
NEWSLETTER

The Influence of Advanced Learning Experience in Secondary School on the Performance in Top-notch University

By Lu, Y. & Leng, D.

Correspondence to: Yi Lu, PhD Candidate, Institute of Higher Education, Fudan University, China. Email: luyi61@fudan.edu.cn

ACCORDING to the survey data of fundamentals collected from a total of 1,359 students from 6 top universities in China, this article used the Multiple Linear Regression model and Ordinal Logistic Regression model to explore the cohesive mechanism of secondary school and university, on the basis of cultivating STEM talents, resource constraints, and China's condition.

The main research results are as follows:

- Experiences like winning an Olympic competition, finishing a scientific research project, and studying in advance are considered as the three kinds of advantages to developing students' innovation abilities. Students with these experiences significantly creative and positive when introducing what they think to others in college, what's more, they tend to strive for the resources required to achieve their scientific ideas.
- The difference between students participating in Olympic competition and those who have not prominently reflected in their academic performance, but the former's learning motivation in the university was not significantly stronger than that of the latter.
- Students who had the opportunity to study college education in secondary school were generally more confident than others.
- It is also noticeable family socioeconomic status has a significant impact on the motivation of top students to study in university. The cultivation of talents seems to be an educational issue; however, it is actually related to many non-educational factors such as social stratum differentiation and economic conditions.
- Finally, the imbalance of China's economic development always affects the distribution of high-quality educational resources and the educational choices of talented students. Talented secondary school students in Beijing and Shanghai have started to break away from competitions while devoting themselves to science and innovation

learning, which is highly dependent on educational resources. Provincial capitals or municipalities directly under the central government are abundant with educational resources, while students in other cities are more likely to succeed in advanced learning in secondary school only through academic competitions.

Source: Peking University Education Review, 2020; 18(4):129-150+188.