October 2015
Chicago's Use of the International Baccalaureate:
An Education Success Story That Didn't Travel
David Steiner, Director and Ashley Berner, Deputy Director

Imagine that a rigorous, evidence-based study finds that an educational intervention, undertaken across multiple years at no great cost to the public and involving tens of thousands of low-income, first-generation public high school students, had a substantial, positive impact on the students' college attendance, persistence, and by implication life chances. One would hope, and might expect, that our nation's stated commitment to educational excellence and equity would lead us to respond with considerable interest, follow-up research, and duplication. Below, we review a rigorous research study of a program that produced strong results for disadvantaged students. That the study hasn't borne widespread interest beyond the location where the intervention occurred points to larger difficulties in translating research into practice – more on that later. First, the study itself and what its findings tell us.

The International Baccalaureate (IB) Diploma Programme (DP) in Chicago Public Schools The International Baccalaureate (IB) Diploma Programme [sic] was introduced in Geneva in 1968 as a course of study for high school students whose parents were in the diplomatic corps and thus moved frequently. Currently, it is a full curriculum that includes six subject groups, a study of theories of knowledge, and high-level essay writing. The program is not merely academic; students must participate in the Creativity, Action and Service program and submit a 4,000-word independent research paper. Students' performance is externally and internally assessed. The IB organization now provides a curriculum for ages 3 – 19, and it has been embraced by schools around the world – not merely by the families of civil servants. ²

In the United States, the IB program is associated with mostly white, affluent suburban kids. But in 1997, Chicago Public Schools (CPS) decided to introduce the IBDP (International Baccalaureate Diploma Programs) into 13 struggling high schools

¹ Anna Rosefsky Saavedra, ITATION {"citationID":"I9RGWiMO","properties":{"formattedCitation":"{\\rtf Anna Rosefsky Saavedra, \\uc0\\u8220{}The Academic*Teachers College Record* 116, no. 040306 (April 2014): 40., 31.

² "International Baccalaureate," accessed August 21, 2015, http://www.ibo.org/en/programmes/.

in some of its most deprived areas. These programs comprised only one or two classrooms; these were not whole school interventions.

In 2011, the University of Chicago's Consortium for Chicago School Research began to study the effects of the program on its graduates. They released their report, <u>Working to my Potential: The Postsecondary Experiences of CPS Students in the International Baccalaureate Diploma Programme</u>, in 2012.

This study was more rigorous than previous work on the IB effect in an American context.³ The CCSR's research was more extensive, examining the college-level outcomes for students who graduated from Chicago Public Schools between 2003-2009. It used a mixed methodology, employing student and administrator surveys, indepth interviews, and cross-tabulations with data on test scores and the National Student Clearinghouse. Finally, the study controlled for selection bias by matching the IB cohort with similar children who would have applied for the program had it been available to them.⁴ Out of an initial sample of 85,663 graduates who had not been classified in special education, alternative high schools, or charter high schools, the study compared the college-going and college-persistence outcomes of 2,589 students who enrolled in IB in 9th grade, 1,888 students who were still enrolled in IB in 11th grade, and 13,598 students who were academically and demographically similar to those who enrolled in IB.⁵

What they found is striking: the CPS students who completed all four years of the IB program were 40% more likely to attend a four-year college, 50% more likely to attend a selective four-year college, and significantly more likely to persist in college than their matched peers outside the program.⁶ The program influenced not only their academic success but also their self-regard and confidence; in-depth interviews showed a strong academic orientation and high sense of self-efficacy.⁷ There were no negative results

³ Vanessa Coca and Consortium on Chicago School Research, Working to My Potential: The Postsecondary Experiences of CPS Students in the International Baccalaureate Diploma Programme, 2012, http://bibpurl.oclc.org/web/49260

http://ccsr.uchicago.edu/sites/default/files/publications/IB%20Report1.pdf., resources cited p. 14.

⁴ Ibid., p. 19.

⁵ Ibid., pp. 17 and 20.

⁶ Ibid., p. 4.

⁷ Ibid., pp. 42, 44.

for the students involved, even for those who began the program in 9^{th} grade but did not complete the program.

Comparisons with Advanced Placement (AP) courses and with selective high schools are telling. The same Chicago research team did not find strong positive effects for similar students who took AP classes or honors-level math courses.⁸ And the IB students in Chicago were 75% African-American or Latino and "predominantly first-generation college students," in contrast with the largely white and Asian composition of Chicago's selective public schools.⁹ Furthermore, the benefits of the IBDP were not contingent upon actually earning the International Baccalaureate Diploma itself (assessments do not necessarily lead to the Diploma). Internationally, 80% of candidates earn the Diploma. In the United States as a whole, 70% of the candidates earn it. Only 20% of these Chicago teenagers earned the Diploma, but the benefits of the IB program still placed them strongly above their non-IB peers.¹⁰ Importantly, implementing IB did not add cost to the cost of the district's budget.¹¹ The cost-effectiveness of the program for Chicago Public Schools, not necessarily for all districts, was independently validated in 2014.¹²

The research team concluded its report with an unusually strong affirmation of program impact:

IB students in college describe a confidence in their academic ability rarely seen in studies of first-generation, low-income, racial/ethnic minority college students. Not only did they feel they could keep up with their more advantaged peers, they felt they could eclipse them. Indeed, the IB program in Chicago appears to have accomplished something very rare in urban education: it took economically and socially disadvantaged students and radically changed their long-term educational prospects by making them world-class learners with an arsenal of academic skills." ¹³

⁸ Ibid., p. 25. Since the study did not address issues of AP implementation or support, this finding should be viewed with caution: We are not suggesting any larger conclusion about the efficacy of introducing AP programs into highneed schools. Other data has shown very positive outcomes for such interventions.

⁹ Ibid., p. 6.

¹⁰ Ibid., p. 27.

¹¹ Ibid., p. 25.

¹² Saavedra, "The Academic Impact of Enrollment in International Baccalaureate Diploma Programs: A Case Study of Chicago Public Schools." 32-24.

¹³ Coca and Consortium on Chicago School Research, Working to My Potential., p. 52.

Interestingly, the researchers flagged one weakness with the program in the area of social capital: once in college, the IB students were more hesitant than their more advantaged peers to approach faculty or administrators for help. The IB team in Chicago began to address this gap at the summer institutes they provide to prepare students for the college application process.¹⁴

What was it about the four-year program that created such strong effects? The research points to four contributing factors: the prescribed, challenging curriculum that runs for all students for all four years; the frequent assessments that are tied to this curriculum; the development of a strong community of peers and teachers; the extensive training that teachers receive from the IB program.¹⁵

Such stellar results for so many underprivileged students with no additional financial investment are extremely rare, and these results need to be carefully analyzed for caveats and omissions. Regarding caveats, the program did not positively influence the learning outcomes of the 38% of students who dropped out of the program before 11th grade — although they were not negatively affected. The study itself did not explore the factors behind this 38% program withdrawal rate. We don't know how much of the attrition was due to normal student mobility, and how much to the program's rigor or to the level of parental support. In terms of omissions, there are gaps in the CPS data that the researchers had to overcome. For instance, CPS did not have records on which students applied and were accepted into the IBDP in 9th grade. The research team thus had to estimate the original 9th grade cohorts by a series of assumptions based on current freshman classrooms and class titles in IBDP schools. ¹⁶

Nevertheless, the research findings were persuasive enough to lead Chicago Public Schools to significantly expand the IB program. The country's third-largest school district now boasts more IB schools and programs than any other district in the country. ¹⁷ Its programs include kindergarten, elementary school, and middle school grades. ¹⁸ In contrast to the classroom model that the CCSR studied, the new programs are wall-to-wall IB neighborhood schools with admissions criteria *only* for those

¹⁴ Ibid., p. 54.

¹⁵ Ibid., pp. 56-57.

¹⁶ Ibid.,p. 60.

¹⁷ Mayor's Press Office, "Mayor Emanuel, CPS Announce City-Wide Expansion of International Baccalaureate Programme" (Chicago, IL, April 21, 2014),

http://www.cityofchicago.org/city/en/depts/mayor/press_room/press_releases/2014/apr/mayor-emanuel-cps-announce-city-wide-expansion-of-international.html.

¹⁸ "International Baccalaureate Programs," *Chicago Public Schools Office of Access and Enrollment*, accessed August 23, 2015, http://www.cpsoae.org/apps/pages/index.jsp?uREC_ID=87448&type=d&termREC_ID=&pREC_ID=165446.

applying for entrance into the 11th grade IBDP. According to Sara Leven, CPS's Secondary Magnet and IB Schools Coordinator, IB's programs have proven flexible enough to meet the diverse needs of Chicago's students. In one of Chicago's largest high schools, all 9th and 10th graders are in the IB's Middle Years Program, then choose between the academic IBDP or the International Baccalaureate's Career Related Program, which includes a variety of course options, from digital media to web design. Teachers appear to value IB's content-focused professional development; indeed, CPS and IB provided PD for 600 teachers just before the start of the current school year.¹⁹

What remains to be seen, however, is whether the non-selective IB elementary and middle schools that are now in place in Chicago's most disadvantaged neighborhoods change the academic trajectories of the students who enter them, and whether this model proves sufficiently compelling for other districts to take notice. In short, the effects of these new programs still need to be studied.²⁰

Reflections on Research to Policy and Practice

We highlight this particular study because it meets two criteria that matter: the research is driven by sound methodology and design, and the researched program shows strong positive effects for students, in this case many of whom were disadvantaged. But we also highlight the study because the aftermath of its publication fits with a familiar pattern of very modest influence. Why haven't urban school districts across the country taken note and in some cases at least chosen to build their own system-wide implementations?

Many factors influence the use and non-use of research, but the bottom line is that transporting research into impacting broader practice is inherently difficult – far more tenuous than just producing and disseminating strong and relevant findings.

The truth is that there are unfortunate and consequential gaps between the worlds of education policy, education practice and academic research. In general terms, the policy world is subject to political winds and interests that in turn influence and filter the use of research. By contrast, district and school-level practitioners are understandably fixated on their immediate contexts, have little time or expertise to consume research, and can be resistant to importing strategies from "somewhere else

¹⁹ Phone conversation, September 2, 2015.

²⁰ Per author conversation with Dr. Camille Farrington, Senior Research Analyst at the Consortium for Chicago School Research, on August 21, 2015.

that isn't like us." For their part, university-based researchers are not accustomed to, nor are they often rewarded for, translating serious research into the vernacular. They also do not habitually answer the questions that policy and practice are actually asking. Even when researchers do write for the public, they cannot guarantee an audience; the relationship between research and action is "not linear" but rather "contingent, interactive, and iterative."²¹ Implementing research often requires longstanding trust and sustained engagement.²²

There are always, in addition, more subtle but determinative issues that can frustrate the process of taking a successful intervention to scale. In this case, the IB program's origin in Europe and its rigorous and prescribed curriculum mark it with an "elitist" heritage and thus elicit reflexive suspicion. Additionally, Chicago's initial investment in (high school) IBDP focused on students who had already demonstrated some academic promise, eligibility having been contingent upon scoring above the 50th percentile on both mathematics and reading seventh-grade tests. ²³ This can offend an egalitarian sensibility, which has focused most often on those students *least* likely to achieve the standard of high-school graduation. As Elaine Hansen, Director of the Center for Talented Youth at Johns Hopkins University commented, "[those of us who work with] high-ability, low-income students could have predicted that a research study of a program that actually works for them would be of no general interest." Hansen added, "This is tragic, because there is abundant and mounting evidence of a national problem that should be high on everyone's education agenda: the 'excellence gap.'"²⁴

Another factor hindering duplication is cost. While larger school districts such as Chicago can hive off the cost of IB professional training from their more capacious PD budgets, smaller districts, with fewer teachers involved, might find the program costs too steep.

But there is an additional explanation for the lack of attention paid to the CCSR's study of Chicago's IB program: few actually know about it. The research scholarship at CCSR enjoys a strong reputation, but those most likely to deploy such findings

²¹ Vivian Tseng and Sarah Nutley, "Building the Infrastructure to Improve the Use and Usefulness of Research in Education," in *Using Research Evidence in Education: From the Schoolhouse Door to Capitol Hill* (Springer, 2014), 163–75. 165.

²² Ibid., 171.

²³ Saavedra, ERO_ITEM CSL_CITATION {"citationID":"9D0paBMb","properties":{"formattedCitation":"{\\rtf Saavedra, \\uc0\\u8220{}Thechools." P. 17.

²⁴ Personal correspondence, August 31, 2015.

(state commissioners and district superintendents) have little time to analyze the vast body of education research, much less to persuade the necessary stakeholders that this particular intervention – unfamiliar and strange sounding - is worthy of attention.

In sum, CCSR's study of Chicago's IB program is illustrative of the difficulty of translating rigorous and promising research into practice: a cautionary tale that should concern all of us who are working to raise the educational opportunities for all students.

Bibliography

- Coca, Vanessa, and Consortium on Chicago School Research. Working to My Potential: The Postsecondary Experiences of CPS Students in the International Baccalaureate Diploma Programme, 2012. http://bibpurl.oclc.org/web/49260
 - http://ccsr.uchicago.edu/sites/default/files/publications/IB%20Report1.pdf.
- "International Baccalaureate." Accessed August 21, 2015. http://www.ibo.org/en/programmes/.
- "International Baccalaureate Programs." Chicago Public Schools Office of Access and Enrollment. Accessed August 23, 2015.
 - http://www.cpsoae.org/apps/pages/index.jsp?uREC_ID=87448&type=d&termREC_ID=&pREC_ID=165446.
- Mayor's Press Office. "Mayor Emanuel, CPS Announce City-Wide Expansion of International Baccalaureate Programme." Chicago, IL, April 21, 2014. http://www.cityofchicago.org/city/en/depts/mayor/press_room/press_releases/2014/apr/mayor-emanuel-cps-announce-city-wide-expansion-of-international.html.
- Saavedra, Anna Rosefsky. "The Academic Impact of Enrollment in International Baccalaureate Diploma Programs: A Case Study of Chicago Public Schools." *Teachers College Record* 116, no. 040306 (April 2014): 40.
- Tseng, Vivian, and Sarah Nutley. "Building the Infrastructure to Improve the Use and Usefulness of Research in Education." In *Using Research Evidence in Education: From the Schoolhouse Door to Capitol Hill*, 163–75. Springer, 2014.