Exploration and Practice of a Training Path for University Students' Data Literacy

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Abstract.

Data literacy has become an essential quality for university students in the era of big data. Data information management plays an increasingly important role in scientific research and social management decision-making. One way to cultivate data literacy of university students is by providing a general course on big data that is open to students from different majors. Through the 4 years teaching practice of Big Data General Course, we have explored a teaching scheme, teaching method and evaluation method to cultivate data literacy for all university students. In combination with our teaching practice in Xihua University, we collected relevant data of students' learning, standardized the attributes and data, and then organized and visualized the data for analysis. Additionally, we designed two types of evaluation methods: summative self-assessment and formative assessment. The analysis and evaluation results showed a positive correlation with our cultivation goals. Based on our findings, offering a general course on big data is an effective way to cultivate data literacy of university students. This conclusion can serve as a reference for the development of general abilities of university students.

Keywords: data literacy, big data, general course, teaching, evaluation