The 5 Discourses of Design in e-Learning

Ben Scragg, Punya Mishra, Melissa Warr
Mary Lou Fulton Teachers’ College, Arizona State University
Cycles of Hype and Despair
The modern school is forced to meet the demands of a rapidly changing civilization. Today the world of the learner is almost unbounded. He must acquire facts relating to a bewildering variety of places and things; he must acquire appreciations of far-reaching interrelationships. The curriculum and methods of teaching must undergo a continuous appraisal. New subject matter and new devices for instruction are being scrutinized for their potential contributions to the learning process.
1933
The introduction of the use of the talking picture into education may prove to be an event as epochal as the application of the principle of the wheel to transportation or the application of steam power to the industrial age. No development in education since the coming of the textbook has held such tremendous possibilities for increasing the effectiveness of teaching as the educational talking pictures.

Devereux, Engelhardt, Mort, & Stoddard, 1933
What else would be “epochal”? 
OH BOY!
HERE WE GO AGAIN...
unpacking
Design
The proper study of mankind is the science of design
- Herbert Simon
who devises courses of action aimed at changing existing situations into preferred ones

Herbert Simon
We conceptualize design as being a contextually-grounded, purposeful, creative, and iterative process of identifying problems and developing solutions to complex (wicked) problems of practice in situations fraught with ambiguity and complexity.
As with most media from which things are built, whether the thing is a cathedral, a bacterium, a sonnet, a figure or a word processor,

To understand clay is not to understand the pot. What a pot is all about can be appreciated better by understanding the creators and users of the pot and their need both to inform the material with their meaning and to abstract meaning from the form

Alan Kay
The 5 discourses of design in education
The 5 Discourses of Design (in Education)
The 5 Discourses of Design (in Education)
The 5 Discourses of Design (in Education)

- Artifacts
  - Materials, Tools, Software, Manipulatives
- Processes
  - Lesson plans, Curriculum, Student Support, Instructional Design
- Experiences
  - Sequencing, Schedules, Spaces, Movement, Events, Celebrations, Learning Communities
The 5 Discourses of Design (in Education)

Artifacts
- Materials, Tools, Software, Manipulatives
- Lesson plans, Curriculum, Student Support, Instructional Design
- Sequencing, Schedules, Spaces, Movement, Events, Celebrations, Learning Communities
- School Schedules, School Transformation, Teacher/student evaluation systems, Community Partnerships

Processes
- Lesson plans, Curriculum, Student Support, Instructional Design
- Sequencing, Schedules, Spaces, Movement, Events, Celebrations, Learning Communities
- School Schedules, School Transformation, Teacher/student evaluation systems, Community Partnerships

Experiences
- Materials, Tools, Software, Manipulatives
- Lesson plans, Curriculum, Student Support, Instructional Design
- Sequencing, Schedules, Spaces, Movement, Events, Celebrations, Learning Communities
- School Schedules, School Transformation, Teacher/student evaluation systems, Community Partnerships

Systems
The 5 Discourses of Design (in Education)

- **Artifacts**
  - Materials, Tools, Software, Manipulatives

- **Processes**
  - Lesson plans, Curriculum, Student Support, Instructional Design
  - Sequencing, Schedules, Spaces, Movement, Events, Celebrations, Learning Communities, School Schedules, School Transformation, Teacher/student evaluation systems, Community Partnerships

- **Experiences**
  - Perception of the school, of public education, openness v.s. closed mentality, values/ways of being, community engagement etc.

- **Systems**
  - Policy

- **Culture**
The 5 Discourses of Design (in Education)

- **Artifacts**
  - Materials, Tools, Software, Manipulatives

- **Processes**
  - Lesson plans, Curriculum, Student Support, Instructional Design
  - Sequencing, Schedules, Spaces, Movement, Events, Celebrations, Learning Communities, School Schedules, School Transformation, Teacher/student evaluation systems, Community Partnerships

- **Experiences**
  - Perception of the school, of public education, openness vs. closed mentality, values/ways of being, community engagement etc. Policy

- **Systems**

- **Culture**
The 5 Discourses of Design (in Education)

- School Schedules, School Transformation, Teacher / student evaluation systems, Community Partnerships
- Lesson plans, Curriculum, Student Support, Instructional Design
- Sequencing, Schedules, Spaces, Movement, Events, Celebrations, Learning Communities
- Transformation, Teacher / student evaluation systems, Community Partnerships
- Perception of the school, of public education, openness v.s. closed mentality, values / ways of being, community engagement etc. Policy

The process of design works across these levels - bi-directionally
The 5 Discourses of Design (in Education)

- **Artifacts**: Materials, Tools, Software, Manipulatives
- **Processes**: Lesson plans, Curriculum, Student Support, Instructional Design
- **Experiences**: Sequencing, Schedules, Spaces, Movement, Events, Celebrations, Learning Communities
- **Systems**: School Schedules, School Transformation, Teacher/student evaluation systems, Community Partnerships
- **Culture**: Perception of the school, of public education, openness vs. closed mentality, values/ways of being, community engagement etc. Policy

---

The process of design works across these levels - bi-directionally.

---

Trolls & fake news
Missed Call
The 5 Discourses of Design (in Education)

The process of design works across these levels - bi-directionally

- **Artifacts**
  - Materials, Tools, Software, Manipulatives
  - Lesson plans, Curriculum, Student Support, Instructional Design

- **Processes**
  - Sequencing, Schedules, Spaces, Movement, Events, Celebrations, Learning Communities
  - School Schedules, School Transformation, Teacher/student evaluation systems, Community Partnerships

- **Experiences**
  - Perception of the school, of public education, openness v.s. closed mentality, values/ways of being, community engagement etc. Policy

- **Systems**

- **Culture**

Everyone designs who devises courses of action aimed at changing existing situations into preferred ones - Herbert Simon

Schools are complex social service systems & educators are designers/intrapreneurs functioning within different discourses.

Discourses are larger world-views, or ways of seeing, speaking, being, and doing that circulate in a given time, place and context and that constrain what is possible to say and do and think.

Discourses occur at multiple levels (macro, institutional, micro/everyday) as a constellation of words, images, and "signs" that are saturated with meaning.
The 5 Discourses of Design (in Education)

The process of design works across these levels - bi-directionally

The many discourses of design in education

Everyone designs who devises courses of action aimed at changing existing situations into preferred ones - Herbert Simon

Schools are complex social service systems & educators are designers/intrapreneurs functioning within different discourses.

Discourses are larger world-views, or ways of seeing, speaking, being, and doing that circulate in a given time, place and context and that constrain what is possible to say and do and think. Discourses occur at multiple levels (macro, institutional, micro/everyday) as a constellation of words, images, and "signs" that are saturated with meaning.

Discourses have specific and universal elements - such as practices, tools, skills, techniques and mind-sets. Typically, specific would be Knowledge, practices, elements and tools (KPETs), while universal would be mindsets such as openness, empathy, creative confidence, optimism, learning from/through failure, willingness to iterate etc.

The use of the word discourses -
- Emphasizes dialogic / communicative practices as being key to design
- Emphasizes the idea of design as a conversation (between various stakeholders, between the designer and the artifact being constructed, between idea and reality)
NEW Organizations
NEW Learning
NEW Roles
NEW mindsets
Ben Scragg
bscragg@asu.edu

Punya Mishra
punya@asu.edu

Melissa Warr
mcwarr@asu.edu