MULTIPLE INTELLIGENCES AND IMPLICATIONS FOR TEACHING

Subject: Educational Psychology
Grade Level: Graduate Seminar (D.A.)
Duration: Thirty Minutes (Approximate)

Topic: Multiple Intelligences & Implications For Teaching

LR Objective: The prospective college teacher (PCT) will judge the usefulness of Howard Gardner's theory of seven intelligences for instruction at the university level.

Set: 1. Film clips from *Ghostbusters* & *JFK* will illustrate multiple aspects of human interaction socially and psychologically. [Video]

    2. What is intelligence? The primary issue of definition will be discussed. If the foundation is ambiguous, then what about the superstructure(s) built upon that substratum? This framework provides the transition to a more complex model of intelligence. [Question & Answer; Discussion]

Objectives:

1. PCT will explore Gardner's seven intelligences.
2. PCT will compare/contrast multiple intelligence theory with traditional views.
3. PCT will apply multiple intelligence theory to their own abilities, goals, habits, likes/dislikes, etc. both psychologically and socially.
4. PCT will apply multiple intelligence theory to students and their abilities, goals, habits, likes/dislikes, etc. both psychologically and socially.
5. PCT will utilize multiple intelligence theory holistically and avoid the tendency toward fragmentation.
6. PCT will judge multiple intelligence theory according to their own personal philosophy of education and its usefulness for their method(s) of instruction.

Modeling: Discussion, interjection, and observation by capable and creative seminar members will replace any strict modeling methodology. Life experiences of seminar members will be elicited.

Instructional Procedures:

1.   *Objective # 1.* Different objects will be given to seminar members in order to illustrate the seven levels of intelligence. A printed handout about Gardner's theory will help guide the interactive discussion.
2.   *Objective # 2.* Use the marker board to highlight concepts / ideas about points of intersect and differentiation between Gardner's theory and traditional approaches to IQ. Use actual standardized tests, or an article about such, to show characteristics of a traditional approach to intelligence.
3.   *Objectives 3 & 4.* A printed personal inventory sheet will allow seminar members to look introspectively about their own multiple intelligences. A handout will ask participants to evaluate practical / theoretical student characteristics and evaluate relative intelligence strength according to Gardner's model.
4.   *Objective # 5.* A strict lecture approach with a brain model [if I can find such, DWF] will be used to encourage the seminar to act–thinking, planning, doing–holistically.
5.   *Objective # 6.* Questions, possibly from a handout or maybe orally, will allow students to reflect upon and make judgment about the usefulness of Gardner's theory. The frame of reference will be each participant's personal philosophy of education.

Checks for Understanding:

1.   Class interaction and participation, evaluated by instructor, will provide informal checks.
2.   Responses to *Objectives 3 & 4* provide some formal feedback.
3.   No check for *Objective # 5*, but Q & A for *Objective # 6*.

Guided Practice: Only the personal inventory for *Objective # 3*.

Closure:

1.   Revisit film clips, or utilize new clips, to review seven levels of intelligence.
2.   Emphasize the role of recognizing diverse aspects of human psychology in formulating educational philosophy. Ask for further applications / ideas from seminar members.

Alternate / Extra Activities: Lecture on D. N. Perkins' "Thinking Frames." Application of principles in serial literature.

Materials:

1.   Video tapes, projection system, screen, sound system.
2.   Marker board and color markers.
3.   Handouts to include articles, bibliography, outline.
4.   Objects for object lessons / brain model.

Resources: Serials

Alexander, Patricia A. "Gifted and Nongifted Students' Perception of Intelligence." *Gifted Child Quarterly* 29 (Summer/1985): 137-143.

Armstrong, Thomas. "Multiple Intelligences: Seven Ways to Approach Curriculum." *Educational Leadership* 52 (Nov/1994): 26-28.

Blythe, Tina, and Howard Gardner. "A School for All Intelligences." *Educational Leadership* 47 (Apr/1990): 33-37.

Boss, Judith A. "The Autonomy of Moral Intelligence." *Educational Theory* 44 (Fall/1994): 399-416.

Bynner, J. M., and D. M. Romney. "Intelligence, Fact or Artifact: Alternative Strategies for Cognitive Abilities." *British Journal of Educational Psychology* 56 (Fall/1986): 13-23.

Campbell, Bruce. "Multiple Intelligences in Action." *Childhood Education* 68 (Summer/1992): 197-201.

Dickinson, D. "Multiple Technologies for Multiple Intelligences." *Executive Educator* 14 (Sep/1992): A8-12.

Ellison, Launa. "Using Multiple Intelligences to Set Goals." *Educational Leadership* 50 (Oct/1992): 69-72.

Eysenck, H. J. "Recent Advances in the Theory and Measurement of Intelligence." *Early Child Development and Care* 15 (no. 2-3/1984): 97-115.

Gardner, Howard. "Developing the Spectrum of Human Intelligences." *Harvard Educational Review* 57 (May/1987): 187-193.

Gardner, Howard. "Reflections on Multiple Intelligences: Myths and Messages." *Phi Delta Kappan* 77 (Nov/1995): 200-203.

Gardner, Howard. "The Theory of Multiple Intelligences." *Annals of Dyslexia* 37 (1987): 19-35.

Gardner, Howard, and Thomas Hatch. "Multiple Intelligences Go to School: Educational Implications of the Theory of Multiple Intelligences." *Educational Researcher* 18 (Nov/1989): 4-10.

Hatch, Thomas. "From Research to Reform: Finding Better Ways to Put Theory into Practice." *Educational Horizons* 71 (Summer/1993): 197-202.

Hatch, Thomas, and Howard Gardner. "New Research on Intelligence Sheds Light on How Children Use their Brains to Make Sense of the World." *Learn* 17 (Nov-Dec/1988): 36-39.

Hodgkins, Robin A. "Knowing Your Own Minds (Latest Developments in the Theory of Multiple Intelligences)." *The Times Higher Education Supplement* 1073 (May 28, 1993): 16.

Hodgkins, Robin A. "Michael Polanyi on the Activity of Knowing–The Bearing of His Ideas on the Theory of Multiple Intelligences." *Oxford Review of Education* 18 (no. 3/1992): 253-267.

"Howard Gardner on Multiple Intelligences (Interview)." *Scholastic Early Childhood Today* 10 (Aug-Sep/1995): 30-32.

Howe, Michael J. A. "Separate Skills or General Intelligence: The Autonomy of Human Abilities." *British Journal of Educational Psychology* 59 (Nov/1989): 351-360.

Jensen, Arthur R. "Changing Conceptions of Intelligence." *Education and Training of the Mentally Retarded* 17 (Feb/1982): 3-5.

Koehnecke, D. S. "Folklore and the Multiple Intelligences." *Children's Literature in Education* 26 (Dec/1995): 241-247.

Kulleseid, Eleanor R. "Extending the Research Base: Schema Theory, Cognitive Styles, and Types of Intelligence." *School Library Media Quarterly* 15 (Fall/1986): 41-48.

Kurzweil, Raymond. "The Paradigms and Paradoxes of Intelligence. Part 1: Russell's Paradox." *Library Journal* 117 (Jun/1992): 51-52.

Kurzweil, Raymond. "The Paradigms and Paradoxes of Intelligence. Part 2: The Church-Turing Thesis." *Library Journal* 117 (Aug/1992): 73-74.

Kurzweil, Raymond. "The Paradigms and Paradoxes of Intelligence. Part 3: Building A Brain." *Library Journal* 117 (Nov/1992): 53-54.

Lazear, D. G. "Teaching for Multiple Intelligences." *Phi Delta Kappa Fastbacks* 342 (1992): 7-46.

Lohman, David F. "Human Intelligence: An Introduction to Advances in Theory and Research." *Review of Educational Research* 59 (Winter/1989): 333-373.

Lynott, Donna-Jean, and Anita Woolfolk. "Teachers' Implicit Theories of Intelligence and Their Educational Goals." *Journal of Research and Development in Education* 27 (Summer/1994): 253-264.

Maker, C. June, et al. "Giftedness, Diversity, and Problem-Solving." *Teaching Exceptional Children* 27 (Fall/1994): 4-19.

Makins, V. "Machines of the Brain (Applying H. Gardner's Theory of Multiple Intelligences to Education)." *The Times Higher Education Supplement* 4107 (March 17, 1995): 24.

Marlowe, Herbert A. "Social Intelligence: Evidence for Multidimensionality and Construct Independence." *Journal of Educational Psychology* 78 (Feb/1986): 52-58.

Matthews, D. J. "Gardner's Multiple Intelligence Theory: An Evaluation of Relevant Research Literature and a Consideration of Its Application to Gifted Education." *Roeper Review* 11 (Dec/1988): 100-104.

"Multiple Intelligences." *Instructor* 102 (Jul-Aug/1992): 48-49.

Nelson, Kristen. "Nurturing Kids' Seven Ways of Being Smart." *Instructor* 105 (Jul-Aug/1995): 26-30.

Osburg, Barbara. "Multiple Intelligences: A New Category of Losers." *English Journal* 84 (Dec/1995): 13-15.

Perkins, D. N. "Thinking Frames." *Educational Leadership* 43 (May/1986): 4-10.

Perkins, David. "Where Is Intelligence?" *Educational Leadership* 51 (May/1994): 105-106.

Reiff, Judith C. "Bridging Home and School Through Multiple Intelligences." *Childhood Education* 72 (Spring/1996): 164-166.

Scherer, Marge. "How Many Ways Is a Child Intelligent? (Interview with H. Gardner)." *Instructor* 94 (Jan/1985): 32-35.

Slate, John R., et al.   "Relationship of Conceptions of Intelligence to Preferred Teaching Behaviors." *Action in Teacher Education* 12 (Spring/1990): 25-29.

Smerechansky-Metzger, J. A. "The Quest for Multiple Intelligences." *Gifted Child Today Magazine* 18 (May-Jun/1995): 12-15.

Sternberg, Robert J. "Intelligence as Thinking and Learning Skills." *Educational Leadership* 39 (Oct/1981): 18-20.

Sternberg, Robert J. "Nature of Intelligence." *NYU Education Quarterly* 12 (Spring/1981): 10-17.

Wagner, Richard K., and Robert J. Sternberg. "Alternative Conceptions of Intelligence and Their Implications for Education." *Review of Educational Research* 54 (Summer/1984): 179-223.

Resources: Books

Campbell, Linda, et al. *Teaching & Learning through Multiple Intelligences*. Needham Heights, MA: Allyn & Bacon, 1996.

Fogarty, Robin. *Problem-Based Learning & Other Curriculum Models for the Multiple Intelligences Classroom*. Arlington Heights, IL: Skylight, 1997.

Fogarty, Robin, and Judy Stoehr. *Integrating Curricula with Multiple Intelligences: Teams, Themes, & Threads*. Palatine, IL: Skylight, 1995.

Gardner, Howard. *The Disciplined Mind: What All Students Should Understand*. New York: Simon & Schuster, 1999.

Gardner, Howard. *Frames of Mind: The Theory of Multiple Intelligences*. New York: Basic Books, 1983.

Gardner, Howard. *Multiple Intelligences: The Theory in Practice (A Reader)*. New York: Basic Books, 1993.

Kaplan, Robert M., and Dennis P. Saccuzzo. *Psychological Testing: Principles, Applications, and Issues*, 5th ed. Belmont, CA: Wadsworth/Thomson Learning, 2001.

Lazear, David. *Seven Pathways of Learning: Teaching Students and Parents about Multiple Intelligences*. Tucson, AZ: Zephyr Press, 1994.

Teele, Sue. *Rainbows of Intelligence: Exploring How Students Learn*. Thousand Oaks, CA: Corwin Press, 2000.