Research Agenda, 2016-2020
University of Chicago Consortium on School Research

Introduction

For over 25 years, the University of Chicago Consortium on School Research (Consortium) has pursued research that provides critical evidence for informing policy and practice in the Chicago Public Schools (CPS). Its research supports the work of practitioners and policymakers by focusing on key educational issues faced by the district and shedding light on what matters for student success and school improvement.

The Consortium's ability to conduct research that is relevant and actionable is rooted in an approach that solicits input from policymakers and practitioners at all stages of the research process. Our research draws on a wide range of qualitative and quantitative methods, across a number of disciplines. It also covers a broad array of topics. We aim for work that is coherent-– findings are connected across different lines of research, and cumulative—new findings build on prior findings, with lines of work often spanning long periods of time. A single study is rarely, if ever, posited as the last word on a research question or topic. Instead, we often engage in a series of studies that progressively uncovers key findings. For example, a first stage of research might assess the scope of the issue(s), a second stage might identify potential levers for influencing the issue(s), a third stage might study district efforts to move those levers, and a fourth stage might then synthesize those findings and uncover new insights that lead to a new cycle of inquiry. Notable examples of our research that have moved through these stages of inquiry include our work identifying the issues that matter most for high school and college graduation; identifying the organizational structures of schools that support improvement; and more recently, providing conceptual clarity around issues central to teaching and learning, such as the importance of noncognitive factors for successful transition into young adulthood.

The Consortium's research agenda plays an important role in guiding its work. About every five years, we establish a new research agenda to serve as a guide for which areas of research to actively pursue. The agenda does not preclude the Consortium from taking on any particular line of work, but it provides a lens through which we gauge requests for new studies. To develop the agenda, Consortium researchers take stock of key findings from prior years of research and consider areas where additional work may be needed. These researchers solicit input and feedback from a range of different stakeholders, including the funding community, community organizations, and CPS leadership and staff, in order to assess the needs of the district and the educational community broadly, as well as identify areas of research we have not previously explored.

As the Consortium embarks on a new research agenda that will guide its work from 2016 to 2020, we remain committed to our core mission: conducting research that informs policy and practice in CPS. At the same time, our research focus has broadened in a number of important ways over the last several years, requiring consideration of boundaries for our work. These issues about the focus of the work are discussed in the following section. The subsequent sections

describe the strands of work that we propose for the next five years, which are organized within three topic areas: *Rigor and Readiness*, *Teachers and Leaders*, and *Schools as Organizations*. The final section of the agenda describes our outreach and public engagement goals.

Parameters for Consortium Research

Over time, the Consortium's research focus has continually expanded to take into account a broader range of student and school experiences and outcomes. Below we describe this broadening scope and identify a few additional areas where future research may also incorporate a wider lens. At the same time, we set some boundaries on the expansion of the work so that our focus remains centered on Chicago. Through discussions with stakeholders about the breadth and focus of Consortium work, we have defined the following parameters for our work going forward:

We will connect K-12 education to preschool and early adulthood. While early Consortium research focused solely on K-12 students, our research focus expanded during the last decade to include post-secondary experiences of CPS students, such as college enrollment, persistence and graduation. More recently, our research has also evolved to include preschool experiences for K-12 students. Incorporating these key transition times into our research and understanding how each is aligned with K-12 education can provide greater understanding about the experiences that shape achievement in the elementary grades, and the ways in which secondary school experiences influence students' success later in life. Going forward, we will continue to study the preschool and early adulthood years to the extent that they inform our understanding of K-12 education.

We will expand the range of student outcomes that we study. Most educational research has focused on a narrow range of student outcomes—particularly math and reading test scores and high school graduation. Our own research has pushed beyond these to include grades, attendance noncognitive factors, and college outcomes. Yet, there are many other outcomes that matter for students' eventual success as adults which are influenced by their experiences in school. Incorporating subjects such as science, social science, and the arts into our understanding of student achievement, while also considering a broader range of outcomes beyond those that occur in schools, such as early labor force participation and community college outcomes, will provide a more complete picture of the impact that education has on the lives of children.

We will collaborate with researchers studying different geographic areas to put Chicago into a broader context. Consortium research will remain focused on the experiences and outcomes of students and schools in Chicago. At the same time, it can be helpful to compare Chicago to other districts, or to statewide patterns, so that we have a better understanding of what is distinctive about CPS, as well as how it is similar to other places. This may occur through collaborations with organizations studying other districts, particularly large urban districts facing similar problems of practice, or other researchers studying the state of Illinois as a whole. In this case, we would conduct research in Chicago in parallel with work of other research teams studying different geographic contexts.

We will pay greater attention to the experiences of specific groups of students. As national efforts focus on improving the academic rigor of schools at all grade levels, understanding the experiences of students with distinctive educational needs, such as English Learners (EL), students with disabilities, and students with varying levels of achievement, is critically important for ensuring these students reach their potential. Past Consortium research has occasionally examined the educational outcomes of particular groups of students, but more sustained research into their educational experiences is a priority for the Consortium going forward, particularly since there have been important policy initiatives implemented by the district affecting some of these subgroups (e.g. Seal of Biliteracy).

We will work to understand how schools and students' experiences in schools are shaped by the broader context in which they exist. Learning is shaped by a myriad of contexts in which students' lives unfold (e.g., family, community). Our past research has endeavored to incorporate some of these influences by including, for example, measures of neighborhood poverty into our research, but these measures only capture a narrow picture of the complexity of students' experiences. While our research remains focused on schools and schooling, we recognize that a more nuanced understanding of the multiple contexts in which students and schools exist can help shed light on some of the factors that contribute to positive school outcomes and also achievement gaps and what is most effective in reducing them. Within this framework, we hope to explore how educational outcomes might be influenced by the intersection of educational structures with other institutions such as health care, housing, crime, and law enforcement.

While we recognize the value of expanding our research focus along several dimensions, we are mindful that the strength of Consortium research lies in our ability to pursue in-depth research on key educational issues. We are committed to maintaining this approach while also considering a wider range of student experiences, outcomes, and social contexts. Maintaining this balance requires recognition that we cannot do everything all the time. Instead, our goal is to consider carefully what the most meaningful scope of work should for any developing study.

Research Topic Areas

The research agenda for 2016 through 2020 is organized into three broad areas, with specific areas of focus described in detail. The first of these is *Rigor and Readiness*, which includes research on the skills and knowledge that students need to be successful at each point along the educational continuum. The second area, *Teachers and Leaders*, describes research on school staff and their professional responsibilities. The final area is *Schools as Organizations*, which includes research on the organizational structure and community context of schools, and their impact on student achievement. Within each of these areas we have identified several strands of work that we would like to pursue over the next five years. The strands of work are not intended to describe specific research studies, but rather collectively represent broad areas of work in which a number of different types of studies could be initiated.

I. Rigor and Readiness

There is a growing body of research showing that for students in middle and high school grades course grades and attendance are more predictive of students' educational attainment (high school and college graduation) than test scores and background characteristics. One emerging hypothesis behind this relationship is that test scores capture only cognitive ability, while grades and attendance not only capture cognitive ability, but also a broad range of noncognitive skills, mindsets, and behaviors that students need to succeed in school and beyond. Moreover, grades, in particular, seem to represent students' engagement, learning, and mastery; act as gatekeepers of future opportunities; and provide important formative and summative feedback to students.

Given the importance of grades and attendance, and also the cognitive and noncognitive factors they represent, understanding how to improve them is an essential component for improving student outcomes. While research suggests that grades and attendance may be more malleable than test scores, not much is known about the school and classroom conditions that foster their development.

Grades and Attendance

Future work on grades and attendance will try to assess why they are such important predictors for student and young adult success. We will also expand research on course grades and attendance in the elementary grades to better support schools as they use elementary "on track" indicators. Some of this work might try to understand fundamental questions like which cognitive and noncognitive factors are captured by grades and attendance; whether it is the grade itself that matters versus underlying skills and behaviors; the processes through which absenteeism affects outcomes; as well as the degree to which grades and attendance have the same meaning across different classrooms, teachers, and schools.

This work has implications for the strategies that schools take to improve them—different strategies might be more effective than others, and some might even be counter-productive, depending upon why grades and attendance matter for later outcomes. This line of work will examine the school and classroom experiences that lead to good grades and strong attendance; the specific strategies that schools use to authentically improve grades and attendance; and the effectiveness of different strategies around grades and attendance for improving students' later outcomes.

Cognitive and noncognitive factors:

In addition to research on the relationship between skills and grades described above, future work will examine the intersection of noncognitive and cognitive factors – how they are related to student outcomes at different grade levels, how cognitive and noncognitive factors develop over time, and what influences those processes. Work in this area might also consider whether cognitive and noncognitive factors are differentially important at distinct developmental stages. Finally, research in this area might consider how to facilitate the development of cognitive and

noncognitive factors in the school context, and in particular, what seems to be important for improving these factors over time, which might range from grading practices, to academic relationships, to the overall functioning of the school and classroom.

II. Teachers and Leaders

The professional capacity of teachers and school leaders is crucial for strong schools and student learning. Improving adults' professional capacity has been a focus of a number of recent policies at the local, state, and federal level, including policies around training, hiring, mentoring, developing, and evaluating teachers and leaders. The Consortium's most recent research on teacher evaluation has examined whether observations of teachers and their classrooms provide a reliable and valid measure of their performance; it also examines implementation successes and challenges as the district overhauled its teacher evaluation systems and policies. Our research has shown that the new REACH evaluation system holds promise because it provides better information to teachers for improving practice, but there continue to be challenges with finding accurate and fair measures for all teachers.

In the area of school leadership, Consortium research has laid a strong foundation for identifying the structures that matter for student achievement through research on the five essential supports for school improvement, and on the mechanisms through which school leaders influence instruction. This has led to questions about the specific ways that school leaders and staff work to improve a school's organizational capacity, climate, and instruction, particularly in those schools serving students in the areas of most extreme poverty, and where students enter school far behind grade level norms.

Recruitment, Hiring, and Workforce Development

There are many questions about the processes by which teachers and principals find employment within CPS, and improve their professional practice over time. Future research in this area might examine how strong leaders and quality teachers are distributed across the system and whether policy changes focused on the teacher and leader pipelines may have influenced the professional labor market. This strand of work may also examine how teaching and leadership talent are recruited and developed at various stages of the pipeline, including the development of expertise for serving diverse learners and English learners. This work could encompass studying the teacher and principal training processes, career development once teachers and school leaders have been hired, as well as changes to the overall workforce such as diversity in terms of teacher experience, gender and race/ethnicity. Of particular interest is the kind of professional development opportunities that schools use to support teachers and school leaders at different stages of their careers.

Assessment of professional capacity

There has been a great deal of debate about how instructional and teacher quality should be measured, and questions remain about whether current approaches adequately capture teachers' contributions to student learning and development. For example, given the importance of

developing students' noncognitive skills, should teachers' contributions in this area be considered? Equally important is the need to assess and measure the qualities that contribute to strong principal leadership. This strand of work focuses on measurement of professional capacity and quality of both teachers and leaders.

Teacher and leader effectiveness for strengthening organizational capacity, culture, and safety of schools

A culture of learning, strong organizational supports, and a safe school environment are all essential components of school life; yet, little is known about how principals and teachers work to promote these organizational attributes, nor how they are trained to promote these qualities. Most research on teacher effects has examined their influence on test scores, and research on principals has focused on instructional leadership in a narrow sense—how they guide instructional practices in the classroom. This strand of work examines the training and development of teachers and leaders on practices and strategies that foster a safe, supportive, and academically-focused school environment. At the pre-K level, it also examines how these strategies differ across schools and whether they are easier or more difficult to promote in certain contexts.

III. Schools as Organizations

The ways in which schools and classrooms are organized affect student learning, both in terms of what students learn and how they learn it. Consortium research has highlighted the importance of five organizational supports for school improvement: effective leaders, collaborative teachers, involved families, supportive environments (safe, orderly, and focused on learning), and ambitious instruction.

Organizational supports can vary substantially from one school to another and also from school program to program. The Consortium's past research on different types of schools, including small schools and turnaround schools, and programs, such as the International Baccalaureate (IB) program, has examined the impact of enrolling in those schools on student achievement, and also on the organizational features driving those schools' performance. Schools' organizational supports also play a role in how new district policies are implemented within the school. Past work has documented substantial school-by-school variation in the implementation of new policies (e.g. Algebra for All, probation policy). Future work will continue to examine the ways in which school organization and structure influence student achievement and the ways in which policies and practices are enacted.

School types, organizational supports and student achievement

Besides traditional neighborhood schools, there are many different types of schools in CPS (e.g. selective, charter, autonomous. and small) and more than half of all students opt for a school other than their own neighborhood school. Even within a school, there are a wide variety of programs (e.g. IB, career programs, STEM programs) as schools compete to attract strong students. Understanding the distinctive organizational features of different kinds of schools and

programs, and assessing how these are related to differences in student achievement across and within schools, continues to be a priority for our future work. Studies of selective enrollment and charter schools are already underway.

District Policies

This strand of work will focus on new policies adopted by the district (e.g. Common Core State Standards, STEM schools, policies around preschool enrollment and bilingual certification), as well as their impact on schools and student achievement. This work might examine how schools' organizational capacity and climate shape the implementation of the policy at the school level and how implementation leads to intended and unintended outcomes.

Related work in this area may focus on schools that remain chronically low performing, despite numerous reform efforts targeting improvement. This work could identify factors that hinder these schools from improving. Research might also suggest other possible strategies for examining these relationships, such as comparing these schools to schools serving similar populations of students who have been successful in improving student achievement.

Community Context

While focusing on a school's internal structure is essential for understanding student achievement, attending to the larger context in which schools are located is critical. Research in this area will examine the kinds of relationships that exist between schools and their communities, including interactions with parents and with community organizations (e.g. after-school programs, health providers, law enforcement groups). In addition, it may examine the kinds of opportunities these relationships provide for students, and whether these opportunities have any direct or indirect impact on student outcomes.

Public Engagement and Outreach

Underlying all of the Consortium's work is a commitment to producing research that drives school and district improvement for the people of Chicago. This commitment requires robust communication between researchers, policymakers, and practitioners at every stage of the research cycle - from the initial planning stage to final presentations of results. These communications must be intensive, transparent, and reciprocal. Our stakeholders help shape our research, make sense of results, and frame findings while simultaneously challenging and offering critique of our assumptions and analyses. The Consortium, in turn, strives to make findings easily understandable and accessible to practitioners and policymakers at the school, district, state, and national levels. The Consortium's goal in all of its outreach and public engagement efforts is to make research easy to use in policy and practice. We will try to reach people where they most readily receive information, and provide findings in ways that make the research accessible and actionable.

Maintaining a Local Focus

We will continue to be deeply engaged in supporting the Chicago education community to make use of Consortium research. To do this, we will employ a variety of communications methods and strategies to make our research findings broadly accessible, including easy-to-read reports of major studies, policy briefs, journal articles, research summaries, and syntheses across studies. We will produce innovative school reports which support data use by principals and teachers, as well as working with UChicago Impact and others to develop practical and intuitive online data tools for school practitioners. In addition, we will frequently engage with key constituencies by presenting the latest research to practitioners, policy makers,   researchers, and other stakeholders here in Chicago and across the country at conferences,   meetings, and briefings. We intend to explore funding to offer periodic local conferences that bring educators and other stakeholders together to consider ways to take action on research findings. In addition, the Consortium will further develop its work with the Network for College Success which is a key ally in using our research to help school practitioners understand what is happening in their schools and, in turn, to use data and research more effectively to address issues their schools face.

Broadening Our Reach

As national interest in our work grows, we recognize the need to develop a coherent strategy for engaging with stakeholders across the country and to expand the ways we share findings. Developing a national engagement strategy and diversifying our research products and communication strategies represent important opportunities to engage with stakeholders in ways that ensure Consortium research is relevant, accessible, and useful. This will be an iterative process and will begin with an evaluation of national relevance of Consortium findings and opportunities to engage with national stakeholders. Among the initiatives we will consider are conducting cross-regional research with similar research organizations in other cities and developing relationships with organizations that could help us reach a broader national audience for particular lines of research.

Further, we understand that how and where people consume information is changing rapidly and, in order to remain relevant and timely, it is important to expand and diversify the ways in which share findings and engage with stakeholders. In particular, we are interested in exploring how best to synthesize information across studies. Consortium research in Chicago would be easier for practitioners and policymakers to use if it made more connections across lines of research. We will evaluate different formats for presenting findings, including briefs and other shorter documents, as well as how best to utilize new media to share our research. This may include more podcasts, a more robust Twitter presence, infographics, and/or TED-style video presentations.