Quick Reference Guide: The Case for Curricular Coherence

Students learn best when curriculum is coherent. As students move from grade to grade, from subject to subject, and from core instruction to intervention or enrichment, their learning experiences should build on one another in purposeful and comprehensible ways. This does not mean insulating students from real complexity or productive struggle, but it does mean preventing unintentional gaps, clashes, and redundancies in instruction.

This Quick Reference Guide describes three types of curricular coherence that support student learning: vertical coherence, aligned tiers of instruction, and cross-subject coherence.

Vertical Coherence

What students learn one year should build on what they learned the previous year and prepare them for what they learn the next. Connections from one grade's curriculum to another should be explicit and understood by students themselves, not only by the adults around them.

Though the standards define a coherent progression of student outcomes, they leave room for a variety of curricular sequences and approaches. Checking each year's curriculum for alignment to grade-level standards is not sufficient to ensure curricular coherence across grades.

> *"The most effective instruction is iterative … students improve when they revisit important ideas, processes, and questions over time."*
>
> - Jay McTighe and Grant Wiggins[1]

In Focus: Stoughton

In Stoughton, teachers look at the English language arts standards for grades 9–10 and grades 11–12 side by side as they plan curriculum, design assessments, and write rubrics for use throughout the high school grades. With a shared understanding of how learning experiences as well as expectations evolve from year to year, teachers can build effectively on one another's work in ways that benefit students.

Aligned Tiers of Instruction

Whether they are working below grade level or above, any supplemental instruction students receive should directly reinforce and extend their regular classroom learning. Teachers of record and support staff need time together to align their work in ways that make sense for students.

First, though, make sure the core curriculum is of high quality and aligned to Massachusetts standards. Anchoring supplemental services to a weak core is unproductive, and a strong core curriculum lessens the burden on systems of intervention.

> *Instructional chaos prevails for many of our at-risk and struggling [students]—those who need the most consistency through repeated exposure to the same material in varied and engaging ways.*
>
> - Nonie Lesaux and colleagues[2]

[1] *Solving 25 Problems in Unit Design* (2015)

[2] *Turning the Page: Refocusing Massachusetts for Reading Success* (2010)

In Focus: Pittsfield

At the Morningside Community School in Pittsfield, teachers meet weekly to co-plan tier 1 instruction with the special education and English language development specialists who serve their students. Pullout instructors benefit from knowing exactly what students are working on in class, while the collaboration also helps general educators make their practice more inclusive, reducing the burden on interventionists.

Cross-Subject Coherence

Some of the most important skills and understandings students develop in school transcend subject areas: for example, evidence-based argumentation, collaborative inquiry, and even more specific content such as the effects of certain government policies or economic trends. When different lessons and teachers are rowing in the same direction, students learn these things more quickly and deeply.

The Massachusetts curriculum frameworks for English language arts and literacy and for history and social science include cross-references and other guidance to support connections across subjects. Meanwhile, strand maps illustrate how the standards for science and technology/engineering connect to standards in other subject areas.

> *"Even the best pedagogy can't overcome the negative effects of incoherent curriculum."*
>
> - Mike Schmoker[3]

In Focus: The Five-District Partnership

The Five-District Partnership (Chelsea, Everett, Malden, Revere, and Winthrop) formed in 2012 to increase horizontal coherence in a region with a highly mobile student population. Common benchmark assessments help member districts set consistent expectations and smooth students' transitions between schools and districts. The initiative promotes vertical alignment as well: for example, grade 5 teachers participate in the construction of grade 6 assessments to ensure that the move from elementary to middle school is seamless.

Aligning curricular materials is only the first step toward creating coherent learning experiences for students. Ultimately, curriculum must be coherent in implementation as well as on paper, especially when different teachers each teach sections of the same class. Collaborative, curriculum-centered professional learning provides teachers valuable time to develop a collective understanding of their curricular materials—including areas of strength and opportunities to adapt and supplement—all in service to coherent instruction.

> *"Uneven, scattered curriculum isn't just boring or confusing; it can widen the gaps between students from affluent backgrounds and their peers from low-income families."*
>
> - Sonja Santelises[4]

[3] "Curriculum NOW" (2011)

[4] "The importance of asking hard questions about what students learn in school" (2018)