



COMMUNITY-CENTERED EDUCATION IN CEDAR RAPIDS, IOWA IOWA BIG'S SYSTEM TRANSFORMATION

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Executive summary

WHAT IS IOWA BIG?

Iowa BIG is a system of high schools located in Cedar Rapids, Iowa in the United States.¹ The Iowa BIG system is small, serving just over 200 students across three high schools, and niche, with a focus on community-embedded project-based learning. Indeed, Iowa BIG is many things all at once, and understanding Iowa BIG as a system requires keen attention to its complexity.

It is a *school system* comprised of a federation of organizations. Established in 2013 in response to dissatisfaction with students' education experiences

in conventional high schools, Iowa BIG began as a single school serving students in two local school districts. Iowa BIG has since grown into a small system of two high schools and one affiliate high school. Operating as a local educational ecosystem, Iowa BIG connects four local school districts, their students, and community partners in ways that span established and conventional boundaries. Iowa BIG is also part of a national educational ecosystem focused on redesigning U.S. high schools as more innovative and engaging places of learning.

It is a *vision for student-centric learning* that centers student engagement and in-context learning. Iowa BIG's essential ambitions, methods, and goals are student learning and performing in the context of student-driven, community-embedded, project-based learning.

¹ This case study is a companion to "[Transforming education for holistic student development: Learning from education system \(re\)building around the world](#)" (Datnow et al., 2022), a summary report that explores the work of building and rebuilding education systems to support holistic student development in six education systems in Singapore, Ireland, Chile, Canada, India, and the United States and in one cross-national system (the International Baccalaureate). While different in many ways, the seven systems bear remarkable similarities in their efforts to (re)build education systems—each is working in policy contexts pressing for academic quality and equity, while also facing additional incentives to support holistic student development.

BOX 1

The summary report “[Transforming education for holistic student development: Learning from education system re\(building\) around the world](#)” lays out 10 key lessons for transforming education systems, which are all exemplified in this case study. In particular, this case study highlights the need to:

1. Engage and coordinate among diverse stakeholders and leverage partnerships.
2. Design educational infrastructure to support new visions for instruction, and mobilize this infrastructure to support instructional improvement.
3. Support the use of educational infrastructure in school and classroom practice through professional learning.

Iowa BIG is an *educational system* that supports students and teachers in organizing, managing, and improving instruction to operationalize its vision for student-centric learning. This educational system binds a constellation of organizations into an educational system through an established infrastructure and supports for capacity-building.

ADVANTAGES AND TENSIONS

As a local ecosystem, Iowa BIG adds value to local school districts by providing a unique educational opportunity for students focused on holistic outcomes. As a part of a national ecosystem, Iowa BIG brings in both financial and knowledge resources that support Iowa BIG in developing, refining, and legitimizing its design. Key tensions include: (a) advancing reforms aimed at departing from the conventional school organization while also operating as part of that system and (b) organizing and working across and within an array of school districts and other organizations.

Drawing on the lessons of Iowa BIG, we suggest policymakers consider three key issues: (1) the distinction between school systems and education systems; (2) the types of support needed to sustain holistic reforms; and (3) the complexity of reform working across local jurisdictions.

Introduction

“We want every student to discover their passions, find their personal strengths, and ultimately recognize that they are the owner and operator of their own learning and future.”-Iowa BIG co-founder and executive director.

The story of Iowa BIG is a complex one. Emerging from community rebuilding efforts following catastrophic flooding in the city of Cedar Rapids, Iowa in the United States, two local school boards worked together to establish Iowa BIG as a single school in 2013 that centers community- and project-based learning. Iowa BIG has since evolved into two high schools and one affiliate serving over 200 students that operates as both a local ecosystem and as part of a national education ecosystem.

Iowa BIG is many things all at once, and understanding Iowa BIG as a system requires keen attention to its complexity. Iowa BIG is a *school system* comprised of a constellation of organizations, including local school districts and national educational partners. Iowa BIG is a *vision for student-centric learning* that centers student engagement and in-context learning. Iowa BIG is also an *educational system* that supports students

and teachers in organizing, managing, and improving instruction to operationalize its vision for student-centric learning.

The aim of the following case study is to highlight Iowa BIG's complexity by describing how it functions as a (a) school system, (b) vision for student-centric learning, and (c) educational system. I conclude by offering recommendations for policymakers, drawing on lessons from the Iowa BIG journey.

Iowa BIG as a school system

"We designed a school based on community input." -Iowa BIG co-founder and teacher

Iowa BIG is a *school system* comprised of a federation of organizations. In 2008, the city of Cedar Rapids, Iowa suffered catastrophic flooding that left much of the city underwater. As the city began organizing for recovery, Cedar Rapids set a vision to use the devastation as an opportunity to reimagine and rebuild their city as a more sustainable, globally-connected community. These rebuilding efforts extended beyond local economic development and into education. As part of those efforts, local educators convened a series of conversations with community members about the future of education in the Cedar Rapids area. Sixty community members participated in an immersive school experience that sent participants "back to school" to attend a local school for a day as a student. Conversations following the experience surfaced a set of goals for student learning that centered on cultivating students' passion, project-based learning, and community-embedded learning.

The product of this community consensus was the development of a single school to enact the Iowa BIG vision for student-centric learning. In 2013, the Cedar Rapids School Board and neighboring College Community School Board authorized the founding of Iowa BIG as a small, project-based learning school

Networked education system: Central hub(s) work with schools to continually improve instruction.

Hybrid system: Partners with both the public and private sectors in efforts to organize and improve instruction.

Open system: Relies on its environment for resources and legitimacy, and connects classroom learning to the broader world.

Learning system: Promotes continual improvement and capacity building.

Educational systems: Beyond governing and providing access to schools, they take responsibility for organizing and improving instruction; school systems have increasingly transformed into education systems.

to engage students in its educational program for student-driven, community-embedded, project-based learning. As a part of Iowa BIG, students attend one of the partnering public high schools and opt in to Iowa BIG for half of the school day to earn credits in English, Social Studies, Science, Mathematics, and Business. Iowa BIG has since expanded by opening a second school and now serves students in four local school districts, along with an additional affiliate school that uses the Iowa BIG program.

Established as a within-district educational opportunity for high school students, the Iowa BIG school system operates as a local educational ecosystem. This local ecosystem connects four local school districts, their students, and community partners in ways that span established and conventional boundaries. As a part of these local school systems, the Iowa BIG school system works within some of the administrative and governance structures of the local school districts—advantages and challenges of which are discussed further below.

The Iowa BIG school system is also a part of a national educational ecosystem focused on redesigning American high schools as more innovative and engaging places of learning. This national ecosystem is comprised of 22 schools that work with the XQ Institute to redesign their schools to be more rigorous, engaging, and equitable. Established by Laurene Powell Jobs, American business executive and widow of Steve Jobs, and Russlynn Ali, former assistant secretary for Civil Rights in the Department of Education during the Obama administration, the XQ Institute is a national nonprofit organization that seeks to transform public high schools to close achievement and opportunity gaps. The XQ Institute provides Iowa BIG with both funding and resources to support the development, refinement, and expansion of the Iowa BIG program and school system. For instance, the XQ Institute awarded Iowa BIG \$1 million over five years to support its efforts to redesign high schools. Iowa BIG's relationship with the XQ Institute provides not only resources, but also legitimacy and prestige by association. In working with this elite national organization that operates as a reform catalyst for more holistic learning, the Iowa BIG system receives legitimacy from the XQ Institute's mainstream educational paradigm.

As described in this section, the Iowa Big school system includes a constellation of educational organizations that work with the Iowa BIG program. This school system is complex in that it is comprised of and overlaps with a range of organizations and systems that, themselves, have unique governance, structures, and aims. Iowa BIG as a school system collaborates with this constellation of organizations as it seeks to engage students in the Iowa BIG program.

But while the Iowa BIG school system is complex, it is also quite niche. The Iowa BIG school system is small, serving just over 200 students. This suggests that the complexity of the school system does not necessarily reflect the scale of the reform. In the case of Iowa BIG, the complexity of its school system is considerable, but the size of the reform is relatively small.

Iowa BIG as a vision for student-centric education

"Iowa BIG exists to help students develop their agency, efficacy, and interests while gaining valuable real-world and academic skills to succeed in a world of rapid and constant change."
-Iowa BIG vision statement

Iowa BIG is also a *vision for student-centric education* that seeks to activate and leverage student agency by engaging learners in authentic, student-driven, and community-embedded project-based learning. Iowa BIG began with dissatisfaction with students' educational experiences in conventional comprehensive high schools, and it evolved into a view of a holistic alternative that centers students in the community. In taking students out of the four walls of the traditional school classroom and engaging students in collaborative learning spaces embedded within the context of their local community, the Iowa BIG program pushes against traditional and mainstream educational paradigms and reimagines the learning conditions under which students thrive. Iowa BIG's essential ambitions, methods, and goals are student learning in context, student engagement, and student agency.

The cornerstone of Iowa BIG's educational program is student learning and performing in context through student-driven, community-embedded, project-based learning. In this program, students engage with people and resources in their community to address local problems, challenges, and initiatives. Projects develop from the needs of the local community, including businesses, nonprofits, and government agencies, and students choose to participate in projects in which they are passionate and interested. Projects are interdisciplinary, nuanced, and include a community partner that participates, assesses, and mentors the project as students work on authentic, contextually-

rich initiatives. Iowa BIG views the community-embedded projects as vehicles for students to practice, demonstrate, and learn and not as assessments. As described by school leaders, “Projects often fail or end prematurely, just like projects in the real world. Students are assessed on the learning they acquire and the work they conduct on their project work.” The Iowa BIG program also believes that projects should be supplemented with college-like seminars to ensure that students have the opportunity to learn standards that their projects do not cover.

The learning aims of the Iowa BIG program are ambitious, and they push against conventional notions of schooling where students typically engage with the teacher and curriculum within the confines of their classrooms and schools. The Iowa BIG program prioritizes and facilitates student engagement and agency within the local community and positions the program in the direction of a more open system (Scott, 2008) by deeply engaging students with the local community. Unlike more conventional school programs where the teacher and curriculum drive the focus of instruction, the Iowa BIG program has the student and community collaborating to set the path for student learning in ways that engage the student while addressing problems and needs in the broader community.

Iowa BIG as an educational system

“At Iowa BIG, we have taken on the traditional notions of time, space, curriculum, and assessment and redesigned them to better match both the world our students are about to face and to place the ownership of these things squarely on them, the arbiter of their own learning.” - Iowa BIG informational materials

Iowa BIG is also an *educational system* that supports students and teachers in organizing, managing, and improving instruction to operationalize its vision for student-centric learning. This positions Iowa BIG as not just a vision for ambitious teaching and learning shared among a constellation of organizations. Rather, it is an educational program that binds a constellation of organizations (i.e., a school system) into an educational system that supports students and teachers in actualizing its vision.

To support its vision for activating student agency through community-embedded project-based learning, Iowa BIG established an educational infrastructure necessary for carrying out its ambitious vision for student learning. In part, this infrastructure involved a (re)envisioning of conventional structures and routines for how students learn, such as the time and space for student collaboration with teachers and classmates, curricula, and assessments. It also reconceptualized how teachers work with one another to learn and build their capacity to support the aims of the Iowa BIG model.

BUILDING AN EDUCATIONAL INFRASTRUCTURE

In contrast to traditional school structures where time, space, curriculum, and assessments are managed by adults, the Iowa BIG model specifically designed an educational infrastructure to release responsibility for organizing these structures to students. This had Iowa BIG reconceptualizing conventional norms for how time and space is used in their school. At Iowa BIG, there are no classrooms, no hallways, and no offices. Instead, students, teachers, and school leaders meet together in open spaces as they work together on student-led projects. There are no bells or formalized class times; students organize their own time to work on interdisciplinary projects by managing calendars to plan their worktime with teammates, teachers, and community partners. The co-founder and executive director of Iowa BIG explained, “When you walk into Iowa BIG, you see students leading team meetings, kids floating in and out of the space going to partner meetings, and you see kids coming and going into regular meetings.” Iowa BIG could organize time and space in this way in large part due to the flexibility provided by Iowa’s adoption of a competency-based

education law. As described by school leaders, this law provided the flexibility Iowa BIG needed to reconceptualize and restructure the school day in ways that supported its vision of student learning.

At Iowa BIG, the projects are the curriculum, and the curriculum develops from the needs and problems of the community. Students have full choice in the projects they pursue. As described by teachers and leaders across Iowa BIG, choosing projects in which students are interested and passionate is paramount to the instructional design. Students choose from either in-bound projects (projects and problems originated by community partners) or outbound projects (projects and problems proposed by students to address a community need). As described by the co-founder and executive director:

We do not care what project they choose. Our job is to steer them to projects that are aligned with their courses and standards. Our job is to get them on projects they care about. As a teaching professional, our job is to wrap the standards and find ways to show them how the standards live in that project.

The projects are expected to be interdisciplinary where students are learning across multiple content areas and instructional standards. This requires students to work with a range of teachers and professionals with different expertise to carry out their projects.

Iowa BIG also releases the responsibility for assessing student learning to students themselves. At Iowa BIG, students are responsible for demonstrating and documenting their progress toward the state instructional standards. Iowa BIG believes that the success of student-led projects is not necessarily indicative of what students learned through that project. Therefore, at Iowa BIG the project is not the assessment. Instead, students use a competency-based database to track their progress and demonstrate mastery of Iowa's standards. Because these projects are interdisciplinary and address instructional standards across multiple content areas, students track and demonstrate their learning across the various sets of Iowa state standards. When student projects do not address all of the instructional standards in a content area, teachers supplement these

projects with college-like seminars. These seminars are held periodically, and students are expected to work on their own in between.

BUILDING CAPACITY FOR CHANGE

Beyond building an educational infrastructure that (re)envisioned how and under what conditions students learn, Iowa BIG also reconceptualized how teachers work with one another to build their capacity to support student learning. Reimagining and reorganizing time and space for learning at Iowa BIG not only shaped the type of learning students experienced, but it changed how teachers worked and learned together. Without the traditional isolation of teachers working with a defined set of students in their individual classrooms, Iowa BIG's model allowed teachers to collaborate in real time to support one another in service of student learning.

A first order matter in building Iowa BIG's capacity to support its learning goals was to recruit and hire an instructional staff whose beliefs about education aligned to the system's foundational educational paradigm. That had Iowa BIG focused on identifying teachers and staff members that believe deeply in student-centric education and student agency. As described by the co-founder and executive director:

What do you need to have to work here? You have to live in a learner-centered paradigm. We don't know what kids need to know. We've tried a lot of things that didn't work and we don't try to hide that. [...] We don't want teachers to "buy in." We want them to be the paradigm at the core of them.

To identify teachers that are vision-aligned, Iowa BIG worked with the XQ Institute to establish screening based on applicants' educational paradigm to gauge their level of commitment to learner-centered instruction. Iowa BIG also recruited staff that, as the co-founder and executive director described, "are incredibly confident and competent in their subject-matter" given the demands of the Iowa BIG's interdisciplinary approach to student learning. Iowa BIG sees recruiting and hiring a teaching staff that aligns to the goals and beliefs of the Iowa BIG model and possess the knowledge and skills to thrive in that model as an essential first step in building capacity

within the system to support the type of student learning Iowa BIG advances.

Iowa BIG also builds the capacity of its staff through in-context, real-time collaboration and learning among teachers, staff, and students. Teachers drive their own professional learning at Iowa BIG, as enabled by the school's reconceptualized structures for time and space. The nature of Iowa BIG's open learning space and interdisciplinary nature of student projects encourages and necessitates teachers to work collaboratively to support student learning. Teacher collaboration happens in context and in real-time as teachers work together to address practical challenges as they emerge in their work. The co-founder and executive director explained:

The traditional notion of what a PLC [professional learning community] is blown out the door here. A PLC here is actually what I think it should be. The first thing is no teacher in our system has their own classroom, no one has their own set of courses with a defined set of kids. Teachers are on projects in which they are not the expert which forces them to work with other teachers.

He goes on to explain:

Again, there are no classrooms, no principal's office. I'm their principal and I'm in the space every day watching them work. This isn't drive by evaluation. I literally watch them teach and work with kids minute-by-minute, day-after-day.

As described here, the reimagined time and space that supports student learning also created real-time, in-context professional learning experiences for teachers. This structure had teachers helping one another to address problems in practice as they arose and had school leadership working directly with staff and students in real time. Beyond this in-context collaboration and learning, teachers at Iowa BIG also met regularly to address other practical challenges in their work. Teachers met for two hours each day at what they call the "family table" where the staff worked together to refine its instructional design and to address particular student challenges.

As described throughout this section, Iowa BIG established an educational infrastructure that helped to actualize the system's vision for student-centric, project-based learning. This had Iowa BIG (re)building the normative structures of schooling (e.g., time, space, curricula, and assessments) to facilitate the type of learning advanced by the Iowa BIG model. This (re)building of infrastructure, in turn, opened up new possibilities for how the school engaged teachers and staff with one another to build system capacity to support their aims for advancing student learning. This structure provided opportunities for teacher collaboration and professional learning in context and in real time to address practical matters of student learning. This structure departs quite markedly from the conventional organization of schools that has teachers working in isolation from one another in their own classrooms (Lortie, 1975), often connecting infrequently to take on the practical challenges they face in their work.

Advantages and tensions: Building systems within and across systems

Thus, as described above, Iowa BIG is at least three things at once: a constellation of organizations; a vision for change; and a program—an educational system—that builds and integrates infrastructure and capacity. But it also functions as more than that: as a local ecosystem and as part of a national ecosystem. This yielded advantages. But it also yielded tensions.

There is advantage to Iowa BIG's function as a local ecosystem and as part of a national ecosystem. From the perspective of the local ecosystem, Iowa BIG is a value-add to the local high schools and their students. Iowa BIG provides a unique and innovative educational opportunity to the four local school districts it serves by offering an educational alternative to students seeking a different, more student-centered educational experience. From the perspective as a part of the national ecosystem, Iowa BIG brings in both financial

and knowledge resources from the XQ Institute that, in turn, supports Iowa BIG in developing, refining, and legitimizing its design for student-centric education.

Yet, Iowa BIG's position as part of these ecosystems also yielded tensions. One key tension Iowa BIG navigated as it developed as an educational system involved the school's reconceptualization of time and space for student learning as it conflicted with more traditional structures in formal school systems. At Iowa BIG, releasing responsibility for managing time, space, curriculum, and assessments to students involved reimagining how students worked and learned together with classmates, teachers, and community partners. That had traditional notions of "classes" and "classrooms" taking on new, more flexible structures with students organizing their work on interdisciplinary projects during large blocks of time sometimes outside of the school walls. In the traditional school structure, however, students earned credits by content area, and credits were organized as single and specific time periods during the school day. The scheduling structures of the traditional school districts were in tension with the larger, more flexible time blocks at Iowa BIG and made it difficult to coordinate students' schedules across the multiple school systems. As described by the Iowa BIG's co-founder and executive director:

We've faced some scheduling nightmares as well. In the traditional system, our kids are getting their credits one at a time—making it really hard to carve out the time for BIG. We really want to get to the point where Iowa BIG can be for a block of time every day. But, right now, we have five high schools with five different schedules, and all of them have required courses only offered at one time.

Scheduling students represents a key tension for Iowa BIG as its educational philosophy and aligned infrastructure for student learning developed in conflict with the structures of the traditional school districts in which it was located. This challenge was amplified as Iowa BIG worked across multiple school districts at one time.

Another key tension for Iowa BIG involved navigating early friction with other schools within the partnering

districts. The thrust of this tension stemmed from the perceived competition for students, teachers, and resources between Iowa BIG and other schools in the districts. As described by the co-founder and executive director:

We've actually had more internal resistance than external, but we're seeing that wane a bit. A lot of it comes down to the limitations on people's ability to imagine what could be. It is hard when you've grown up and worked in the system for so long.

He described that early on in the school's development, some within the district tried to discourage students from choosing to attend Iowa BIG. Iowa BIG made several conscious choices early on in the hope of minimizing potential pushback and resistance by some within the broader system. This involved adopting some components of the traditional system, particularly with regards to grading, that did not necessarily fit with Iowa BIG's educational paradigm. The co-founder and executive director explained:

We made some concessions immediately. There were some battles we didn't want to fight. The first battle everybody seems to want to fight when they try to do something different is grading and assessment. We weren't going to play that. We were not going to spend the first few years building out assessments and worrying about the grading system. We just adopted their grading system.

While Iowa BIG eventually reformed its assessment system to involve competency-based assessments that aligned with its educational philosophy and instructional design, their early decision to maintain the status quo with regards to grading was an attempt to minimize tension with the broader school systems in which it is located.

While Iowa BIG encountered other tensions in their work, including some developing from its close relationship with community partners, the two tensions presented here reflect a particular set of challenges experienced as a result of Iowa BIG's unique positionality. As a part of both the formal school district and as part of a collaboration of educational systems operating beyond traditional school boundaries, Iowa

BIG needed to navigate a constellation of organizations as it developed as an educational system. This had Iowa BIG working with existing structures developed in the formal school systems, such as school schedules and grading policies, to accommodate, mediate, and buffer its relationship with the various educational systems in which it is embedded. This suggests there are a particular set of challenges encountered by those systems developing within existing systems as they seek to establish new norms and strategies for supporting student learning.

Lessons for policymakers

Iowa BIG serves as a unique case for understanding reform efforts focused on holistic student outcomes. As described throughout this case, Iowa BIG is complex and functions as many things all at once: a school system, a vision for student-centric education, and an educational system. In drawing on the case of Iowa BIG, policymakers seeking to advance reforms or systems focused on holistic outcomes might consider several matters when designing and supporting reform efforts that reach across various educational systems.

One, there is a distinction between school systems and education systems. For Iowa BIG, developing as an educational system went beyond establishing a system of organizations with a shared vision for holistic teaching and learning. Its development also involved establishing an educational program that supported students and teachers in organizing, managing, and improving instruction to operationalize its vision for student-centric learning. This program included an established educational infrastructure and supports for capacity building. In so doing, Iowa BIG developed into an educational system that supported students and teachers in their day-to-day work together, and it did this in a way that advanced the holistic learning experiences and outcomes for students across its system of schools.

Two, holistic school reforms need ongoing support. Iowa BIG developed with the support from a nongovernmental network (the XQ Institute) that

provided funding and knowledge resources to help Iowa BIG learn, improve, and grow. Association with this national educational ecosystem also provided a degree of legitimacy and prestige for the Iowa BIG program that operated counterculturally from the local mainstream educational experience. Policymakers can learn from the type of support the XQ Institute provided to cultivate holistic reforms—namely sustained access to resources, support in knowledge development, and enhanced legitimacy of the system.

Finally, there is increased complexity in reform efforts working across local jurisdictions. In large enough districts, central offices might be able to create a niche educational system within the context of its own school system. The Iowa BIG system, however, needed to work across multiple local school systems, and with that came particular challenges and tensions. Policymakers should consider the complexity of the educational landscape in which reform efforts are situated. Systems that are highly balkanized will likely need to work within and across various systems and organizations, and will potentially need support to navigate challenges experienced as a result.

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Appendix: Methods

The Iowa BIG case report draws primarily on digital and material sources, including program descriptions on the Iowa BIG and XQ Institute websites, 18 podcasts describing the Iowa BIG program and its development, promotional videos, and written and oral perspectives from Iowa BIG students and staff. These materials provided perspectives on the history of Iowa BIG, its evolution and development over time, and lived experience from those that are a part of the enterprise. The digital and material sources are complemented by an interview with an Iowa BIG executive who has historical and contemporary perspective on the development of the program.

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