
NEWSLETTER

A Comparative Analysis of Large-scale Online Education between Urban and Rural K-12 Schools in China during the COVID-19

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UPON the emergency of the COVID-19, the unconventional mode of pandemic-battle has been adopted around China. According to the Information Technology Education Subcommittee of the Chinese Society of Education, the researchers conducted an investigation on the online teaching situation of primary and secondary schools during the epidemic in China. On the basis of questionnaire inquiry and interview, the researchers designed questionnaires respectively to collect data of the personnel within the basic education, including the principals, teachers, and students under the situation of “School’s out, but Class’s on”. Through the SPSS 22.0, the researchers preprocessed the collected data and then using the descriptive statistics analyzed the present situation of online teaching, so as to compare the results with the variation analysis of the rural-urban differences. The research results show that:

- Among all participant schools, 89.8% of them have conducted the online teaching of all the curriculum, except courses like P.E., or Art cannot be taught online due to the unsuitable learning methods or lacking the corresponding platform.
- The chi-square test was adopted to examine whether urban or rural schools have the basic conditions for online learning. The results show that there are still significant differences in basic hardware conditions, network conditions, and venue conditions between urban and rural students. Judging from the existing problems, it is concluded that equality of opportunity has not been achieved yet. There are also certain differences in the proportion of time spent on organizing online teaching in urban and rural schools. Although both urban and rural schools mainly adopt online live broadcasts and online discussions between teachers and students during the epidemic, the two types of teaching are different in emphasis. Urban schools spend a larger proportion of

time online lessons, while rural schools tend to concentrate on the online discussions between teachers and students. Although schools in different areas have organized the collective preparation for the lesson, there is a certain gap in the focus and implementation of rural schools in curriculum resource construction, ICT strategies, and teaching design in the process of lesson preparation compared with urban schools.

- Statistics show that in terms of financial support, there is a gap between rural schools and urban schools. As for the other safeguards measures, the degree of humanistic care and institutional support of urban and rural schools are both relatively high.
- Compared with students in urban schools, students in rural schools have higher self-reported scores on learning effects and interests, especially on the aspect of the effects of interaction with classmates and online learning motivation in the online learning process, also they are better in self-perception.
- The information technology literacy of urban school students scored higher than that of rural school students. A further T-test was conducted on the difference in information technology literacy, and a significant difference was found. Students in rural schools are up against more technical difficulties in the process of online learning, and the mastery degree of them in new technologies compared with students in urban areas. About mental health, urban school students scored higher in mental health than rural school students. The T-test of urban and rural school students showed that there are significant differences in the mental health of urban and rural school students. This difference is reflected in the family-supportive environment and the safeguard measures provided by the school. Compared with rural school students, urban school students have better family support and timely psychological, academic, and technical assistance from the school.

Therefore, from the perspective of providing “fair and quality” teaching and learning, on the one hand, it is necessary to reconstruct the way of resource organization and optimize the ecology of rural teachers’ professional development. On the other hand, it is necessary to cultivate students’ digital resilience and provide high-quality platforms and resources to serve lifelong learning.

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