Selected Examples of Several of the Different Genres of SOTL
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GROUP 1: REPORTS ON PARTICULAR CLASSES

A. It worked!

Important pieces of our expert knowledge as experienced practitioners can be preserved by writing up examples approaches to content or pedagogy that work especially well in our own classes. In this genre, the teacher's own impressions of the effectiveness frequently serve as sufficient assessment. The trend now is to try to document the effectiveness a bit more formally using classroom assessment techniques (CATs) and classroom research.

B. Before & After: Qualitative Assessments Of Changes In Practice.

The many examples of this genre in Angelo and Cross include a calculus class (pp. 69-72) in which the professor wanted to help students improve their problem solving skills. This example illustrates the process of refining the pedagogical questions and the successive modifications that are often necessary to make new pedagogical approaches work successfully. In this case, the new pedagogy improved student success sufficiently that no student made an F, despite the maintenance of high academic standards.

C. Before & After: Quantitative Assessments Of Changes In Practice.

R. E. Fullilove & P. U. Treisman. 1990. Mathematics Achievement Among African American Undergraduates at the University of California, Berkeley: An Evaluation of the Mathematics Workshop Program. Journal of Negro Education 59: 463-478. The impetus was finding that about 60% of the African Americans who took calculus were unsuccessful (D/F/W). Initial work used extensive interviews and observations of students to establish differences in study approaches that distinguished the more successful groups of students. These group-study approaches were then incorporated into the requirements for the program, which dropped the D/F/W rate to 4%.

GROUP 2: REFLECTIONS ON SEVERAL OR MANY YEARS OF TEACHING EXPERIENCE, IMPLICITLY OR EXPLICITLY INFORMED BY OTHER SCHOLARSHIP ON TEACHING

D. Essays Developing Good Ideas


E. Summaries Of Expert Knowledge Gained By Self-Reflection And Experimentation In Ones Own Teaching.


F. Integration Of Larger Frameworks With Classroom & Curriculum Practice


GROUP 3: LARGER CONTEXTS: COMPARISONS OF COURSES & COMPARISONS OF STUDENT CHANGE ACROSS TIME

G. Qualitative Studies Designed To Explore A Key Issue. [3 Very Important Studies]

William G. Perry, Jr. [1970] 1998. *Forms of Intellectual and Ethical Development in the College Years, A Scheme.* New introduction by Lee Knefelkamp. Jossey-Bass. The impetus here was the observation that students could flunk out of Harvard despite working quite hard at learning the course material. The longitudinal design used extensive interviews with students at the end of each of their four undergraduate years. Patterns of intellectual development were inferred and checked for inter-judge reliability. A very influential study.

H. Quantitative Comparisons Of Different Courses Or Sections

M. D. Sundberg & M. L. Dini. 1993. Science majors vs nonmajors: Is there a difference? *Journal of College Science Teaching.* Mar/Apr 1993:299-304. Question: Does covering more teach more? Both courses taught with traditional pedagogy and by multiple instructors, but with different intensities of 'coverage.' Learning assessed with the ACT exam for AP Biology (which was already used as the exemption exam for both courses. Despite much higher rates of drop for the majors course: "The most surprising, in fact shocking, result of our study was that the majors completing their course did not perform significantly better than the corresponding cohort of nonmajors."


GROUP 4: FORMAL RESEARCH

J. Experimental Analyses


GROUP 5: SUMMARIES AND ANALYSES OF PRIOR STUDIES

K. Annotated Bibliographies.


L. Brief, Annotated Summaries Of Key Findings In The Research Literature.


M. Formal (Quantitative) Meta-Analyses