

# The Future Is Custom:

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## How Districts Are Using Custom Curricula as a Foundation for Student Success

By Evo Popoff and Liz Cohen

Foreword by AJ Crabill

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# Foreword:

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In each school system and state I've served, the powerful connection between instructional materials and instructional quality has been clear. Yet for the first time in recent memory, curriculum is in the public spotlight.

Families are increasingly involved in a roiling national debate on the quality of instructional materials. Parents across the country are debating which books should or shouldn't be in schools, to what extent content and authors should reflect the demography of the student population, and more. These topics have taken on increasing political saturation, all of which has exposed gaps in the level of community and parental voice included in the curriculum selection process, as well as inviting questions about the larger curriculum design and deployment process.

In many cases, the process of adopting, curating and developing course materials hasn't included a robust set of voices from the community, which could translate into unnecessary confusion or tension later. In other situations, districts either fail to adopt curricula or, more commonly, look the other way when teachers deviate from district-approved materials and select their own.

As this paper notes, some of the nation's largest school districts have even begun developing their own curriculum to address these challenges. While the goal of this work is to create higher-quality materials, the real value comes from the process that these districts undertake to create custom curricula — as this report shows in case studies from Chicago Public

Schools and Pinellas County Schools in Florida. In each instance, local school systems are trying to match the instructional materials used in the classroom with the vision and values of families in the community.

That intention almost invariably draws school boards into the conversation given that it is the role of the school board to represent the vision and values of the community. When school boards govern effectively, they can serve as a protection that benefits the instructional materials deployment process; when they govern poorly, however, school boards can mistake the governance role of representation for the staff's role of implementation. When that happens, student harm is likely to be amplified rather than mitigated. School board roles that maximize student benefit in the instructional materials processes include clarifying the community's vision for what students should know and be able to do, creating a stable culture of leadership and establishing an expectation that school system processes will include authentic rather than politicized representation as well as expert external scrutiny.

The more clearly the school board articulates goals for student outcomes — the community's vision for what students should know and be able to do — the easier it is for school system administrators to build alignment into future instructional materials. School system-wide goal setting is a role for the school board, not a task to be abdicated and then later picked up by superintendents out of necessity. When educators can clearly discern a connection

between school-based expectations, student needs and instructional materials, they are more likely to actually use them. When that connection is not made obvious, it can lead to stacks of unopened materials that teachers have, perhaps wisely, chosen to ignore. School boards that adopt clear goals about student outcomes help insulate customized instructional materials from being seen as irrelevant.

Once school boards have adopted student outcome-focused goals, the likelihood of accomplishing those goals increases as leadership stability increases. An effective approach is for school boards to evaluate superintendents on the data-based results of the exact same goals to which it expects instructional materials to attend. That is in contrast to the most common practice of superintendent evaluations being based on board member opinions and political circumstances. In addition, alignment of superintendent evaluation to the same goals that drove instructional material creation and adoption can help create an atmosphere where high-quality curriculum can survive changes in superintendents and school board members.

And finally, school boards can benefit instructional materials-related processes by communicating the expectation that recommendations requiring school board approval must engage a balance of participants during the recommendation development process and in any related staff-led committees. There is tremendous power in having school-based educators deeply involved in the selection and/or creation of aligned, rigorous, high-quality instructional materials. The work is less likely to be dominated by any single interest if committee membership is authentically inclusive of stakeholders such as parent and teacher organizations, retired educators, the

leaders of city/county-wide education alliances, and more. In addition, one of the potential pitfalls of custom curricula is that locally created instructional materials may lack the scrutiny of third-party review that is provided to off-the-shelf materials. School systems can reap some of those benefits by inviting curriculum and instruction experts from local universities, education-focused nonprofit organizations and surrounding school districts to review and audit the materials using the state's standards as a reference — as Chicago Public Schools did with EdReports.org. This balancing act of including a balance of participation also frees the school board to accept the results as legitimate and deny vendor-led or single interest-led lobbying efforts.

The stories shared in this paper show that a quality curriculum is about process as much as (if not more than) the final product that is used in classrooms. Those stories also demonstrate how school systems, too, can lead that work to great effect when their curriculum development process: engages the community to better reflect its values and the population it serves; incorporates meaningful adoption and implementation support and professional development; and leverages the active participation and expertise of community stakeholders and trusted outside groups. School boards have a vested interest in — and important role in — making sure the schools they serve use materials that meet all three benchmarks. This report shows that developing custom instructional materials can accomplish that — a development that should pique the interest of board members across the country.

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# Executive Summary:

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In the past two decades, the K-12 curriculum market has gone from three publishers producing largely print textbooks on core curriculum to thousands of tools predominantly focused on digital content and supplemental material. The expansion of teacher “homegrown materials” — content developed and curated by educators — has further contributed to the explosion of resources in the classroom, creating further challenges for leaders who want to ensure that every student in the district receives high-quality, student-centered, rigorous instruction.

Some districts are now bypassing traditional sources of curriculum altogether to pursue custom curriculum, with an aim to improve the quality and local cultural relevance of materials. At the same time, districts are engaging educators in the customization process to, ideally, increase the likelihood that more teachers will use these new materials, freeing up time to focus their efforts on lesson delivery: the real art of teaching. As Robert Pondiscio, senior visiting fellow of the Thomas B. Fordham Institute, suggests, “we have to normalize the idea that the soul of teaching is not lesson creation; it’s lesson delivery.”<sup>1</sup> Investing in high-quality curricular materials can let teachers focus on the real art of teaching: the how, not the what.

It is too early to tell whether these districts will achieve their ultimate goal — that is, significantly improve student learning and outcomes — through these efforts. These new curricula have only recently been launched, and the global pandemic makes any effort to improve outcomes a challenge; but the processes used by these districts, along with positive

early indicators, such as teacher adoption, are promising first steps of this work. As well, this paper should not be seen as a judgment on traditional publishing houses, who themselves are constantly working to refine existing offerings and develop new resources that are relevant and rigorous.

This paper first considers the historical, political and pedagogical context for curriculum development, looking at trends such as:

- A majority of teachers supplement or replace “official” materials with their own.
- Changing demographics have led to an emphasis on culturally relevant materials.

Through deep dives into Chicago Public Schools and Pinellas County Schools, we uncovered a series of important considerations and best practices, including:

- Curricula development should be part of a larger conversation around strategic priorities, equity and resource allocation.
- Doing the hard work to establish clear internal and external goals around a curriculum project is a crucial step.
- Engaging with stakeholders — from district staff and classroom educators to families — should occur at every step of the process and should be ongoing following implementation of any new materials.
- The goal of this paper is not to provide an exhaustive treatment of a complex topic. It is also not without bias. This paper was commissioned by an organization that partners with districts to develop custom curriculum, and we hope readers consider it in that context.

# Table of Contents

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**6 About the Authors**

**7 Acknowledgements**

**8 Introduction**

**10 Part I: The Road to Developing District-Wide Custom Curricula**

**13 Part II: Best Practices and Considerations**

**14 Case Studies: Chicago Public Schools and Pinellas County Schools**

**22 Conclusion**

**24 Endnotes**

# About the Authors

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Before beginning his career in education, Evo practiced law at McDermott, Will & Emery where he worked on labor and employment, antitrust and general corporate issues. He holds a Bachelor of Arts in political science from the University of Chicago and a J.D. from The George Washington University Law School.

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A parent of three children and resident of Chevy Chase, Maryland, Liz holds a Master in public policy from Georgetown University and a Bachelor of Arts from the University of Pennsylvania, where she graduated summa cum laude and Phi Beta Kappa.

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## About Public Consulting Group

Public Consulting Group LLC (PCG) is a leading public sector solutions implementation and operations improvement firm that partners with health, education and human services agencies to improve lives. In education, PCG is proud to offer integrated solutions that empower school districts and state education agencies to meet the diverse needs — both basic and complex — of their learning communities. Guided by our strong commitment to diversity, equity, and inclusion, we work closely with our education partners to promote successful outcomes for all students.

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For nearly two decades, Whiteboard Advisors' team of educators, policy wonks and storytellers has brought an understanding of policy, technology and practice to bear on our collaboration with the most transformative organizations and entrepreneurs in education. The W/A team is passionate about taking breakthrough ideas to scale to reimagine how we learn, work, and live.

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# Introduction

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What’s a curriculum? For at least the last 60 years, it was synonymous with textbooks for American students and educators. Those textbooks were developed by a relatively small number of publishers, often referred to as the “Big Three,” primarily to serve the needs of a small number of states.<sup>2</sup> Perhaps for that reason, it was an open secret that teachers frequently “hacked” their textbooks — pulling out sections they wanted (or didn’t want) to cover, supplementing with worksheets or texts from other sources, and creating their own content and assessments.<sup>3</sup>

The truth is that districts pursue a variety of strategies to navigate fluctuations in academic standards, teacher quality and student needs from one year to the next. As many as one-third of districts decide not to adopt a district-wide curricula, choosing instead to let their schools and educators curate or create their own content.<sup>4</sup> Others just keep doing what they have always done: purchasing textbooks.

But a growing chorus of school districts, including Chicago Public Schools and Pinellas County Schools, are developing custom curricula or making plans to do so. By undertaking this work, these districts are fundamentally changing how educators approach curriculum. Instead of thinking about it as an off-the-shelf solution, they’re reimagining it as material that can — and perhaps should — be bespoke and locally aligned.

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**By undertaking this work, these districts are fundamentally changing how educators approach curriculum.**

This “local and bespoke” approach conforms to a basic tenet of American education: the local control over curricular decision-making. But, with almost 14,000 public schools, it also raises legitimate questions of consistency (“will — and should — Algebra 1 differ from district to district?”) and, perhaps most importantly, efficacy (“Is custom curriculum positively impacting student learning?”). State standards are designed to provide some consistency at least within each state while also providing districts and educators flexibility and an opportunity to innovate in translating those standards to instruction in the classroom. In answering the core question of curricular efficacy — are students learning? — it is critical to acknowledge the learning science that tells us that curriculum is but one of a number of factors that drive student learning. It is an important factor — curriculum matters not



only because it directly impacts students but because it also influences teacher behavior<sup>5</sup> — but by no means is curriculum alone the silver bullet. Incorporating policies and practices that address the array of variables impacting how students learn, like those laid out by the Science of Learning and Development (SoLD) Alliance, matter too. Rich learning experiences (the category into which high-quality curriculum fall) are just one of five guiding principles along with positive developmental relationships; development of skills, habits and mindsets; integrated support systems; and environments filled with safety and belonging.<sup>6</sup>

This white paper explores key factors that shaped the shifting curriculum landscape over the past decades. It examines why districts are bypassing traditional sources of curriculum to take on the large-scale effort often required to create custom curriculum, spending precious time, money and political capital in the process. It examines the approaches districts have taken and the best practices for taking on this work, with particular emphasis on Chicago Public Schools and Pinellas County Schools in Florida. And it explores what districts should consider as they begin developing their own curricula.

# Part I: The Road to Developing District-Wide Custom Curricula

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In 2019, Chicago Public Schools announced its Curriculum Equity Initiative, a \$135 million project to create a comprehensive, custom curriculum in English language arts, math, science, social science and world language.<sup>7 8</sup>

The initiative, along with the Skyline Curriculum that grew from it, were notable for their bold visions and broad scopes. But the process also represented a significant departure from the district's traditional method for designing a curriculum. As then-Chief Education Officer LaTanya McDade noted, “[w]e didn’t want to just purchase off-the-shelf instructional materials. We wanted it really to be customized to represent the diversity of our student population, as well as ... the cultural and historical contributions of our city.”

Initiatives like Chicago’s represent a sea change in the way districts have historically thought about designing curriculum and creating the content that goes along with it.<sup>9</sup> For much of the last 150 years, three publishers have dominated the K-12 textbook marketplace: Houghton Mifflin Harcourt, McGraw-Hill Education and Pearson. One survey found that as recently as 2019, 47% of schools selected textbooks from one of these “Big Three” publishers.<sup>10</sup> For a variety of reasons, some districts have begun to find these textbooks insufficient for their needs. Between the shift from print to digital; a recognition of the importance of local, cultural context; and a desire to give educators materials they will actually use, districts are looking for alternatives to the traditional textbook model.

## ***The Big Shifts: From Print and Core Curriculum to Digital and Supplemental***

The work taking place in Chicago — and other districts across the country — is an example of a shift from print to digital that’s rippling through the K-12 curriculum landscape, one made possible over the last two decades by technological advances and the proliferation of digital content.

COVID-19 only accelerated that trend: In 2020, school districts spent about \$5 billion on print materials, \$1 billion less than in the years before the pandemic.<sup>11</sup> Spending on digital materials grew by \$2 billion, a 20% increase from the previous year.<sup>12</sup> In a 2021 survey from Whiteboard Advisors, all respondents said they anticipate using digital instructional materials in the classroom, with more moving to a “digital first” approach.<sup>13</sup>

In addition to digital content, districts also want supplemental content that enhances, extends or enriches the core curriculum. “Supplemental” includes everything from interventions and literacy engagement activities to social-emotional learning supports and video snippets embedded in tech platforms.<sup>14</sup> Supplemental materials, which represented 20% of the K-12 curricular market in 2005, grew to make up 50% of it in 2015<sup>15</sup> and has only continued to increase in overall market share.

There’s a potential drawback to this transformation: Between the curricula

that districts require and the supplemental materials teachers find on their own, K-12 educators run the risk of duplication and overkill. According to a study by LearnPlatform, districts are accessing 52% more edtech tools than pre-pandemic levels, with the average district activating more than 70 math and English language arts tools.<sup>16</sup> Karl Rectanus, co-founder and CEO of LearnPlatform, said this stunning array of edtech tools provokes questions such as, “Are we using multiple tools for the same purpose?” and “Do they align with instructional practices and district standards?”<sup>17</sup> Ironically, much of these tools and materials go unused, though the most recent data predates the pandemic.<sup>18</sup>

With so much change and instability, it’s hardly surprising that some districts continue to use what’s comfortable. But others, like Chicago Public Schools, recognize an opportunity, if not an outright imperative, to make sure all students have access to high-quality content and materials.

### **The Growth of Homegrown Content**

In the U.S., most decisions about curriculum are local, guided by content standards developed at the state level. District administrators generally make the decisions, often with input from teachers and students who select content that reflects their culture and values. But the curricula that districts purchase aren’t always what teachers use in the classroom, since they often adjust, remove and add materials to personalize content for students.<sup>19</sup>

The adoption challenge isn’t just about selecting good materials to adopt: What gets purchased isn’t always what gets used in the classroom. Technology has made it much easier for teachers to “hack” curricula, dismantling and

revising textbook materials to create their own collections of texts, activities and assessments. By some estimates, as much as 66% of the materials that teachers use come from teachers themselves,<sup>20</sup> and numerous platforms and Pinterest pages exist to help them create, curate and share instructional materials.

Shifts in U.S. demographics are the primary driver of this phenomenon. The 2020 Census revealed that Asian and Latinx populations grew by 35% and 20%, respectively, while the white population fell from 64% in 2010 to 58%, the lowest of any point in history.<sup>21</sup> The number of Americans identifying as multiracial also more than doubled in that time.<sup>22</sup> Within public schools, white students have made up less than 50% of enrolled students since 2014, with the share of Hispanic students increasing in particular.<sup>23</sup>

These trends are creating a greater call for K-12 instructional materials that reflect not only America’s diversity but also the growing need for equitable, culturally responsive content. Studies consistently demonstrate that commonly used texts in off-the-shelf materials often don’t reflect student populations in the classrooms that are using them. For instance, an analysis of English language arts curricula used in New York City schools “showed that while 85% of NYC public school students are Black, Latinx or Asian, 84% of the books in ten commonly-used K-5th grade curricula are written by white authors and 51% have white main characters.”<sup>24</sup>

To include content with more diverse authors resulting in diverse perspectives, educators increasingly turn to resources “outside the textbook” for instructional materials. One survey found that 98% of secondary school teachers and 99% of elementary school

teachers draw upon materials they develop and/or select themselves in English language arts instruction — with 96% of the material coming from Google.<sup>25</sup> “Their decisions reflect a multitude of beliefs and experiences, including teachers’ perceptions of what constitutes quality instructional materials,” according to a study from RAND.<sup>26</sup>

### **The Traditional Challenges With Homegrown Content: Time and Quality**

These customizations may help teachers better address their students’ cultural needs, but the practice in general raises a number of concerns.

The first is time, perhaps the most precious commodity in education. Searching for high-quality, inclusive curriculum materials is labor intensive: Teachers report spending up to 12 hours per week looking for and creating materials.<sup>27</sup> According to Robert Pondiscio, senior visiting fellow of the Thomas B. Fordham Institute, “[e]very hour spent creating, modifying, or ‘curating’ instructional material is an hour not spent studying student work, giving feedback, advancing the teacher’s own mastery of his or her subject, building and enhancing relationships with students and parents, or any number of tasks and activities that surely advance or enhance learning more than assembling the basic curricular tools of her trade.”<sup>28</sup>

Another concern is the impact on academic performance. Districts rightfully dedicate significant time and money to selecting the best materials because of the impact it has on academic outcomes.<sup>29</sup> Kathleen Porter-Magee, superintendent of Partnership Schools, found that “[t]eachers who [drive] the largest

achievement gains in their classrooms embraced our adopted curriculum — and [are] thus able to focus their very real and creative energy and expertise on unlocking the potential of our curriculum to meet the particular needs of the students they serve every day.”<sup>30</sup>

But when teachers hack district-supplied curriculum with content they find or create, there’s the potential for inconsistencies from teacher to teacher (even within the same school) and, in some cases, differing levels of quality. Moreover, research highlights the hard truth that teachers typically lower the rigor of curricula when they modify it.<sup>31</sup> That is particularly true in classrooms with a majority of students of color: According to one study, students in 40% of these classrooms never received on-grade-level materials (compared to 12% for white-majority classrooms).<sup>32</sup> While the gap between the percentage of on-grade-level materials between students of color and white students may be exemplary of other school biases and inequities; the teacher-created content often results in academic loss for all students.

The growth in homegrown materials comes at a time of heightened attention on the quality of curricula — even beyond the development of Common Core standards more than a decade ago to create higher-quality curricula with less state-to-state variations.<sup>33</sup> More recently, the focus has been on quality ratings issued by EdReports and similar independent organizations.<sup>34</sup> “So the flexibility piece isn’t a new thing. The new thing is following a curriculum with fidelity.” The pandemic also added further urgency to address instructional rigor, quality and alignment with state standards to improve outcomes for students impacted by unfinished learning.

# Part II: Best Practices and Considerations

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Against this backdrop, school districts are re-evaluating their relationships with traditional textbook publishers that don't accommodate regional or cultural modifications and don't create materials that fully align with state standards. Additionally, districts are examining how they select textbooks. Because state-level adoption committees often work directly with publishers to modify content, the process "does not always authentically involve K-12 teachers or students."<sup>35</sup> That's a problem, because their involvement increases the likelihood of selecting an effective, culturally appropriate curriculum. Inviting teachers to the table also creates curricular "champions," creating buy-in that reduces their desire to hack district-selected curriculum with their own materials.

As more districts seek rigorous materials that better meet their students' needs and involve more stakeholders in the process for selecting those materials, they're shifting from consumers of curricula to developers.

In short, they're becoming textbook publishers and curriculum developers.

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**Lily McDonagh and other CPS leaders felt compelled to act quickly and decisively because ‘everyday, kids were being exposed to lesser-quality curricula in our district.’**

# Case Studies: Chicago Public Schools and Pinellas County Schools

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Two of the country's largest districts, Chicago Public Schools and Pinellas County Schools, have set about the difficult, time-consuming, yet ultimately rewarding process of creating custom curricula. Their experiences provide a valuable window into understanding the opportunities, challenges, considerations and best practices of custom curriculum development. In both cases, the districts saw an opportunity to go beyond off-the-shelf textbooks and curriculum to build materials with local cultural relevance; both Chicago and

Pinellas believed that both relevant materials and the process of developing those materials within their districts would lead to increased educator uptake and usage of custom curricula along with favorable, district-wide student outcomes.

Of course, customization varies from one district to the next, and what it looks like will, by definition, vary. But the lessons learned from successful implementations in districts like Chicago and Pinellas show significant overlap.

## Chicago Public Schools: Skyline

- In 2019, CPS announced the Curriculum Equity Initiative to ensure that students in every part of Chicago can engage with high-quality curriculum, instructional resources and curriculum-embedded/interim assessments.
- Following conversations with districts across the country and external partners, the district developed a rubric for identifying high-quality instructional standards.
- Over two years, hundreds of Chicago teachers provided feedback on curricula developed across 12 grades and six content areas.
- Chicago committed more than \$135 million over three years for this initiative.
- Customized features include cultural responsiveness; support for diverse learners (recommend accommodations and platform-based accessibility features); social emotional learning; Spanish translation; and supports for English learners.
- In July 2021, CPS introduced the following subjects and grades:
  - ❖ English language arts, PK-12
  - ❖ Math, PK-11
  - ❖ Science, PK-11
  - ❖ Social science, PK-10
  - ❖ World languages, Spanish, PK-12
  - ❖ World languages, French, PK-12

## Pinellas County School District

- In January 2019, Florida Gov. Ron DeSantis issued an executive order to develop new academic standards. In February 2020, the state adopted the Benchmarks for Excellent Student Thinking (B.E.S.T.) standards in English language arts.
- In the decade before these new standards, Pinellas supplemented and developed its own materials. When selecting new curricular materials to match B.E.S.T. standards, the district favored one textbook for kindergarten through second grade and one from a different vendor for grades 3 through 5. In both cases, leaders were concerned that they would still need to supplement the content provided in the textbook.
- Instead, Pinellas focused on the work it had already done to develop a largely homegrown curriculum in which the textbook supplemented locally developed materials.
- In partnership with TNTP and Impact Florida, the district developed a rubric for identifying high-quality instructional materials: Does it meet the complexity of the standard? What about supports for English learners or students with disabilities? What is the teacher experience with the material? How do parents access the materials digitally from home?

## Best Practices and Considerations

### *To Partner or Not Partner*

While some districts create curriculum from scratch — as San Francisco did with mathematics — others start with a base and work with publishers to match the local context and priorities. For Chicago and Pinellas, the decision to partner with external vendors was strategic.

In Pinellas, the decision was about having an impartial evaluation of the existing curricula: “It didn’t matter who you talked to: if our scores went up, people would credit the curriculum. If our scores went down, they would blame the curriculum,” said Kevin Hendrick, the district’s associate superintendent of teaching and learning services. “I wanted an outside group to come in and examine our curriculum to give us an honest look.”

In Chicago, it was about balancing speed to market with true customization, said Lily McDonagh, the district’s director of educational initiatives. Through discussions with districts that were already using customized materials, the district learned that creating high-quality custom content from scratch is difficult and time-consuming, with some saying they spent eight to 10 years building an English language arts or math curriculum.

Talking to vendors “shifted the lens of how we viewed it,” she said. “Rather than saying, ‘Let’s get a group of people together to start writing and build this,’ the thing we learned from talking to them is that you can’t just do this.”



## Aligning With and Reinforcing Strategic Priorities

The story of districts moving to custom curriculum is the story of districts backing up their priorities with money, resources and action. In Chicago, that meant recognizing its content was “stagnant” and needed to reflect more equity and diversity. “Our content was made for the masses and wasn’t culturally responsive,” McDonagh said. “It didn’t reflect the needs of our very diverse student population.” She and other district leaders felt compelled to act quickly and decisively, because “everyday, kids were being exposed to lesser-quality curricula in our district.” Moreover, student experiences and identities were not reflected in school materials.

### What are culturally responsive and relevant texts in CPS?

- Grade 2: Students consider the essential question “How do people persevere when faced with challenges?” “Mango, Abuela and Me” tells of a little girl’s far-away grandmother coming to permanently stay with her family. The focus of this text is for students to identify the key challenge and the key actions of both the young girl and her abuela and how they can overcome barriers and to support the essential question by looking at the major events in the text.
- Grade 8: Students grapple with the essential question “How do we find the truth?” Students begin the module by reading the graphic novel “Black Panther: A Nation Under Our Feet” (Book 2) and related informational texts. Students then transition to reading “Just Mercy” by Bryan Stevenson and complete a project-based learning model of writing informational narratives.
- Grade 10: Students consider the essential question “To what extent am I defined by my culture?” through the lens of poetry. Poems are drawn mainly from two anthologies, “The BreakBeat Poets: New American Poetry in the Age of Hip-Hop” and “¡Manteca! An Anthology of Afro-Latin@ Poets.” Select poems include “Say My Name” by Idris Goodwin; “to the notebook kid” by Eve Ewing and “Home Court” by Jose Olivarez. By engaging with both written and performed contemporary poems, students encounter the diverse voices of poets living in and commenting on our modern world in a wide variety of poetic forms.

From the outset, the district wanted to develop digital curricula — a hard sell to educators before the COVID-19 pandemic made much easier after the era of remote instruction. So McDonagh and the district paved a new road for creating digital, custom content for all of the district’s learners: “There was no blueprint we could steal. Nobody had done six content areas across all grade levels. Nobody had done it in a fully digital circumstance. And nobody had done a custom version of that.”

Pinellas, on the other hand, chose to create booklets along with digital materials honoring teacher feedback showing that many prefer print materials. The result, according to Hendrick, was building



instructional materials “that maximize every one of the things that we say are really important. We’ve done this work to say, ‘This is what’s in a rich ELA curriculum that meets the needs of our student body and is personalized for the context in Florida.’”

In both districts, defining quality and efficacy were key parts of the process. Chicago, for example, partnered with EdReports to create a quality rubric that local staff could use when working with vendors to curate and create materials.

### **Local by Design**

Districts that are creating custom curricula want teachers to have high-quality, culturally responsive, localized materials so they can focus on instruction rather than content curation while working to maximize student outcomes. One of Pinellas’ goals for its custom English language arts curriculum was including texts with local or regional significance, something teachers might accomplish by supplementing district-supplied materials.

For example, in one second-grade module, “What impact can people have on the environment?” students learn about environmental topics that connect to them locally, such as sea turtles nesting on beaches and the Everglades. Students also learn about characteristics of responsible citizenship — exactly the kind of content a teacher might hack with material they found or created. But the district preempted the need for that by selecting a few texts based on local topics and from local authors, including one book, “Kids Saving Oceans: Olivia Makes a Difference,” co-authored by a St. Petersburg, Florida resident. Now not only do students have local context, the district has control over grade-level appropriateness and quality. Similarly,

### **Integrating Social Studies and Science in Pinellas County**

One strategic priority for Pinellas County Schools is the integration of science and social studies. Throughout the Pinellas curriculum, all grades have integrated social studies and science standards that are aligned with the thematic essential question and specific learning targets. Text selections for the curriculum are designed to be aligned to these standards.

- Kindergarten students compare children and families of today with those in the past in social studies, while in science they observe plants and animals and how they are alike and different. Texts include “From Caterpillar to Butterfly”; “Tiger Features”; and “Ready to Fly: How Sylvia Townsend Became the Bookmobile Ballerina”
- Kindergarten students learn to recognize the five senses and related body parts. They also learn to locate and describe physical places in the school and community.
- Grade 2 students identify ways citizens can make a positive contribution in their community, such as volunteering and recycling. In science, these students consider how both human activities and natural events can have major impacts on the environment. Texts include: “Be a Changemaker,” “Rise Up and Write It!,” “Greta and the Giants” and “Kid Heroes for the Planet.”

Pinellas first-grade students read a Clearwater, Florida news article about the Pinellas County Schools mural project together with the text “Maybe Something Beautiful: How Art Transformed a Neighborhood.”

“Not every text has a local context, but when you do two or three in each grade level, people notice,” Hendrick said.

Moreover, in Chicago, the practice of mirrors and windows is used in text selection to help students see themselves (mirrors) and glimpses into the lives of others (windows). Third-grade students use a Chicago Sun-Times article with stories written by Chicago-area students to explore how potentially shared experiences can shape identity. Students also consider how the authors can be mirrors and windows by seeing photos of student authors and the schools they attend(ed).

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**Districts that are creating custom curricula want teachers to have high-quality, culturally responsive, localized materials so they can focus on instruction rather than content curation while working to maximize student outcomes.**

## Windows and Mirrors

The concept of Windows and Mirrors came from a 1988 essay<sup>36</sup> by Emily Styles, in which she wrote about “the need for curriculum to function both as window and as mirror, in order to reflect and reveal most accurately both a multicultural world and the student herself or himself.”

Throughout the Skyline curriculum, the idea of windows and mirrors is used. For example:

- In 11th grade, students read the first two acts of “Hamlet” alongside select lyrics from Kendrick’s Pulitzer Prize-winning album, “DAMN.” “Hamlet” serves as a window to the classic Western literary canon and 16th century British drama. Modern lyrics serve as a mirror for contemporary students.
- In fifth grade, students read “All About Anxiety” by Carrie Lewis and a Times for Kids article “Hooked on Games” by Brian S. McGrath. The texts serve as a mirror by demonstrating how social media and technology can affect their psyche and by debating whether and how gaming can be both a trigger for stress and a stress reliever.
- In kindergarten, students read “My Family, Your Family” by Lisa Bullard and “In Every House, On Every Street” by Jess Hitchman. Those texts encourage students to have conversations about the similarities and differences between the daily life experiences within someone’s home as they compare it to the family and neighborhood community in the text and also make connections to their own lives.

## Fidelity of Implementation

While the work isn't easy, more districts are discovering the additional work is outweighed by the benefits of custom curriculum development — increased adoption, better alignment to state standards and local contexts, better reflecting local cultural contexts and needs. “Custom materials augment existing lesson plans just enough to show students that their norms for communication and behavior not only are valued, but important,” said former Massachusetts Gov. Jane Swift, founder of the nonprofit LearnLaunch, which supports efforts to bring high-quality education to all learners. And some are even saving money in the process. Among the reasons provided by districts for engaging in this work is the desire for more consistent implementation of the curriculum.

Related to the desire for greater consistency of implementation is the goal of achieving greater coherence through the creation of a custom curriculum. In 2021, education researchers define a coherent instructional system as one where “state and district policies around curriculum, assessment, and professional learning provide teachers clear and consistent messages supporting standards implementation.”<sup>37</sup> Unfortunately, their research found teachers are significantly more likely to work in an “incoherent system than one that provide[s] coherent guidance around how to implement standards and provide high-quality ELA instruction.”<sup>38</sup>

Implementation is also important because, as stated earlier, creating a new curriculum alone won't ensure different outcomes in student learning. Richard Elmore wrote, “There are only three ways to improve student learning at scale: You can raise the level of the content that students are taught. You can increase

the skill and knowledge that teachers bring to the teaching of that content. And you can increase the level of students' active learning of the content. That's it. Everything else is instrumental.”<sup>39</sup> Key to Elmore's concept of the Instructional Core is that work on one of the three elements requires work on the other two in order to truly change the instructional core. Thus, completing development of the curriculum is only the start of the journey for districts like Chicago and Pinellas — the implementation phase requires effective change management to increase the skill of teachers using the content and the level of active learning by students.

## Establish Goals

One best practice that emerged is that districts should be clear, both internally and externally, as to their goals when it comes to curriculum development. That can mean deciding on scope — Which grades? What content areas? What's the budget? — before bringing on a partner. Hendrick said it's crucial to “be honest about what you want and what you don't want. You can't go into it with a blank slate.”

Chicago ultimately decided to identify the curriculum initiative as a product, which led it to discuss important questions such as, “What does the market for this product look like — our internal CPS market, how would we promote it, how would we identify needs of different market segments, and how would we determine return-on-investment after the fact,” McDonagh said.

Both districts stressed undertaking a custom curriculum initiative is a significant amount of work, and districts should carefully consider their internal capacity as well as the potential to engage with external partners. In Pinellas, the district hired a full-time project manager to

oversee this work. As Hendrick said, “This is not work that somebody who has a full time day job can just layer on.”

Similarly, Chicago created an entire department: Curriculum, Instruction and Digital Learning. Helena Swanson-Nystrom, the executive director, explained “centralizing high standards really matters. If eighth-grade ELA is really strong but second-grade science is weak, that’s not ok. We wanted to make sure we didn’t lose traction because of the sometimes siloed nature of different departments in the district.”

Lauren Weisskirk, chief strategy officer at EdReports, suggests districts “know your local criteria. What’s important to you?” She points out that “when you do an adoption, you are also considering the professional learning that will happen throughout AND the work you want to do to get materials in the right spot for your kids. Know what the gaps are so that you can focus your time and energy on addressing the gap you have the time and ability to fill.”

### ***Engage Stakeholders Early and Often***

Stakeholder engagement is another area in which to consider best practices. The highest-quality, most customized curriculum in the world is only useful if teachers actually use it. CPS conducted a listening tour of states and districts that had previously done customization work, and one major takeaway was that mandating curriculum isn’t an effective way to ensure impactful adoption and implementation. CPS decided at the outset it wouldn’t mandate its new curricula but rather deeply engage with educators across the district and provide professional learning opportunities to support educators as they optionally implement the curricula.

Incorporated into each vendor contract was a requirement for multiple feedback cycles, for which the district leveraged a network of over 300 teachers for this effort. “In each continuous improvement cycle we would build, get teacher feedback, and iterate,” explained Swanson-Nystrom. “The feedback from each cycle would be informed by the feedback from the teachers.” Chicago also thought carefully about how to continue engagement more broadly, both beyond the teachers providing feedback during the process as well as throughout implementation. As Swanson-Nystrom described, “the district can take the unit plan for Grade 1 ELA and make improvements, building in additional EL supports, DL supports, make those improvements over time — and everyone gets access to those improvements immediately.”

Like Chicago, Pinellas enlisted teachers to sit on their adoption committee along with trainers, instructional staff and more. Pinellas also uses a nonbinding voting system to gauge educator feedback. The district staff went to 77 elementary schools, asking at each grade level for feedback on the materials, ultimately asking each school to vote on the curriculum. While the district isn’t bound by whether or not the schools vote for the curricular materials,

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**In each continuous improvement cycle we would build, get teacher feedback, and iterate.” — Helena Swanson-Nystrom, Chicago Public Schools**

it's an important step to solicit feedback and understand if the district is on the right track. In addition, Pinellas spent an entire year conducting focus groups with teachers, school leaders, literacy coaches and even with students in fourth and fifth grade.

In Chicago, more than 5,500 teachers plan to adopt at least one Skyline course during the 2021-2022 year. The district's next step will focus on parents. As McDonagh describes: "In partnership with our internal family and community teams and our external partners, we will begin to offer families resources on how to use Skyline."

Concurrently, Chicago will also provide ongoing professional learning for educators on Skyline to support continued engagement. In fact, both Chicago and Pinellas are providing customized professional learning: CPS is leveraging external partners, while Pinellas is leading the work internally. Both districts see ongoing professional learning as a foundational piece of their curriculum initiatives. Indeed, curriculum-based professional learning can "invite teachers to participate in the same sort of rich, inquiry-based learning that new academic standards require. It...[can] prompt teachers to change their instructional practices, expand their content knowledge, and challenge their beliefs."<sup>40</sup> High-quality professional learning is at least as important as any other best practice highlighted in this report.

The Aspen Institute's Ross Wiener shared his perspective on how successful curriculum initiatives are found where districts "really intentionally connect professional learning to the curriculum. Not 'you get your curriculum

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**Successful curriculum initiatives are found where districts “really intentionally connect professional learning to the curriculum. There’s a deep connection between the content you’re teaching and how you’re teaching it.” — Ross Wiener, Aspen Institute**

with a little bit of training, and then you get your training on pedagogy,' or something else that's disconnected from curriculum. There's a deep connection between the content you're teaching and how you're teaching it."

Whether it's print textbooks, digital materials or a fully customized local curriculum, school system leaders have been forced to accept a basic truth: The most effective curriculum is meaningless if no one is using it. Stakeholder engagement at the launch of a curriculum initiative must be paired with regular, consistent professional learning to support teachers in their core work of high-quality, impactful lesson delivery within the framework of high-quality custom curriculum.



# Conclusion

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The idea that curriculum matters isn't new. But tailoring curriculum to match the needs of the community is giving school districts a new perspective not just on what students learn but how they learn it. Customization provides an opportunity for districts to improve the quality and cultural relevance of instructional materials while building an environment of educator engagement. "Everybody recognizes there are culturally responsive experiences they want for their kids, local context in the spirit of engagement, of giving students windows and mirrors," said Gene Pinkard, director of practice and leadership at the Aspen Institute. The affordability and scalability of customized curricula only strengthens the argument for providing these experiences.

Some districts pursue curriculum development because it seems a better use of resources than purchasing yet another set of textbooks or materials that aren't widely used and will hopefully deter teachers from creating their own materials. Yet, others look to a custom curriculum as a lever in the evolving idea of education reform — that the right curriculum will close achievement gaps and improve students outcomes. But in order to understand how curriculum can lead to change — and to evaluate what curriculum can and cannot do — districts should also look to the well-established research base around change management and the science of learning — for instance Richard Elmore's concept of the Instructional Core referenced earlier.

Developing a custom curriculum — i.e., focusing on raising the level of the content

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**The most successful curriculum initiatives happen because districts view teachers as partners in the process — from planning to implementation and beyond.**

that students are taught — is a critical lever for improving student learning but is insufficient on its own. Providing a new curriculum doesn't guarantee students are faced with tasks of appropriate rigor or that they will engage in active learning — factors that learning science tells us are critical for student learning.<sup>41</sup> It also "won't increase [teachers'] skill and knowledge without the sort of inquiry-based professional development that we know makes a difference," shared Zaretta Hammond. Curriculum is a vital tool, but without training and support, it is unlikely to move the student learning needle in significant ways at scale. As districts like Chicago and Pinellas move forward with the curriculum they have so intentionally created — and as other districts consider similar paths — it's crucial to keep in front of this work. As Hammond explained, "Getting teachers to use

something is not the same as getting students to learn it.” Within the strategic reviews, goal-setting and other best practices laid out in this paper is the idea that districts should constantly question their assumptions about what will make a difference, how change will occur and how creating a custom curriculum aligns with broader efforts to improve student learning.

The most successful curriculum initiatives happen because districts view teachers as partners in the process — from planning to implementation and beyond. Part of embracing teachers as partners is making true space for them to engage effectively. They may not develop the materials themselves, but letting

them participate in the process helps create a true partnership. After all, teachers are in the best position to understand the social and cultural needs of their community of kids. As Kathleen Porter-Magee said, “In a world overrun with information... we owe it to our teachers to give them the tools they need to succeed.”<sup>42</sup> High-quality curriculum — customized, culturally responsive or otherwise meeting the needs of a particular district — contributes to a culture in which rigorous teaching and real learning can flourish. When done well, a district-led curriculum development process can draw an effective road map for student learning and create the environment where teachers are eager for the journey.

# Endnotes

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<sup>1</sup> Pondiscio, Robert. “The unexamined cost of teachers’ time spent choosing instructional materials.” Thomas B. Fordham Institute, January 28, 2021. <https://fordhaminstitute.org/national/commentary/unexamined-cost-teachers-time-spent-choosing-instructional-materials>

<sup>2</sup> Davis, Michelle R. “‘Big Three’ Publishers Rethink K-12 Strategies.” EducationWeek, February 6, 2013. <https://www.edweek.org/teaching-learning/big-three-publishers-rethink-k-12-strategies/2013/02>

<sup>3</sup> Richardson, Will. “How Schools Can Hack their Textbooks.” Modern Learners, <https://modernlearners.com/how-schools-can-hack-their-textbooks/>

<sup>4</sup> Interview with EdReports, 2021.

<sup>5</sup> Chingos, M., Whitehurst, G. (2012). “Choosing Blindly: Instructional Materials, Teacher Effectiveness, and the Common Core.” Retrieved from Brown Center on Education Policy at Brookings. [https://www.brookings.edu/wp-content/uploads/2016/06/0410\\_curriculum\\_chingos\\_whitehurst.pdf](https://www.brookings.edu/wp-content/uploads/2016/06/0410_curriculum_chingos_whitehurst.pdf)

<sup>6</sup> “Design Principles for schools: Putting the science of learning and development into action”, Learning Policy Institute and Turnaround for Children, June 2021.

<sup>7</sup> “Chicago Public Schools Launches Groundbreaking Curriculum Equity Initiative.” Chicago Public Schools, May 17, 2019. <https://www.cps.edu/press-releases/chicago-public-schools-launches-groundbreaking-curriculum-equity-initiative/>

<sup>8</sup> Molnar, Michele and Sarah Schwartz. “5 Companies Win Contracts Worth \$135 Million to Create New PreK-12 Curriculum for Chicago Schools.” EdWeek Market Brief, June 5, 2019. <https://marketbrief.edweek.org/marketplace-k-12/5-companies-win-contracts-worth-135-million-create-new-prek-12-curriculum-chicago-schools/>

<sup>9</sup> “Reach Capital 2021 Report on U.S. Education Trends.” Reach Capital, August 29, 2021. <https://www.slideshare.net/tonycwan/reach-capital-2021-reimagined-report-on-us-education-trends>

<sup>10</sup> Seaman, Julia E. and Jeff Seaman. “What We Teach: K-12 Educators’ Perceptions of Curriculum Quality.” Bay View Analytics, 2020. [https://www.bayviewanalytics.com/reports/k-12\\_whatweteach.pdf](https://www.bayviewanalytics.com/reports/k-12_whatweteach.pdf)

<sup>11</sup> Westrope, Andrew. “Newsela Raises \$100M for Digital-First Education Materials”. Government Technology, March 12, 2021. <https://www.govtech.com/education/k-12/newsela-raises-100m-for-digital-first-education-materials.html>

<sup>12</sup> Davis, Sarah. “How Coronavirus (COVID-19) Is Impacting Ecommerce”. Roi Revolution, January 18, 2022. <https://www.roirevolution.com/blog/2022/01/coronavirus-and-ecommerce/>

<sup>13</sup> Whiteboard Advisors, Education Insider Survey

<sup>14</sup> Miao, Fengchun. “Ensuring effective distance learning during COVID-19 disruption: guidance for teachers”. UNESCO, 2020. <https://unesdoc.unesco.org/ark:/48223/pf0000375116.locale=en>

<sup>15</sup> Rosbash, Tanya. “Who’s the next winner in the shifting K-12 curriculum market?” Tyton Partners, March 1, 2018. <https://tytonpartners.com/library/will-win-k-12-curriculum-market/>

<sup>16</sup> “EdTech Insights: EdTech Top 40 2021.” LearnPlatform. [https://learnplatform.com/top40?utm\\_campaign=2021-edtech-top40&utm\\_medium=asset-infographic&utm\\_source=blog](https://learnplatform.com/top40?utm_campaign=2021-edtech-top40&utm_medium=asset-infographic&utm_source=blog)

<sup>17</sup> Rectanus, Karl. “What New Report Tells Districts about EdTech Use in First Full Year with COVID.” LearnPlatform, September 10, 2021. <https://learnplatform.com/blog/edtech-management/what-new-report-tells-districts-about-edtech-use>

<sup>18</sup> Davis, Michelle R. “K-12 Districts Wasting Millions by Not Using Purchased Software, New Analysis Finds.” EdWeek Market Brief, May 14, 2019. <https://marketbrief.edweek.org/marketplace-k-12/unused-educational-software-major-source-wasted-k-12-spending-new-analysis-finds/>

<sup>19</sup> Nebraska Department of Education. “Standards to Curriculum”. January 25, 2022. <https://www.education.ne.gov/contentareastandards/standards-to-curriculum/>

<sup>20</sup> “Survey Finds Teachers Spend 7 Hours Per Week Searching for Instructional Materials.” Education World, February 7, 2017. [https://www.educationworld.com/a\\_news/survey-finds-teachers-spend-7-hours-week-searching-instructional-materials-490526015](https://www.educationworld.com/a_news/survey-finds-teachers-spend-7-hours-week-searching-instructional-materials-490526015)



<sup>21</sup> Schneider, Mike. “Census data: US is diversifying, white population shrinking.” Associated Press, August 13, 2021. <https://apnews.com/article/race-and-ethnicity-census-2020-7264a653037e38df7ba67d3a324fc90d>

<sup>22</sup> Tavernise, Sabrina and Robert Gebeloff. “Census Shows Sharply Growing Numbers of Hispanic, Asian and Multiracial Americans.” New York Times, August 21, 2021. <https://www.nytimes.com/2021/08/12/us/us-census-population-growth-diversity.html?searchResultPosition=1>

<sup>23</sup> “Racial/Ethnic Enrollment in Public Schools.” National Center for Education Statistics. <https://nces.ed.gov/programs/coe/indicator/cge>

<sup>24</sup> “Diverse City, White Curriculum: The Exclusion of People of Color from English Language Arts in NYC Schools.” NYC Coalition for Education Justice, 2020. <http://www.nyccej.org/wp-content/uploads/2019/12/Diverse-City-White-Curriculum-3.pdf>

<sup>25</sup> Opfer, Darleen V., Julia H. Kaufman and Lindsey E. Thompson. “Implementation of K-12 State Standards for Mathematics and English Language Arts and Literacy: Findings from the American Teacher Panel.” RAND Corporation, 2016. [https://www.rand.org/pubs/research\\_reports/RR1529-1.html](https://www.rand.org/pubs/research_reports/RR1529-1.html)

<sup>26</sup> Wang, Elaine Lin, Andrea Prado Tuma, Sy Doan, Daniella Henry, Rebecca Ann Lawrence, Ashley Woo, and Julia H. Kaufman. “Teachers’ Perceptions of What Makes Instructional Materials Engaging, Appropriately Challenging, and Usable: A Survey and Interview Study.” RAND Corporation, 2021. [https://www.rand.org/pubs/research\\_reports/RRA134-2.html](https://www.rand.org/pubs/research_reports/RRA134-2.html)

<sup>27</sup> “Survey Finds Teachers Spend 7 Hours Per Week Searching for Instructional Materials.”

<sup>28</sup> Pondiscio.

<sup>29</sup> “Survey Finds Teachers Spend 7 Hours Per Week Searching for Instructional Materials.”

<sup>30</sup> Porter-Magee, Kathleen. “Is a Solid Curriculum a Constraint on Teacher Creativity?” Education Next, Fall 2021. <https://www.educationnext.org/solid-curriculum-constraint-teacher-creativity/>

<sup>31</sup> Pondiscio.

<sup>32</sup> “The Opportunity Myth: What Students Can Show Us About How School Is Letting Them Down—and How to Fix It.” TNTIP, September 25, 2018. <https://tntp.org/publications/view/student-experiences/the-opportunity-myth>

<sup>33</sup> “Why are the Common Core State Standards important?” Common Core State Standards Initiative. <http://www.corestandards.org/faq/why-are-the-common-core-state-standards-important/>

<sup>34</sup> Lowe, Brendan. “Textbook Adoption Was Once About ‘Going to the Right Dinner’ With Publishers. Now EdReports Is Disrupting the \$8 Billion Industry by Putting Teachers in Charge.” The 74, September 8, 2019. <https://www.the74million.org/article/textbook-adoption-was-once-about-going-to-the-right-dinner-with-publishers-now-edreports-is-disrupting-the-8-billion-industry-by-putting-teachers-in-charge/>

<sup>35</sup> Prescott, Sabia and Jenny Muñiz. “We Don’t Have to Sacrifice Cultural Relevancy While Learning Online.” New America, March 25, 2020. <https://www.newamerica.org/education-policy/edcentral/we-dont-have-to-sacrifice-cultural-relevancy/>

<sup>36</sup> <https://nationalseedproject.org/itemid-fix/entry/curriculum-as-window-and-mirror>

<sup>37</sup> Polikoff, Morgan, Elaine Lin Wang and Julia H. Kaufman. “The Overlooked Support Teachers Are Missing: A Coherent Curriculum.” The Rand Blog, March 3, 2021. <https://www.rand.org/blog/2021/03/the-overlooked-support-teachers-are-missing-a-coherent.html>

<sup>38</sup> Ibid.

<sup>39</sup> [http://teacher.justinwells.net/Downloads/improving\\_the\\_instructional\\_core\\_elmore\\_2008.pdf](http://teacher.justinwells.net/Downloads/improving_the_instructional_core_elmore_2008.pdf)

<sup>40</sup> Short, Jim and Stephanie Hirsh. “The Elements Transforming Teaching through Curriculum-Based Professional Learning.” Carnegie Corporation of New York, November 2020. [https://media.carnegie.org/filer\\_public/47/94/47947a81-4fdf-421b-a5e8-fbb211898ee0/elements\\_report\\_november\\_2020.pdf](https://media.carnegie.org/filer_public/47/94/47947a81-4fdf-421b-a5e8-fbb211898ee0/elements_report_november_2020.pdf)

<sup>41</sup> “Design principles for schools,” Learning Policy Institute and Turnaround for Children, p. 58-61.

<sup>42</sup> Porter-Magee.