What is curriculum mapping?

The curriculum mapping model based on Dr. Heidi Hayes Jacobs’s work (1997, 2004, 2006, 2008, 2010) clearly addresses the necessity to synthesize various models and create a framework that focuses on the recommendations, requisites, and desires that affect students’ learning and teaching environments.

Udelhofen (2005) states “…the concept of curriculum mapping originated in the 1980s with the work of Fenwick English…” (xviii). Dr. Jacobs embraced and enhanced the earlier work by adding a variety of teacher-driven curriculum maps, horizontal and vertical alignments, cyclic reviews, and professional curricular dialogue. Jacobs (2004) states, “…curriculum maps have the potential to become the hub for making decisions about teaching and learning. Focusing the barrage of initiatives and demands on schools into a central database that can be accessed from anywhere through the Internet can provide relief … Mapping becomes an integrating force to discuss not only curriculum issues, but also programmatic ones.” (p.126).

How is it defined?

Curriculum mapping is the process indexing or diagramming a curriculum to identify and address academic gaps, redundancies, and misalignments for purposes of improving the overall coherence of a course of study and, by extension, its effectiveness (a curriculum, in the sense that the term is typically used by educators, encompasses everything that teachers teach to students in a school or course, including the instructional materials and techniques they use).

It basically is how educators plan what subject content students will learn over the course of the year. In many places, it is done over a four to six-year plan, building off of content from one year to the next. It follows a logical, time-progressive order to give the students a well-rounded and comprehensive educational experience.

How is it mapped?

Curriculum mapping aims to achieve success over four goals:

- **Vertical coherence:** When a curriculum is vertically aligned or vertically coherent, what students learn in one lesson, course, or grade level prepares them for the next lesson, course, or grade level. Curriculum mapping aims to ensure that teaching is purposefully structured and logically sequenced across grade levels so that students are building on what they have previously learned and learning the knowledge and skills that will progressively prepare them for more challenging, higher-level work.

- **Horizontal coherence:** When a curriculum is horizontally aligned or horizontally coherent, what students are learning in one ninth-grade biology course, for example, mirrors what other students are learning in a different ninth-grade biology course. Curriculum mapping aims to ensure that the assessments, tests, and other methods teachers use to evaluate learning achievement and progress are based on what has actually been taught to students and on the learning standards that the students are expected to meet in a particular course, subject area, or grade level.

- **Subject-area coherence:** When a curriculum is coherent within a subject area—such as mathematics, science, or history—it may be aligned both within and across grade levels. Curriculum mapping for
subject-area coherence aims to ensure that teachers are working toward the same learning standards in similar courses (say, three different ninth-grade algebra courses taught by different teachers), and that students are also learning the same amount of content, and receiving the same quality of instruction, across subject-area courses.

- **Interdisciplinary coherence:** When a curriculum is coherent across multiple subject areas—such as mathematics, science, and history—it may be aligned both within and across grade levels. Curriculum mapping for interdisciplinary coherence may focus on skills and work habits that students need to succeed in any academic course or discipline, such as reading skills, writing skills, technology skills, and critical-thinking skills. Improving interdisciplinary coherence across a curriculum might entail teaching students reading and writing skills in all academic courses, not just English courses.


**Why is curriculum mapping important?**

Curriculum mapping is important because it allows teachers and administrators to focus on balance between the content across curricula. It allows them to look into each classroom and see what children learn, and helps them gather data on redundancies or gaps in the course content. Curriculum mapping also helps teachers and administrators assess the structure of the course, and the time-scale plan of when specific lessons or concepts are taught.

Hale (2008) says this, “curriculum mapping is not a spectator sport. It demands teachers’ ongoing preparation and active participation. There must also be continual support from administrators who have a clear understanding and insight into the intricacies of the mapping process.” (p. xv)

One important thing to remember, curriculum maps are never considered “done”. They are an ongoing development seeking to improve student learning and content quality across schools. As long as teachers have new students, new classes, and new school years, the content and structure should be continually assessed and revised (if need be) to ensure students get the most out of their education, and for teachers to use the most effective strategies in their lessons. *If you have questions about USD 320 process for revising curriculum, please contact Dr. Mary Kaye Siebert, Director of Instructional Services.*

**Resources**


