

Columbia School District's Core

How We Build Instructional Coherence from Theory to Practice

Einstein wrote, “Out of clutter, create simplicity.” From seemingly endless clutter, our district—school board, teachers, and administrators—sought to create a coherent framework that would bring order to our educational endeavors, ideas, and practices and to build capacity to embrace new thoughts and innovations. We imagined a conceptual and practical framework that would couple existing trends and practices with contemporary initiatives, such as the Common Core State Standards (CCSS) and the sweeping federal and state teacher evaluation mandates. While creating capacity for embracing these and other ideas and initiatives, we also envisioned that the framework would stabilize endless flipping from one educational theory or initiative to another. To this end, the following describes how we shaped our dream into a robust framework that (1) unifies our educational concepts and practices, (2) develops the capacity for assimilation of new educational proposals and innovations, and (3) creates a framework that we readily embrace.

1. Unified Instructional Core

Over the past two decades, the education community turned their primary attention from the teacher to the learner and highlighted the importance of designing tasks that meaningfully reflect content and target student engagement. This powerful refocus launched the conversation about how to integrate teaching and content to better engage students. Richard Elmore proposed framing educational practice within an interrelated *Instructional Core*; this he suggested consists of three features—(1) student’s engagement in their own learning, (2) teacher’s knowledge and skill, and (3) academically challenging content (Elmore, 2010).

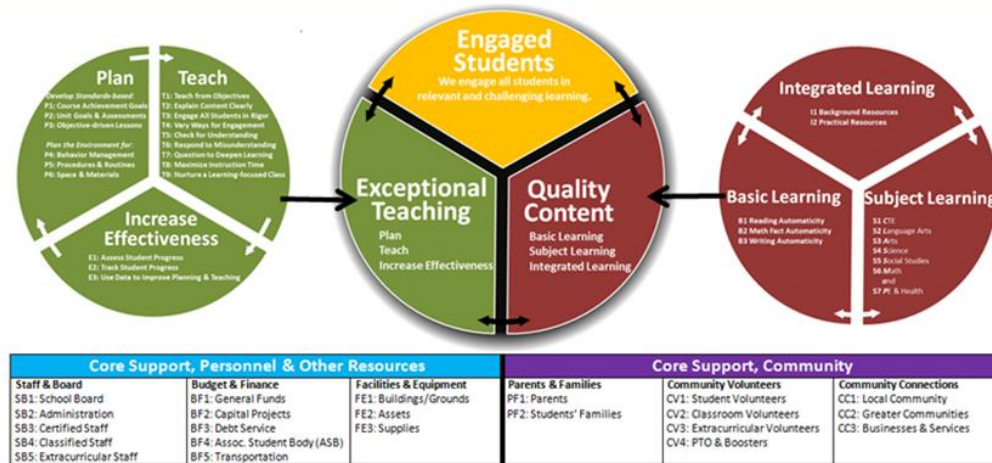
With the coherent unification of teaching and learning as our goal, we used Elmore’s `instructional core as the anchor for the selection of a *Teaching/Learning Framework* and creation of a *Content Framework* as is shown in Figure 1. We then connected these comprehensive frameworks to teacher-friendly, web-based *Fingertip Resources* that we designed to bridge the theoretical and the daily practice of education.

The central focus of Figure 1 is the framework for the *Instructional Core*—Engaged Students/Exceptional Teaching/Quality Content. This is flanked on the left with the descriptive *Teaching Framework* that we adapted and on the right with the *Content Framework* which we created. Thus, with engaged student learning as the target of the *Unified Instructional Core*, teachers working within the core must consider just two supportive frameworks—a *teaching/learning framework* and a *content framework*. Elmore succinctly stated, “Teaching causes learning” (City,

et. al., 2010) To help cause learning, our teachers consider (1) the interests, aptitudes, background, and experiences of each of our students—the heart of the core—and (2) reference the frameworks and access the resources. We undergirded the frameworks with *Personnel/Other Resource Support* and *Community Support*. Finally, we laced the frameworks and resources into the *Unified Instructional Core*.

Figure 1

The Unified Instructional Core



2. Teaching/Learning Framework

A number of meaningful teaching/learning frameworks exist that could be aligned neatly within the *Unified Instructional Core*. From an array of exemplary frameworks, we adapted the comprehensive DCPS Teaching and Learning Framework and its teacher-ready practical resources, a primary tipping point for our selection. Our adaptation to this Framework, shown in the left side of Figure 1, combines a triad of instructional components and, book-cased within the following parentheses, a simplified code—*Plan (P)*, *Teach (T)*, and *Increase Effectiveness (E)*. We briefly describe this model below.

2.1 Plan. The Framework section titled *Plan* outlines a structure for designing quality instruction; this includes *Develop Standards-based*: P1: Course Achievement Goals; P2: Unit Goals and Assessments; and P3: Objective-driven Lessons. Just as essential, the next section includes *Plan the Environment*: P4: Behavior Management; P5: Procedures and Routines; and P6: Space and Materials.

1.2 Teach. Like the *Plan Framework*, the *Teach Framework* is subdivided; these divisions include T1: Teach from Objectives; T2: Explain Content Clearly; T3: Engage All Students in Rigor; T4: Vary Ways for Engagement; T5: Check for Understanding; T6: Respond to Misunderstanding; T7: Question to Deepen Learning; T8: Maximize

Instruction Time; and T9: Nurture a Learning-Focused Class. Collectively, these highlight crucial lesson elements that promote student engagement in objective-driven, data-centered learning.

2.3 Increase Effectiveness. The *Increase Effectiveness* section of these framework features three subsections—E1: Assess Student Progress; E2: Track Student Progress; and E3: Use Data to Improve Planning and Teaching. To Increase Effectiveness, our teachers gather, record, and analyze informal and formal data drawn from individual and full classrooms of students to create academic profiles; develop interest and aptitude surveys; and gain knowledge of students, their families and communities. Together, the *Plan*, *Teach*, and *Increase Effectiveness* sections provide a coherent cyclic teaching and learning process that, properly applied, promotes exceptional teaching and engaged learning.

3. Content Framework

Because we found no framework that sufficiently aligned with our content purposes, we created the *Content Framework* as shown in the right side of Figure 1; this framework gives sharp focus to the content section of the *Unified Instructional Core*. We designed the *Content Framework* in three parts—(1) *Basic Learning*; (2) *Subject Learning*; and (3) *Integrated Learning*. Thus, unlike the cyclic *Teaching/Learning Framework*, the *Content Framework* is multidirectional—students may engage in integrated learning activities while simultaneously learning subject specific concepts or basic automaticity.

3.1 Basic Learning. *Basic Learning*, generally termed *Foundation Learning* in the CCSS, adds clarity to our common language of instruction. We limited these automaticity gateway skills to reading, math fact, and writing. We restrict reading automaticity to the automatic decoding of foundation letter-sound elements in connected text written at each student’s grade level or at a sixth grade readability, whichever comes first. As we do for math fact and writing automaticity, we promote reading automaticity interventions as needed (Gates & Yale, 2010; Rasinski, 2012).

Math fact automaticity we describe as the immediate response to math facts—addition, subtraction, and multiplication (Price, Mazzocco, & Ansari, 2013). Specifically, we support teaching of automaticity of all basic math facts zero through twelve by the end of third grade. Automaticity of the math facts eases student learning of the algorithms, the foundation for the limitless applications of mathematics.

Finally, we designed a writing automaticity model that includes three essential parts. The first essential consists of writing coherent sentences that begin with a capital letter and end with a period, question mark, or exclamation point. As the second essential, we teach five-part writing automaticity. Our primary teachers assign their students a

five-sentence paragraph in which the first sentence introduces the topic, the next three add detail to support the topic, and the concluding sentence summarizes the topic and supportive sentences. As our students mature in their writing, we teach them how to produce a five-part short essay by expanding each sentence into a paragraph. For the third essential of our writing automaticity model, we teach our students to use transition words and phrases, such as using the ordinal words *first* and *second*, applying transition words like *therefore* or *furthermore*, and adding redundancy that includes repeating a word or using a synonym. The automaticity writing triad forms the foundation for more advanced and creative writing styles.

Skills in automaticity basics—reading, math fact, and writing—represent entry or gateway skills. Unquestionably, students must master the three automaticities to fully engage in the *Subject* and *Integrated Learning* described below.

3.2 Subject Learning. We divided *Subject Learning* into our school district’s seven fields of study—Career and Technical Education (C1), Language Arts (L2), The Arts (A3), Science (S4), Social Studies (S5), Mathematics (M6), and Physical Education and Health (P7)—for which we coined the acronym *CLASS MaP* to easily organize these in our minds. Our teachers identify a maximum of 30 essential terms for the subjects taught in each grade or standalone course. This straightforward process weaves the horizontal and vertical content fabric from kindergarten through the 12th grade (K-12) CLASS MaP; we labeled these *Content Terms* or simply *C-Terms* (see Robert Marzano, 2004). Furthermore, teachers update the C-terms with reasonable ease as they adopt new content. For the most part, the seven fields of study found within *Fingertip Resources* begin with rudimentary foundations then spiral toward Bloom’s framework of academically challenging learning tasks of application, analysis, evaluation, and creativity—the modernized term for synthesis.

3.3 Integrated Learning. We qualify *Integrated Learning*, the highest level in the *Content Framework*, as content that bridges the fields of study; this we divide into I1: Background Resources, and I2: Practical Resources. Content can be integrated, for example, through blending writing with the other subjects. Examples of popular *Integrated Learning* include humanities courses that typically combine the traditional integration of common themes within language arts, the arts, and social studies; and STEM classes, which include the integration of science, technology, engineering, and math.

4. Core Support

Figure 1 also shows two frameworks that support *The Core*. The first framework includes the *Core Support* from *Personnel/Other Resources*—school board/non instructional staff, budget/finance, and facilities/equipment. The

second framework includes *Core Support* from the *Community*—parents/families, volunteers, the local community, and the greater community. Without these crucial support systems, teaching/learning/content efforts hopelessly flounder.

5. Fingertip Resources

Deliberately drawing upon web-based sources, the *Fingertip Resources* bring everyday practicality to the *Teaching/Learning* and *Content Frameworks* that rest within the *Unified Instructional Core*. These provide both fundamental and supplementary resources. Examples of the web-based fingertip pathways to fundamental resources include CCSS, a common language of instruction, C-terms, and our district-adopted textbooks.

The supplemental resources, on the other hand, add a wealth of complementary web-based resources. Moreover, our teachers add many of the supplemental sites; this boosts the authenticity and value of the sites. The Task-oriented Question Construction Wheel, based on Bloom’s Taxonomy, serves as one secondary website example—T7: http://aei.uoregon.edu/handouts/2004_bloom_polygon.pdf. Sandra Day O’Connor’s iCivics project serves as a second example—S5: www.icivics.gov. All-in-all, these and numerous other fingertip sites allow our teachers to link the frameworks to specific grade and subject resources.

Finally, we sort the *Fingertip Resources* according to one of the six subsections found within the *Unified Instructional Core*—the *Plan, Teach, Increase Effectiveness* subsections that form the *Teaching/Learning Framework* and the *Basic, Subject, and Integrated Learning* subsections that make up the *Content Framework*. On our district website, we post an icon for the *Unified Instructional Core*. A fingertip click on this icon takes our teachers to the subsections of these frameworks; another click opens the corresponding fingertip websites. We use the codes accompanying Figure 1 to organize the websites within the *Resources*. For example, from our district website teachers click S6 to access an array of web-based mathematics websites; these range from our adopted mathematics resources to ideas for lesson design.

6. Instructional Coherence

The *Instructional Core* anchors the *Teaching/Learning* and *Content Frameworks* and shapes the selection of the *Fingertip Resources*. This model coherently embraces both the instructional theory and day-to-day teaching/learning. As our district considers new content and course proposals, the frameworks serve as the springboard to answer the two important questions: What stays? What goes? Also, while maintaining the integrity of the *Unified Instructional Core*, our district adapts the teaching/learning and content frameworks to fit our needs and purposes.

Noteworthy, we then link our strategic plan to the five sections shown in the *Unified Instruction Core* framework—(1) Engaged Students; (2) Exceptional Teaching; (3) Quality Content; (4) Core Support, Personnel/Other Resources; and (5) Core Support, Community. We sharpen our focus upon *Engaged Students* with our student-centered mission and vision statements. Specifically, Figure 1 shows that our vision reads, “We engage all students in relevant and challenging learning.” This vision anchors our teaching-student-content efforts. We then wrote a focus statement for the other four sections. Our focus statement for Quality Content, for instance, reads, “We engage each student by using relevant and challenging quality content—Basic, Subject, and Integrated Learning.” Our school board routinely considers revisions and updates the strategic planning document. In short, the *Unified Instructional Core* and the strategic plan display tight coherence and, thus, serve as key documents that offer purpose and direction for our district.

Moreover, the *Teaching/Learning* and *Content Frameworks*, coupled with the *Fingertip Resources*, anchor teaching and learning yet offer flexibility and instructional coherence. This flexibility supports teaching full classrooms of students, small student groups, and one-to-one instruction alike. Furthermore, the frameworks provide school and district-wide unity while allowing for the individualism of teachers and students to flourish. In sum, this instructional coherence showcases both the theoretical essence and the practical “how to” ideas—it aligns abstract notions with concrete suggestions.

The unified core and frameworks also provide the foundation for teachers to collaboratively work together; this unification memorializes the past and gives an instructional staff focus for current and future collaborative student/teacher/content efforts. In short, the *Unified Instructional Core* anchors previous collaborative endeavors while giving trim and sail to present and future work. Focused work within the *Unified Instructional Core*—the *Teaching/Learning Frameworks* flanked by the *Content Frameworks* and supported by robust *Fingertip Resources*—creates a coherent, unified whole. The *Core* brings unity; the *Frameworks* add substance; and the *Resources* breathe life.

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