## <u>Primary school students' dissertations</u> <u>trigger discussion over education</u>

Curve geometry, questionnaires, references and bibliographies, all things anyone would expect to find in a graduate thesis, but which have begun to appear in primary school homework.

Some assignments by students from Qinghua University Primary School caught the public eye when they were posted on WeChat earlier this week.

Fifth grade students were asked to write about Su Shi, a Song Dynasty (960 – 1279) poet. Their topics included "The Brand Value of Su Shi," "Understanding Su Shi by Big Data Analysis" and "A Comparative Study of Su Shi and Li Bai."

"Xu Zi'ang and I found all of his 3,458 poems, which had about 250,000 characters," said 11-year-old Zhang Qi (not his real name). "We found 9,552 poets who had composed 276,545 poems. On average each poet completed 28 or 29 poems. Therefor Su Shi did the work of 120 poets."

This year is the 980th anniversary of Su Shi's birth, and, according to Tang Weihong, assistant to the school headmaster, the school began asking the students to study the poet in March.

The articles were finished during the eight-day National Day holiday and were soon circulating online, with some marvelling at the capabilities of primary school students.

"As a college student, I almost knelt down reading the articles," read one comment on Sina Weibo. "You are great."

"I hope that my kids will study in a primary school like the Qinghua University Primary School," said another.

But there was not shortage of those who questioned whether the articles were actually written by the students themselves.

"The boy who did the big data analysis didn't say how he obtained the data," said Shen Yan, a professor with the Beijing University national school of development. "He just said he did it with his dad. How much was done by the student and his classmates?"

In response, the teacher, Tang, replied that Zhang Qi began doing similar research when he was in third grade.

"He observed the growth of turnips and wheat before writing a report about the comparison and did more than ten other analytical reports in the following years," he said. "Based on my experience, I believe it was not so difficult for him to write this one."

The father of a six-grader in the school told Xinhua that students began

doing research like this very early. "It is not uncommon," he said. "Parents help them in the process but they lead the research."

In fact, many students in the school started doing research in their third year. The topics range from smog in the subway to measuring the playground.

Wu Fei, a professor with the Zhejiang University, said the method made up for a shortcoming. "Chinese education in many schools is exam-oriented, while foreign students began doing research very early," Wu said.

Wang Kai, vice director of the curriculum center with Beijing research institute of education science, told Xinhua that creative study has always been advocated. Beijing put forward a plan in 2015, stipulating that in primary and middle schools no less than 10 percent of the classes should be used for practical study.

"For a very long time, our children learned more but thought less," Wang said. "We are trying to change the situation."

"The idea is good but do we have a better way?" asked Shen Yan.

"They are children after all. We should encourage them to play more rather than forcing them into the world of adults with papers," she said. "If some students really like the research, it is OK. But it should not be compulsory. We should not pull up seedlings to help them grow."