### A View of High School Mathematics Curricula through the Lens of Schwab’s Commonplaces

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#### Context

**Narrative Inquiry**

“The duration of the inquiry is indefinite; what will constitute the significant data is unknown; the outlines of a satisfactory outcome are vague or invisible. In general, the task is not to traverse a marked route but to determine a route and a destination and to do so with uncertainty as a conspicuous factor at each step.” (Schwab, 1960, p. 21)

**High School**

- A large, urban district in the southern mid-western United States
- Large number of low-socioeconomic students, most performing below grade level in mathematics, and many of whom are second-language learners

**Participants**

- Geometry teachers using a new program during its second year of adoption

**Initial focus**

- To improve teachers’ instructional approaches to a new Geometry program

**Subsequent focus**

- To help empower mathematics teachers to deal with instructional challenges in the face of systemic impediments within their high school

#### Conceptual Frameworks

**Schwab’s Commonplaces (1973)** should be in balance (see Figure 1).

| Teacher commonplace: the knowledge and flexibility the teacher brings to the translation of the curriculum |
| Subject-matter commonplace: the teacher’s depth of understanding of the subject matter |
| Learner commonplace: awareness of what learners already know, what each will find easy or difficult to learn, and what motivates or creates anxiety for each |
| Milieu commonplace: the learning environments that impact affective aspects of learning |

#### Methodology

**Narrative inquiry** served as the framework for conceptual interpretation of the stories that unfolded during the study.

**Participants:**

- Seven high school Geometry teachers who had a forty-five minute weekly scheduled common planning time
- Two of the teachers who received individual attention within their classrooms

**Duration:**

- One full day each week during the entire 2004 – 2005 academic year

**Data sources:**

- Field notes which detailed conversations with teachers and administrators
- Semi-structured interviews with teachers
- Observations of classrooms, surrounding hallways and larger communal rooms
- Artifacts such as agendas for meetings, notices pertaining to school activities, teacher-developed assessment instruments, and articles shared and discussed with teachers
- Audio-recordings and hand-scribed notes of group discussions and selected discussion protocols
- Personal-reflection journal

#### References


#### Stories of Incoherence

Analyses of the two teachers’ individual classrooms:

- Lack of coherence in the four commonplaces, particularly with respect to teacher and learner evidenced by inflexibility and inability to address individual students’ needs
- Social disruption that pointed to milieus which did not engender learning even for those few students who were motivated to learn

#### Conclusions

In the wake of NCLB accountability, large school systems frequently seem to focus on subject matter while paying little attention to teacher, learner and milieu commonplaces. Schwab (1973) cautions to avoid dominance of one commonplace over the others.

- The researcher proposes a view of Schwab’s *deliberative* curriculum, a conscious, explicit focus on the four commonplaces at the classroom level that extends to professional development and community development levels within a school and beyond written policy.
- School leadership must be aware of the need for continual, deliberative collaboration among all members of school community around the four commonplaces.
- As a mathematics professional developer, the researcher deliberately plans around the four commonplaces, paying close attention to how the selected subject matter will serve teachers with varying ability levels and contexts for learning and teaching.

#### Implications and Unanswered Questions

- Demonstrate how the commonplace balance can be brought about systemically in schools and possibly across districts.
- What should professional development look like so that deliberative, coherent curriculum becomes a natural, everyday practice?
- Do successful schools practice deliberative curriculum making? Can these schools further improve through making deliberative curriculum more explicit?