A broad gap exists between traditional professional development and professional learning that can help teachers experience the kind of inquiry-based learning we expect them to provide to their students. The following recommendations are drawn from *The Elements: Transforming Teaching through Curriculum-Based Professional Learning*, which explores how professional learning anchored in high-quality curriculum materials allows teachers to experience the instruction their students will receive and change their instructional practices, leading to better student outcomes. Learn more at www.carnegie.org/elements.

**Core Elements**

- Anchor professional learning in district curriculum and instructional materials.
- Deepen expertise in relevant content, pedagogical content knowledge, and teaching pedagogy.
- Demonstrate the relationship between beliefs and the use of new instructional materials by creating experiences that involve examining assumptions, perceptions, and practices.
- Help teachers to understand connections between instructional materials and the culture, context, race, and ethnicity of students.

**Functional Elements**

- Introduce teachers to new curriculum and reinforce its use through experiences that mirror the instructional approaches they will use with students.
- Apply research on how to shift beliefs and embed opportunities for cognitive dissonance and its resolution in professional learning.
- Develop expertise, guide development, and use change tools to provide feedback and support curriculum implementation.
- Demonstrate how to shape lessons that address students’ culture, context, race, and ethnicity.
- Equip teachers to scaffold lessons to connect less-prepared students with rigorous content and learning experiences.

**Structural Elements**

- Advise and guide system and school leaders to establish collaborative learning teams by grade and content area.
- Provide ongoing support for collaborative learning teams, including learning protocols anchored in curriculum implementation.
- Make visible and explicit to teachers and others the learning models that support the implementation of instructional materials.
- Support the development of change management plans that recognize and allocate the essential time needed for curriculum implementation.
- Document the impact of time invested in curriculum-based professional learning.

**Essentials**

- Help leaders, teachers, and coaches articulate and amplify a shared vision for teaching and learning that addresses each subject or grade level and the role of curriculum-based professional learning.
- Create professional learning materials that build internal leadership capacity among teacher leaders, coaches, and school leaders.
- Support opportunities to extend resources through partnerships, open education resources, and other funding sources.
- Identify questions that advance coherence during curriculum selection and implementation.
- Advocate for professional learning grounded in district curriculum and instructional materials.
**The Elements** are the expectations and according actions that school and district leaders, curriculum developers, and teacher development organizations take to promote and design curriculum-based professional learning. They include:

- **core design features**, which focus on the purpose of curriculum-based professional learning
- **functional design features**, which shape teachers’ experiences
- **structural design features**, which describe parameters and settings

Elements may be used in different combinations depending on what individuals and organizations need at different times. But all curriculum-based learning rests on **the Essentials** — the expectations for system and school leaders that nurture growth and change.

Find the full report at [www.carnegie.org/elements](http://www.carnegie.org/elements)