

Improving Teaching and Learning Workshop

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BIO

Harvey J. Brightman is Regents Professor Emeritus of Decision Sciences at Georgia State University. He received his Ph.D. from the University of Massachusetts in Management Science in 1970. He has published over 60 articles in the fields of problem solving, computer-based model building, decision support systems, and teaching for critical thinking. He has consulted with Armco Steel, ARCO, The Institute for Management Studies, IBM, Georgia Power, Coca-Cola, Centers for Disease Control among others.

Dr. Brightman was selected as the 1984 College of Business Alumni Distinguished Professor. He has also received the CBA award for teaching and for service. Dr. Brightman was chosen the Alumni Distinguished Professor for Georgia State University in 1992. In 1994 he received the Dennis Grawoig Distinguished Service Award from the Decision Sciences Institute. In 1998 Dr. Brightman was selected by the University System of Georgia to receive the Regents' Teaching Excellence Award. He served as teaching mentor for the Robiinson College of Business at Georgia State University from 1999-2001. He retired from GSU on July 1, 2001.

His first book entitled *Problem Solving: A Logical and Creative Approach* was the Macmillan Executive Book Selection in the summer of 1981. The American Association of Hospital Administrators also nominated it for its Book of the Year. It was translated into Japanese in 1983. Dr. Brightman's second book is entitled *Statistics in Plain English* published in 1985 is still in print. His third book entitled *Group Problem Solving: An Improved Managerial Approach* was translated into Japanese in 1991. Both of his problem solving books is still in print, making them among the longest-running university-press books in existence. His fourth book, *Statistics for Business Problem Solving* was published in 1992. In 1999 Dr. Brightman completed another statistics book entitled *Data Analysis in Plain English with Excel*.

Dr. Brightman is a Past President and a Fellow of the Decision Sciences Institute; an international organization dedicated to the improvement of decision making.

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Rank order importance of 17 dimensions on student achievement on common finals

	Your Guess	Study Results
◆ Stimulation of interest	—	—
◆ Enthusiasm for teaching	—	—
◆ Knowledge of subject	—	—
◆ Course/presentation organization	—	—
◆ Presentation clarity	—	—
◆ Sensitivity to class progress	—	—
◆ Communication skills	—	—
◆ Clarity of course objectives	—	—
◆ Value of text	—	—

Feldman, K. "The Association Between Student Ratings of Specific Instructional Dimensions and Student Achievement," *Research in Higher Education*, 30(6) 1989. pp. 583-645. 3

Rank order importance of 17 dimensions on student achievement

	Your Guess	Study Results
◆ Value of supplements	—	—
◆ Relevance of subject	—	—
◆ Fairness/quality of exams	—	—
◆ Nature/quality/frequency of feedback	—	—
◆ Encouragement of discussion	—	—
◆ Course's intellectual challenge	—	—
◆ Concern for students	—	—
◆ Availability and helpfulness	—	—

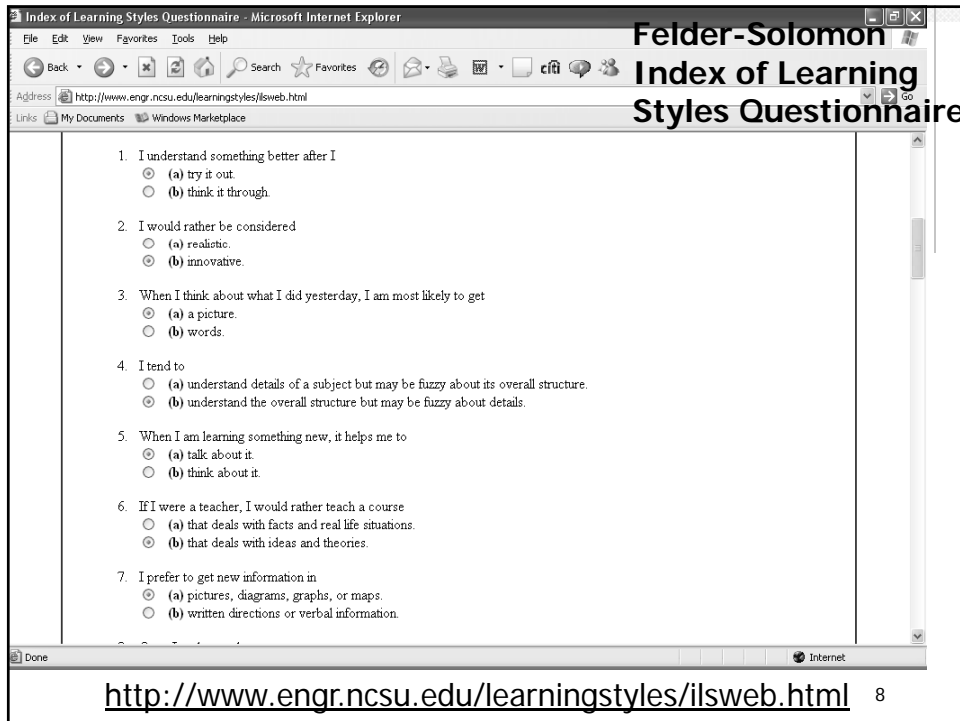
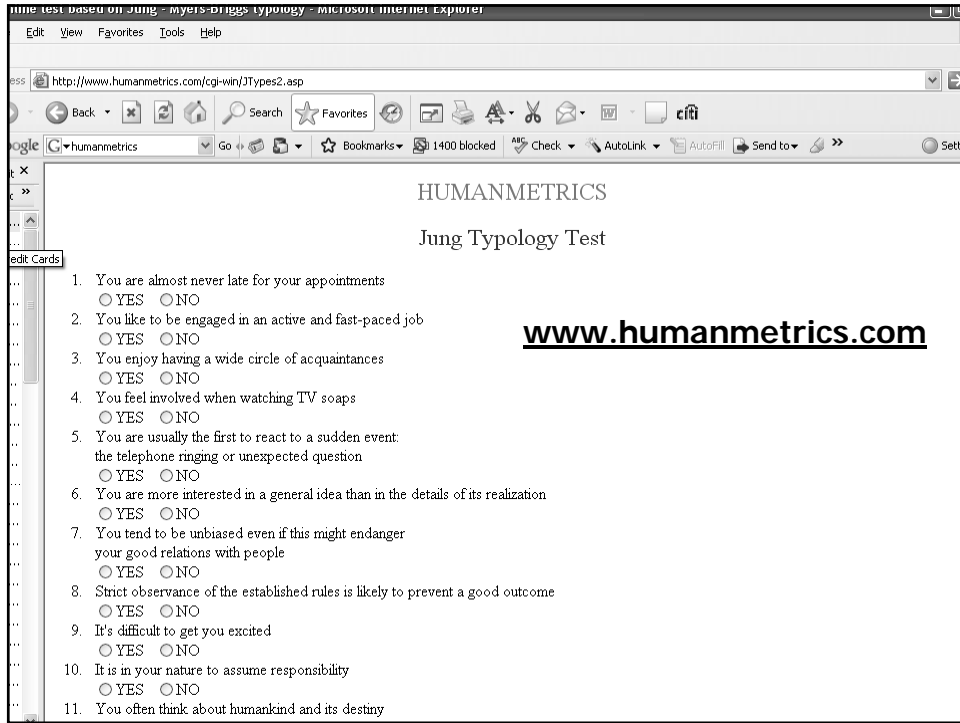
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Results of GSU study where dependent variable is student evaluation of instructor

1 Organization and Clarity	25.9%
2 Dynamic-clear presentation	45.5
3 Fairness on Exams/Grading	53.9
4 Student Motivation	59.9
5 Student Interaction	65.8
6 Intellectual and Scholarly	70.5

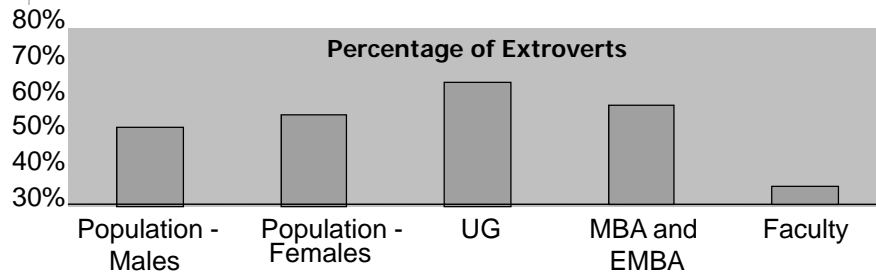
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Impact of Extroversion and Introversion on learning

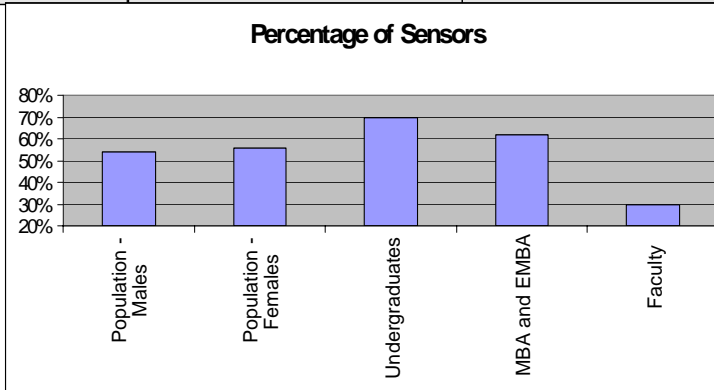
	TAPPS	
Energy	Extrovert No impression without expression	Introvert No impression without reflection



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Impact of Sensing and Intuition on learning

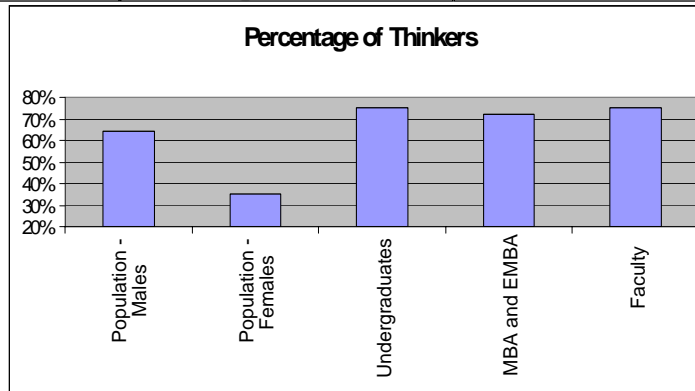
	YB4Wat	
Data Collect	Sensing YB4Wat, Big 5 JIT Picture	Intuitive YB4Wat?, Big 5 - 2, Big Picture



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Impact of Thinking and Feeling on learning

Decide	Thinking Needs learning objectives	Feeling Needs group work



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So what have we learned to improve teaching

1. You must write detailed learning objectives.
2. Student must self-discover why a topic is important before learning it, especially for required courses.
3. Students must know where they are, have been, and are going – big or just-in-time (JIT) diagrams or pictures.
4. You must teach using the Big 5 principles.
5. You must shift to a student-centered learning environment - student-to-student interaction with quiet time.

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Some excellent research websites

- ◆ www.capt.org/
 - Click on Research, Bibliographic Search
- ◆ www.eric.ed.gov/
 - Education Resources Information Center: K-12 and College
- ◆ <http://www.findarticles.com/>
 - Contains articles not found in ERIC Database. Mostly College.
- ◆ <http://skillcity.iaaf.uwa.edu.au/>
 - Material on Improving Oral and Written Communication. College
- ◆ <http://www.merlot.org/Home.po>
 - A free and open resource designed for faculty. Links to online learning materials.

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Some excellent learning style websites

- ◆ **MBTI**
 - <http://www.cpp.com/>
- ◆ **Keirsey.com**
 - Small Charge
- ◆ **MBTI Lite: Humanmetrics.com**
 - Free Instrument
- ◆ **Felder-Solomon: <http://www.engr.ncsu.edu/learningstyles/ilswb.html>**
 - Active vs. Reflective; Sensing vs. Intuitive; Visual vs. Verbal; Sequential vs. Global
 - Free Instrument

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General reading list

Davis, B. *Tools of Teaching*. San Francisco: Jossey Bass, (1993).

Lowman, J. *Mastering the Techniques of Teaching*: Jossey Bass, 2001

McKeachie, W and Svinicki, M.. *Teaching Tips* (12th Edition), Boston: Houghton Mifflin, (2005).