CCSR review outlines new framework for noncognitive factors shaping school performance; identifies key levers for improving student outcomes

Teachers know that students who put in the most effort are the ones who earn the highest grades. A new, critical literature review from the University of Chicago Consortium on Chicago School Research challenges the notion that hard work and effort are character traits of individual students, instead suggesting that the amount of effort a student puts in to academic work can depend, in large part, on instructional and contextual factors in the classroom.

Districts across the country are preparing to implement the new Common Core State Standards (CCSS), which reflect an agreement across states to set a higher bar for college and career preparation and which will require shifts in classroom practice. Of course, significantly raising the bar will not improve educational outcomes unless students are able to meet these new standards. *Teaching Adolescents To Become Learners: The Role of Noncognitive Factors in Shaping School Performance* presents an opportunity for both policymakers and practitioners to better understand the role that noncognitive factors can play in improving student performance.

While many current education policy initiatives focus on test scores as the chief predictors of high school success and college readiness, recent research has shown that students’ course grades and GPAs are much better predictors of their future educational outcomes than test scores. The prevailing interpretation is that grades not only capture academic skills but also reflect a range of noncognitive factors that are critical for students’ success in school and later in life.

An emphasis on high school and college completion as national educational goals requires a shift in educational policy and practice, away from a narrow focus on test scores and
toward a new emphasis on the cognitive and noncognitive factors that lead students to productively engage with rigorous content and earn high course grades.

*Teaching Adolescents To Become Learners* summarizes the research on five categories of noncognitive factors that are related to academic performance: academic behaviors, academic perseverance, academic mindsets, learning strategies, and social skills. It examines whether there is substantial evidence that noncognitive factors matter for students’ long-term success, clarifying how and why these factors matter, determining if these factors are malleable and responsive to context, determining if they play a role in persistent racial/ethnic or gender gaps in academic achievement, and illuminating how educators might best support the development of important noncognitive factors within their schools and classrooms. The review suggests some promising levers for change at the classroom level, as well as challenges for further research.

**Promising levers for change:**

- Students earn high grades when they show perseverance and strong academic behaviors; those who attend class, work hard, complete assignments, and fully apply themselves earn the best grades. Research shows that the critical levers for improving academic behaviors are to build students’ academic mindsets and help them develop learning strategies. 

- There is little evidence that students’ innate perseverance is malleable, but students are much more likely to demonstrate perseverance and strong academic behaviors when they have positive academic mindsets and effective learning strategies.

- Poor academic behaviors and a lack of perseverance may often be misdiagnosed as a lack of motivation or interest, rather than a lack of effective learning strategies or a problem with students’ mindsets. Research shows that classroom environments and instructional strategies can intentionally build strong academic mindsets and that teachers can explicitly teach and model learning strategies that improve student behaviors, perseverance, and performance.

**Challenges for future research:**

- Research should strive for conceptual clarity when studying noncognitive factors; there is little consistency in measurement or definition across different fields of study.

- Social science researchers have often relied on interpretation to identify noncognitive factors, rather than measuring them directly. This can lead to misinterpretation of the
conclusions of the studies. Future research depends, in part, on the development of better measures of noncognitive factors.

- More research is needed on the role of school and classroom contexts in students’ development and demonstration of noncognitive factors. Little work to date has focused specifically on existing teacher practice and its effect on student behaviors, attitudes, strategies, or overall perseverance.

- Teachers need coherent, actionable strategies for developing students as learners in the context of regular classroom instruction. Research should look beyond experimental interventions to consider ways teachers could incorporate attention to noncognitive factors into their everyday practice.

This report was supported by Raikes Foundation and Lumina Foundation.

About the University of Chicago Consortium on Chicago School Research
The University of Chicago Consortium on Chicago School Research (CCSR) conducts research of high technical quality that can inform and assess policy and practice in the Chicago Public Schools. We seek to expand communication among researchers, policymakers, and practitioners as we support the search for solutions to the problems of school reform. CCSR encourages the use of research in policy action and improvement of practice, but does not argue for particular policies or programs. Rather, we help to build capacity for school reform by identifying what matters for student success and school improvement, creating critical indicators to chart progress, and conducting theory-driven evaluation to identify how programs and policies are working.

About Raikes Foundation
Raikes Foundation (www.raikesfoundation.org) is committed to helping adolescents become healthy, contributing adults. With a focus on early adolescents, Raikes Foundation aims to develop each young person’s agency by building the mindsets and learning strategies that support youth in productively persisting through middle grades and on to college, career, and life success.

About Lumina Foundation
Lumina Foundation (www.luminafoundation.org) is an Indianapolis-based private foundation that is committed to enrolling and graduating more students from college—especially 21st century students: low-income students, students of color, first-generation
students and adult learners. Lumina’s goal is to increase the percentage of Americans who hold high-quality degrees and credentials to 60 percent by 2025. Lumina pursues this goal in three ways: by identifying and supporting effective practice, through public policy advocacy, and by using our communications and convening power to build public will for change.

Visit www.ccsr.uchicago.edu for a copy of the report.