From Epistemology to Curriculum Design: Contrasts in Approaches to OBL

Mary E. Diez
Graduate Dean
Alverno College

Big principles of OBL

- William Spady's (1988) definition
  - Clarity of focus
  - Expanded opportunity
  - High expectations
  - Design down
- Why is the notion of OBL so controversial?

Epistemology of intelligence vs. an Epistemology of mind

- Wolf et al. (1991)
  - Two views of learning
  - Two strong poles in education since the early 20th century.
- Shepard (2000)
  - Two paradigms of educational practice
    - 20th Century "dominant paradigm"
    - "Emergent paradigm"

Epistemology of intelligence

- What is learning?
  (Wolf et al.'s description)
  - Acquisition of information and skills as decontextualized "bits" of knowledge
  - In a linear sequence
  - Guided by a belief that the rate of progress is fixed

Behaviorist learning theory

- Shepard's analysis of the 20th Century Dominant Paradigm as behaviorist in its:
  - Conceptualization of learning as the accumulation of atomistic bits of knowledge
  - Tightly sequenced and hierarchical approach
  - Limited transfer (each objective taught separately)
  - Use of motivation based on positive reinforcement of many small steps
Implications for curriculum

- Wolf et al. talk about a "scalar curriculum"
  - Simple tasks are gatekeepers for more complex work
- Shepard describes "the curriculum of social efficiency"
  - Carefully specified educational objectives based on job analysis
  - Science of exact measurement, precise standards
  - Differentiated curriculum based on predicted social roles
  - All follow same path to outcomes

Implications for assessment

- Wolf et al. describe a "culture of testing"
  - Focused on decontextualized "bits" of knowledge
  - Using standardized tests constructed so that only a few can score high
- Shepard
  - Scientific measurement
  - Tests isomorphic with learning

Implications for culture

- Wolf et al.
  - Emphasis on sorting students by rank
  - Isolation
- Shepard
  - Scientific management of schools like factories
  - Utilitarian content, antagonism toward academic content, except for elite few

An example of this approach

- CBTE movement in the U.S. (University of Houston, University of Toledo, and others—1970’s and early 1980’s)
  - "Specified exactly what students need to do to be effective teachers..."
    CLEAR FOCUS and DESIGN DOWN
  - Had an elaborate set of criteria for each requirement (of thousands) HIGH EXPECTATIONS
  - Used an individualized approach, which led to complex record keeping, extended time
    EXPANDED OPPORTUNITY

Critiques – clear focus

- THE CBTE movement was an administrative nightmare
  - Thousands of competencies
  - Individualized learning plans for students demanded more time than faculty were willing to devote.
  - Standards-based teacher education is facing some of the same issues

- Benefits
  - What students need to do is very clearly spelled out
  - Teachers can crystallize their real intentions
  - Provides clear direction for planning

- Problems
  - But what they are to do may be narrow, fragmented, and atomistic
  - The view of knowledge is instrumentalist
  - Individual student inquiry, speculation, and creativity is limited
  - The affective dimension of education may be devalued
Critiques—expanded opportunity

- Benefits
  - May eliminate permanent failure

- Problems
  - But places enormous demands on teachers to individualize instruction
  - May discriminate against capable students

Critiques—high expectations

- Benefits
  - Facilitates process of evaluating students
  - All held to the same standard

- Problems
  - But the standard may not be consistently high, given narrow, fragmented “bits”
  - Focus on outcomes trivializes curriculum content

Critiques—design down

- Benefits
  - Helps the teacher to select appropriate content, methods, resources, etc.

- Problems
  - Focus on outcomes denies the value on processes of learning and teaching
  - Instrumentalist view of knowledge violates the epistemology of the structure of certain subjects and disciplines
  - May sidestep the key issue of values in the curriculum

- Most of the critiques of outcome-based approaches are tied to the “epistemology of intelligence/culture of testing”

- Now, a look at the alternative view...
Implications for curriculum

- Shepard describes a “reformed vision of curriculum”
  - Guided by a belief that all are capable
  - Providing challenging subject matter aimed at higher order thinking/problem solving
  - Linking learning in and out of school
  - Socializing students into the discourse and practices of academic disciplines
  - Providing equal opportunity for diverse learners
  - Fostering important dispositions and habits of mind
  - Enactment of democratic practices in a caring community

Implications for assessment

- Wolf et al. describe a “culture of assessment”
  - More complex performances
  - Collaborative elements
  - Assessment as contributing to learning
- Shepard
  - Challenging tasks to elicit higher order thinking
  - Focus on learning processes as well as outcomes
  - An ongoing process, integrated with instruction
  - Students active in evaluating own work

Implications for culture

- Wolf et al.
  - Collaboration, not only between instructors, but between students and instructors, students and students
  - Respect for capabilities/possibilities of all minds
- Shepard
  - Creation of a learning culture
  - Valuing of individual differences, cultural differences

An example of this approach

- Alverno College’s “ability-based” approach to education identifies eight abilities (complex combinations of knowledge, skill, attitude, value, and disposition), taught across the curriculum, integrated with disciplines.
  - Abilities
    - Involve the whole person
    - Are teachable
    - Can be assessed
    - Transfer across settings
    - Are continually re-evaluated and re-defined

Alverno’s abilities

- Effective communication
- Analysis
- Problem solving
- Valuing in decision-making contexts
- Effective social interaction
- Developing a global perspective
- Effective citizenship
- Aesthetic engagement

Key principles

- Educators are responsible for making learning more available by articulating outcomes and making them public CLEAR FOCUS
- Education goes beyond knowing to being able to do what one knows
- Abilities need to be defined in a way that our teaching of them can be developmental EXPANDED OPPORTUNITY
OBL Seminar
From Epistemology to Curriculum Design: Contrasts in Approaches to OBL
9 September 2008

- Designing for learning involves integrating abilities with disciplines and across disciplines
  DESIGN DOWN
- Abilities must be carefully identified and compared to what contemporary life requires
- Assessment is integral to learning
  HIGH EXPECTATIONS

- Essential to learning and assessment are
  - Public, explicit outcomes/criteria
  - Performance
  - Feedback
  - Self assessment
- The effectiveness of assessment for everyone involved depends on the existence of a total dynamic system that contribute to the coherence and continuous improvement of the curriculum—a CULTURE of assessment

Critiques – clear focus

- Benefits
  - Provides clear direction for students
  - Provides clear direction for planning
  - Helps teachers to crystallize their real intentions
  - Encourages inquiry, speculation and creativity
  - Deals with complex outcomes

- Problems
  - Faculty are obliged to make explicit the meaning of the disciplines—central concepts, tools of inquiry, values, and ongoing controversies

Critiques – expanded opportunity

- Benefits
  - Supports learning through multiple means
  - Allows capable students to take learning as far as they are able

- Problems
  - Still places demands on teachers to address needs of individuals, particularly through the provision of helpful feedback

Critiques – high expectations

- Benefits
  - Facilitates process of evaluating students
  - All held to consistently high standards
  - Standards are linked to disciplinary expectations

- Problems
  - May call for “radical revision of assessment”
  - Faculty role in assessment calls for additional development of expertise
  - Faculty role in assessment may shift balance in what faculty do with their time

Critiques – design down

- Benefits
  - Helps the teacher to select appropriate content, methods, resources, etc.
  - Integrates many aspects from processes, to values, to disciplinary approaches

- Problems
  - In effect, involves “multiple simultaneous reforms”
  - Faculty role in design of learning may require additional development of expertise
  - Communication across faculty may be a burden
OBL Seminar
From Epistemology to Curriculum Design: Contrasts in Approaches to OBL
9 September 2008

Conclusion

- OBL is strongly impacted by the epistemology underlying it
- Beliefs about learning impact the design of curriculum and assessment and the development of culture
- Ultimately, a faculty needs to determine how best to implement OBL to achieve the goals it has for student learning


