Whole Child Education: How Four Nations Compare

Test scores cannot and should not tell the full story of a school’s efforts to educate their students. Yet U.S. news coverage of international comparisons of educational systems tend to focus exclusively on this metric, where the U.S. is the in middle of the pack of developed nations. This often leads to dismal headlines chastising U.S. teachers, students, and schools.

A new study published in Educational Research for Policy and Practice, a peer-reviewed journal, focuses on a different and more expansive definition of educational effectiveness by examining associations between school climate, student well-being, and academic outcomes in Eastern versus Western nations.

The study, based on an analysis of PISA 2015’s assessment of 15-year-olds in China, Finland, South Korea and the United States, is authored by Mengchen Su of the University of Minnesota Twin Cities and NEPC Fellow Jaekyung Lee of the University at Buffalo, The State University of New York. Their goal is to examine the degree to which these nations are educating the whole child by serving socio-emotional as well as academic needs. The study accordingly examines two dependent variables: science literacy and student well-being.

The focal academic outcome is science literacy because PISA collects other indicators of interest—disciplinary climate and teacher support—in science classes, which are considered as independent variables. (The study also controls for multiple additional factors such as gender, socioeconomic status, and parental support.) The authors use a Hierarchical Linear
Model (HLM) to estimate and explain student and school effects.

The disciplinary climate index assesses the degree to which students at a given school perceive that their science classes are orderly and conducive to learning. The teacher-support indicator assesses the degree to which students at a given school perceive that teachers are interested in and supportive of their students’ learning. Well-being is measured with a single question that asks students to rate their overall levels of life satisfaction on a scale of 0 to 10.

The study repeatedly found that patterns holding up in the other three nations did not hold for Finland. For instance, the study found that Chinese and South Korean students rate their classroom environments as more orderly than environments in the U.S. or Finland. In fact, of the four nations, Finland has the lowest ratings for classroom order. However, while classroom orderliness is associated with higher levels of science literacy in the three other nations, this is not the case in Finland.

Similarly, a combination of an orderly—even authoritative—school climate and higher levels of teacher support leads to higher levels of science literacy and student well-being in China, South Korea, and the United States. But Finnish students tend to benefit more from support than from authoritative discipline. “It is noticeable that the large proportion of variance in both outcomes is explained at the student level in Finland, which corresponds to prior literature that Finnish education emphasizes students to be the primary agents in their learning,” Su and Lee write.

Finnish students also have the highest rates of life satisfaction (well-being), followed by students in the United States. But the study found that life satisfaction is not highly correlated with school-level effects in any of the nations.

Su and Lee conclude with recommendations for each nation. They note that Finland, long held up as a poster child for effective education, appears to be right where it needs to be when it comes to whole child education:

The study results support [the conclusion] that the success of Finnish whole child education does not mainly rely on school discipline or supportive teachers, but its student-centered pedagogy and a trust-based learning community. The nonsignificant school climate influence and Finnish students’ success reflect that Finnish education emphasizes students’ autonomy instead of school level enforcement in learning, and their whole child education is seen as life-long empowerment.

NEPC Resources on International and Comparative Education

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