry learning combining inquiry-based research with extracurricular tours is a new trend indicating a direction for online education. "In 2016, the Opinions on Promoting Inquiry Learning Tours Among Primary and Secondary School Students was jointly released by 11 ministries and commissions (e.g., the Ministry of Education) on the premise of referring to overseas experience, performing domestic pilot tests and extensively seeking for advice, pointing out that inquiry learning travel will be incorporated in primary and secondary education teaching plans. This reveals that China's inquiry learning travel program enters a stage of comprehensive implementation." [11] To be specific, inquiry-based research asks students to go out of school, experience the joy of practice in person and appreciate local cultural and scientific research resources in an "immersion" way. Nevertheless, offline inquiry learning develops slowly because of safety and cost-related problems as well as the influence of COVID-19. By contrast, online inquiry learning at present not only requires lower costs but also intensifies students' senses of experience and involvement. In this way, technology and enjoyment are organically combined together and online inquiry learning becomes a new trend favored by consumers. With the emergence and popularity of modern information technology, educational institutions are inclined to organize inquiry learning travels by utilizing novel technologies. As a brand-new education pattern combining educational activities and travel, online inquiry learning tours receive the attention of all sectors of society. Furthermore, online inquiry learning also raises new requirements for the organizational and planning abilities of educational institutions. Different from

traditional curriculum models, online inquiry learning asks educational institutions to realize the classification design of educational products and thus produce specialized products oriented to diverse consumer groups. This is a severe challenge to current educational institutions. Online inquiry learning tours do not stand for browsing scenic spots. In an age of online education, different educational products need to satisfy different demands of consumers and take advantage of science and technology to enhance students' senses of involvement and improve their research capabilities.

3. RATIONAL DECISION-MAKING BY CONSUMERS

3.1 Changes in consumers' strategies

As educational institution transformation continues, consumers may select different strategies to deal with environmental changes. To obtain an optimal combination of consumption strategies, consumers as parents need to make reasonable decisions according to their children's acceptance and interest and establish correct educational views. "Parents should give their kids scientific, planned and goal-directed education based on characteristics of their physical and mental development, and firstly make sure that they learn and master some fundamental knowledge, laying a foundation for students' all-around development.[12]"

3.2 Mental distortions of consumers

Despite the trend of online education, how to correctly select appropriate educational products is still a problem for extensive consumers. In this aspect, they, instead of following suit or giving the seeding a hand, need to set up clear and correct educational concepts and rationally assess the effects of online tutorship. Decision-making among consumers may mutually influence their decision-makers. Competitive enterprises are inclined to adopt strategies best for themselves to realize the benefit maximization. "Though exam-oriented education is criticized by many parents, they still are strong supporters of it. As far as school selection is concerned when a student is about to enter the junior middle school from primary school, or senior high school from junior middle school, there are more parents valuing academic scores and the enrolment rate of a school, which can be referred to as the so-called teaching quality." [13] Currently, the exam-oriented education plays a major role in China. To make sure that their children are capable of standing out from their peers, parents do not hesitate to pay high prices for enrolling in tutorial classes where the number of students already exceeds the previously designated quota, which means targeted admission. Under the influence of the COVID-19 outbreak and the double reduction policy, offline tutorship has been substituted

by online education in most educational institutions. However, purchasing educational commodities thus becomes more popular. To obtain better grades, parents tend to purchase more courses. In addition, parents entrust their children to educational institutions during the previous offline tutorship, while children select online inquiry learning and study via live or recorded lessons at home. In the latter case, many parents begin to highlight quantity, but not quality. Because of a comparison mentality, they think that it would be better if they buy more lessons for their children. Consequently, it is much more likely for a large number of parents to lose themselves in the "Concorde fallacy", it also known as sunk cost fallacy, means that for an event in which certain costs have been invested, it cannot proceed when reaching a certain stage but we have no other choices but to make the best of a mistake for various reasons, in this case, instead of easing the burden on students and their parents, burden alleviation makes the burden heavier. "Report on National Mental Health Development in China (2019~2020) was released on March 2021. It is pointed out that sleep deprivation becomes increasingly serious among teenagers, and positive rate of depression attacking teenagers reached 24.6% in 2020"[14].

3.3 Indispensability of rational decision-making among parents

In the context where the double reduction policy facilitates gradual regularization of educational institutions, parents fail to change their incorrect educational ideas. In practice, new demands constantly arise based on requirements of social, school, and home education objectives; nevertheless, their demands may conflict with their existing cognitive levels. As demonstrated in relevant research, not all concepts can be perceived by themselves. In other words, parents who have difficulties in children's education and thus adopt a practice that couldn't be more wrong do not realize that such problems are caused by their incorrect educational concepts. Considering this, parents need to transform and update their original educational concepts on one hand and be aware of disharmony between traditional educational ideas and social development/sound growth of their children on the other hand. Only in this way, their problems can be radically settled. Facing the fact that the number of extracurricular tutoring centers declines, parents are willing to improve their children's academic performance by spending more money on signing up for after-class tutorship. Because of such a comparison mentality, students are inclined to enroll in hobby training courses far beyond their learning capabilities; as a consequence, the learning burden of children becomes even heavier. Therefore, parents should adopt a strategy of success through quality other than quantity, asking their children to participate at the right time in high-quality tutorial classes that fit into

their interests and development orientations. Therefore, the traditional development pattern of being quantity oriented can be abandoned and another development stage of quality improvement arrives. Furthermore, over-reliance on online courses can affect students' learning efficiency. For this reason, it is clear that correct and rational decision-making by parents are critical to their children's proper growth; and building correct educational concepts is also the key to cultivating outstanding talents. In a word, selecting appropriate courses depending on children's interests and capabilities can facilitate their healthy growth.

4. DISCUSSIONS

By comprehensively investigating different decisions made by educational institutions and consumers in the context of the COVID-19 outbreak and the double reduction policy, it is indicated that all of them aim at providing better educational opportunities and a more excellent learning environment for children. Under the background that online education becomes a major trend, educational institutions take the initiative in promoting and popularizing online inquiry learning by virtue of high and new technology. On one hand, this may contribute to enhancing both cultural quality and research capabilities of youths in China; and on the other hand, it can boost the progress in China's educational causes as it has the potential to improve scientific literacy and spread traditional culture. Under the circumstance of COVID-19 normalization, only a combination of online and offline education is capable of realizing educational rationalization. "Education also plays a role in social stratification and intergenerational transmission. Extracurricular tutorship makes it much more likely for a family with high socioeconomic status to gain an advantage in facilitating the future development of their children by paying extra educational expenses. Without a doubt, this may lead to solidification of social stratification and intergenerational transmission of socioeconomic status."[15]

Considering the present environment, educational institutions need to speed up their transformation, which is embodied in the following two aspects. First, offline education should be shifted to online inquiry learning; and second, they should devote themselves to improving students' comprehensive quality, that is, tutorship oriented by academic scores needs to be replaced with an inquiry learning model that combines general knowledge courses with art and hobby training. In a new educational environment, it is suggested that parents change the way they raise their children and set up correct educational concepts. Children's education depends on cooperation between parents and teachers. The release of the double reduction policy has a significant influence on educational involution. It is

believed that China's educational undertakings will find their optimal solution and reach a balance through joint efforts of the entire society.

5. CONCLUSIONS

Undoubtedly, China's training and educational institutions are under the dramatic influence of the sudden outbreak of COVID-19 as well as the national policy implemented for the purpose of ensuring high-quality development of the education industry. For educational institutions, this is also an important opportunity to make breakthroughs. Facing educational institution transformation, a strategy game between parents as consumers (how to make rational decisions) and educational institutions (how to make further improvements and progress to meet social demands) is a key issue of this study.

In this paper, survey and literature research methods are utilized to: (1) comprehensively analyze the present educational environment in China; (2) systematically probe into impacts of COVID-19 outbreak and the national policy; (3) simulate different mentalities of consumers and educational institutions; (4) compare pros and cons of educational institution transformation into an online inquiry learning model; and (5) clarify both the necessity of educational institution transformation and importance of consumers' rational decision-making through integrated analyses. It turns out that the best decision can be made depending on the mutual cooperation of consumers and educational institutions.

There are still some defects in this paper, including a time restraint, lack of rigorous quantitative analysis and model building technically, certain survivorship bias existing in data collection, and emphases on theoretical analysis and discussions about qualitative problems. In future research, more profound investigations will be made on education market situations and psychological and behavioral changes of consumers who are confronted with educational institution transformation. It is expected that a linear regression model can be established by means of a sampling survey and multiple evaluation indicators be designed and tested through various assumptions. In this way, the game between consumers and educational institutions will be further explored by right of rigorous mathematical analyses.

REFERENCES

[1] Y. Xiao, Y. Ju X. Jing, Influence of novel coronavirus pneumonia on the mood and learning [J]. Chinese Journal of Clinical Psychology, 2020, 28(06): 1254-1260. DOI: 10.16128/j.cnki.1005-3611.2020.06.036. LK <https://d.wanfangdata.com.cn/periodical/ChlQZXJp>

b2RpY2FsQ0hJTmV3UzIwMjIwMzIyEhJ6Z2xjeGx4enoyMDIwMDYwMzYaCDN2bnNzbnpo

- [2] M Song. Under the Implementation of Double Reduction Policy[C]//2021 International Conference on Education, Language and Art (ICELA 2021). Atlantis Press, 2022: 800-804.
- [3] J. Yin, W. Li, Research on the Countermeasures of improving the quality of school education after the "double reduction" policy [J] Teacher Education Forum, 2021, 34(10): 17-20.
- [4] B. Wu. Research on the Impact of China's "Double Reduction" Policy on Out-of-School Remedial Classes[C]//2021 3rd International Conference on Economic Management and Cultural Industry (ICEMCI 2021). Atlantis Press, 2021: 548-552.
- [5] J. Li, X. Li, A. Shi, et al. The Impact of the Double Reduction Policy[C]//2021 International Conference on Education, Language and Art (ICELA 2021). Atlantis Press, 2022: 713-720.
- [6] W Fei, L. Fang. Analysis of students' academic burden from the distribution of extracurricular time-- An Empirical Study on the academic burden of junior middle school students in China [J] Research on educational development, 2018, 38(10): 32-38.
- [7] Y. Guo. The Current Impact of the Double Reduction Policy[C]//2021 International Conference on Education, Language and Art (ICELA 2021). Atlantis Press, 2022: 147-152.
- [8] X. Jiang, Y. Yang, B. Han, L. Yong, Y. Chang. Discussion on current situation, existing problems and improvement of online education on the background of "Internet +" [J]. Modernization of Education, 2019, 6(36): 79-80+94.
- [9] Z. Jin, C. Chun. Future teachers under the trend of mixed education -- Reflections on teacher diversion, transformation and teacher education in the era of MOOC (massive open online courses) [J] Exploration of Higher Education, 2015, (04): 105-110.
- [10] A H. Research on modular O2O teaching mode under the background of "Internet + education" [J]. University Education, 2020, (10): 33-36+40.
- [11] C. Dong, X. Hong. The development and research progress of research tourism in my country [J]. World Geography Research, 2020, 29(03): 598-607.
- [12] Z. Yan. A survey report on the status quo of primary and secondary school students' family education [J]. Journal of China Youth University for Political Science, 2006 (05): 36-43.

- [13] M. Bao. Some thoughts on exam-oriented education [J]. *Education and Teaching Forum*,2020,(35):117-118.
- [14] X. Jin, Y. Sun. Does Double Reduction Policy Decrease Educational Pressures on Chinese Family?[C]//2021 International Conference on Education, Language and Art (ICELA 2021). Atlantis Press, 2022: 771-776.
- [15] Y. Yin, Z. Lai. Research on the Transformation of Educational Institutions under the Policy of Double Reduction[C]//2021 4th International Conference on Humanities Education and Social Sciences (ICHESS 2021). Atlantis Press, 2021: 1530-1534.