Paving the Way: Cognitive Development and Scaffolding Strategies for Undergraduates in
Library Instruction Classes
Sarah Morris | Instruction and Reference Librarian | Loyola University Chicago
October 20, 2014

Presentation overview
Transitioning from high school to college is a tricky process socially, emotionally, and mentally.
Understanding cognitive development can help educators make informed decisions about
effective classroom content for first-year students. By knowing where first-year students are in
terms of their approaches to learning, library educators and faculty partners can use a scaffolding
approach to help students develop the higher level skills they need in college.

Concept Areas
Cognitive development theories
What it is - As proposed by William Perry, the idea that students pass through stages of
development in their learning
Cognitive development stage for first-years - Perry argues that many first-year students are in a
"dualistic" development phase where they have a more-or-less black and white worldview, want
"right" answers to questions, and trust in authority
Readings
Jackson, R. (2007). "Cognitive Development: The Missing Link in Teaching Information
Literacy Skills." *Reference and User Services Quarterly, 46*(4), 28-32.
Perry, William G. (1999). Forms of Intellectual and Ethical Development in the College Years:
A Scheme. San Francisco: Jossey-Bass.
Mellon, Constance (1986), "Library anxiety: A grounded theory and its development", *College
& Research Libraries* 47 (2): 160–165

Information Literacy
A working definition from ACRL - Information literacy is a repertoire of understandings,
practices, and dispositions focused on flexible engagement with the information ecosystem,
underpinned by critical self-reflection.
Links and Resources
ACRL Information Literacy Competency Standards for Higher Education -
http://www.ala.org/acrl/standards/informationliteracycompetency
Project Information Literacy. University of Washington Information School.
http://projectinfolit.org/publications

Threshold Concepts
Definition- Threshold concepts are core concepts that stick with a student once they are learned.
Threshold concepts are often difficult or troublesome concepts and skills that can cause students
to hit roadblocks in their learning.

Resources
Townsend, L, Brunetti, K., and Hofer, A.R. (2011). "Threshold Concepts and Information Literacy." *portal: Libraries and the Academy, 11*(3), 853-69.
Threshold Concepts and Information Literacy Website - http://www.ilthresholdconcepts.com/

Scaffolding
What it is - Instructional scaffolding is a learning process that focuses on providing support and guidance to students as they learn and master new tasks. Support is gradually lessened as students develop autonomous skills. Scaffolding starts from a familiar, and developmentally appropriate, place for students and new concepts and skills are built up and introduced over time.
Resources
UNC School of Education Overview of Scaffolding - http://www.learnnc.org/lp/pages/5074
Emerging Perspectives on Learning, Teaching, and Technology, Department of Educational Psychology and Instructional Technology at the University of Georgia - http://epltt.coe.uga.edu/index.php?title=Main_Page

Integrated Course Design
What it is - This is a variation on backwards design, which is an instructional design process that begin with learning outcomes and works back from there toward the development of classroom activities. Integrated course design is a similar process, but this design system also places an emphasis on the importance contextual factors, such as pre-existing coursework or class size that can influence curriculum decisions.
Resources
Wiggins, G. & McTighe, J.(2005). Understanding by Design (Expanded 2nd Ed. USA). Alexandria, Va.:Association for Supervision and Curriculum Development.
Vanderbilt Center for Teaching overview of Understanding by Design - http://cft.vanderbilt.edu/guides-sub-pages/understanding-by-design/
Booth, C. (2011). *Reflective teaching, effective learning: Instructional literacy for library educators*. Chicago: American Library Association.

Sample lesson planning process from Loyola University Chicago
Gather data about student population from campus partners who work with first-years
Consider what students should be able to do and know, and develop learning outcomes
Consider what students might already know and figure out good starting places for lessons
Determine what success will look like and how to assess student progress
Develop lessons and activities to help students achieve these outcomes