

Comprehensive Examination Question List (2003-2004)
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Comprehensive Examination Question List

Definition of the Discipline

- 1) Define the discipline of educational psychology. Make certain that you include the following elements within the context of your definition: the notion that educational psychology is distinctive in substance (the systematic study of the individual in context); the notion that educational psychology is a contextual science (a contextual science of enormous complexity—it is important to connect psychology with the nature of the educational enterprise); and contemporary questions related to Thorndike's view that educational psychology is the master science of education.

Literature Review

- 2) Select one article (or inter-related set of articles) from a general flagship journal in psychology (e.g., American Psychologist, Psychological Bulletin) and/or educational research (e.g., Educational Researcher) plus one article (or inter-related set of articles) from a specialized journal in educational psychology (e.g., Educational Psychologist, School Psychology Review) which you believe to be of great importance with respect to the development of educational psychology and/or educational research methodology in the years to come. Provide a detailed discussion related to your rationale for selection of the two articles (or inter-related set of articles) and describe what you consider to be the potential points of contact between the articles and future theoretical, practical, and/or research methodological developments in educational psychology.

Overall Conceptual Framework

- 3) Create a comparative summary description related to the mid-century view of education as an efficient, management by objectives system in which the overall aim was to construct instructional approaches that were teacher proof and the new Vygotskian-based view in which education relies on teachers more than materials, on school experiences that are small, cooperative, focused and personalized, on teachers being viewed as insider researchers, reflective practitioners, adaptive experts, and a learning environment in which all teachers and students are valued as active participants in a community of inquiry.
- 4) Create a comparative summary description related to three views of knowing (a behavioral/empirical view; a cognitive/rational view; and a situationist/pragmatic-sociohistoric view). Make certain that within the context of your comparative summary description that you clearly indicate how theorists and instructional design consultants associated with each view would design instructional environments to foster transfer and motivation, and how student learning would be assessed.

Research Methodology

- 5) With respect to a critical evaluation of the theoretical and methodological foundations of the discipline of educational psychology, provide a detailed description related to the following set of issues: “Methodology is viewed by many as no longer the tie that binds...However, a word of caution should be noted...Methodology has become more important, not less important. Today’s methodologist needs substantive knowledge. The substantive questions are the most important aspect of inquiry. Education is an evolving social construction.”

- 6) Provide a detailed reaction to the following statements related to issues in educational research. Present a critical evaluation of each of these current issues and a justification for your views.
 - “A dichotomy between quantitative and qualitative methods has grown, seemingly by ignoring the time-honored view that research questions and a conceptual framework determine relevant methods and analytical approaches and that methods do sit outside these.”
 - “There are few findings of any lasting significance emerging from such statistics-dominated small-scale work in education over more than the quarter-century from 1950s and 1960s through the 1970s.”
 - “In short, there is a functional form of literacy in education, but it is not the kind provided by a canon. What core can provide is knowledge and appreciation of the main dimensions of the education enterprise – results and methods – and a sense of their interconnectedness. ...Serious research demands on-the-job training.”
 - “To enter communities with only our own purposes in mind and no sense of responsibility beyond the publication of results is to victimize – no, rape – communities for our own gain. We gain in professional reputation, grant moneys, and books and articles published, while the lives of those who have made the research findings possible remain the same. Ann Lieberman (1992) has argued that researchers have the responsibility to change lives, not just describe them. ...Ann Brown (1997) declares, ‘If the children with whom I and my partners work did not learn, understand, and achieve better as a result of their experiences in our research, I would find it morally unacceptable to continue.’”

- 7) Are postmodern views of research methodology eroding our scientific foundations? Although empiricism may be dead as a theory of truth, it is very much alive as a method of discovery and finding evidence. Discuss your views related to the complimentary use of empirical, narrative, ethnographic, and other forms of qualitative inquiry, (e.g., teacher research, insider research, action research) within the educational and psychological research communities. Can we strike a methodological balance between the continuities and discontinuities inherent in the modern and postmodern eras? Can we use the traditions of our

past as building blocks to catalyze the development of new disciplined methods of inquiry? Explain your position.

Psychology of Learning

- 8) Discuss the main trends in contemporary research in human learning. Make certain that your discussion focuses on theoretical developments that have stemmed from correcting earlier theoretical misconstructions. Present some directions for the future related to the development of human learning theories and educational/therapeutic practices.
- 9) The psychology of learning is presumably a field in which the general principles of behavior are systematically addressed. What place, then, does (should) the study of individual differences (constraints) have in such a field? Be specific in identifying promising theoretical and practical contributions.
- 10) Provide a balanced reaction to the notion that a behavioral view has very limited utility with respect to instructional design and curriculum development. Many have claimed that behaviorally-based models of learning are not capable of shedding much, if any, light on the basic questions of what is worth knowing. Provide a detailed description and critique of what we know and don't know about behaviorally-based connections to instructional design and curriculum development.
- 11) Discuss the relationship between language and cognition (thinking, problem solving, creativity, and memory organization) from a variety of points of view. Be certain to discuss possible causal directions as you critically examine the various theoretical perspectives (i.e., does language influence cognition or does cognition influence language?)
- 12) Discuss what you consider to be a number of positive and negative instances related to where we are currently positioned to bring about educational reforms to enhance the connections between learning theory and teaching. Make an effort to address the following issues within the context of your discussion:
 - core/common grounds among us
 - public schools as central to democracy
 - alternative forms of data representation within emerging theoretical and methodological frameworks
 - postmodern threats to the authenticity of science and reason
 - promising avenues of school reform efforts within the context of an educational policy focus, an APA focus, a NASP focus, and an AERA focus
 - international achievement differences
 - social justice, diversity, and multiculturalism
 - functional analyses of academic performance problems

- creation of problem solving communities (i.e., communities of learners and researchers)
- 13) From a cognitive science perspective, discuss the differences in the learning characteristics between novice and expert learners. Citing relevant research findings, discuss the utilization of cognitive, social, and cultural constructivist instructional design techniques appropriate for use with children and adult learners. Make certain that you include in your discussion the work that has been done regarding the structure and acquisition of expert performance and the relationship of the development of expertise to creativity.
 - 14) In what ways, and to what extent, has the study of the mind and brain affected theories and practices in educational psychology?
 - 15) To what extent do the constructs of intelligence, personality, and motivation remain useful in educational psychology? Justify your position.
 - 16) Provide a detailed reaction to Bruner's statement related to a need for a refreshed cognitive revolution. What are your views related to the contemporary status of behavioral views and cognitive, social, and cultural constructivist views of learning theory and instruction? Within the context of your discussion, make certain that you relate your views to contemporary educational practices and instructional designs.

According to Bruner (1990), the original intent of the "cognitive revolution" was directed toward constructivism: to "discover and describe formally the meaning that human beings created out of their encounters with the world." However, the emphasis began to shift from "meaning" to "information" and from the "construction of meaning" to the processing of information. He proposed that meaning-making—and meaning must be understood within a cultural context—that it be restored as "the central process of a cultural psychology, of a refreshed cognitive revolution."
 - 17) For many years, a commonly used definition of psychology was that it was the scientific study of behavior or organisms. Today, many claim that the behavioral definition needs to be broadened to include the psychology of the mind and brain. Present a discussion of why this broadened view appears to be gaining acceptance in the mainstream. Take a stand on the definitional issue, citing evidence offered in defense of your stand.

Learning Theory and Teaching

- 18) Discuss what we know and don't know about learning to teach. Make certain that you include the following components within the context of your response: the basic assumptions of cognitive psychology (i.e., the central role of knowledge in thinking and learning; learning viewed as an active constructive process; and the

view that knowledge and learning are situated in contexts and cultures); the research findings related to general pedagogical knowledge and beliefs (instructional strategies and Doyle's (1986) view of classroom management in which focus is given to teacher's decisions rather than behaviors), subject matter knowledge (the missing paradigm), and pedagogical content knowledge and beliefs; substantive and syntactic structures; and Berliner's (1988) and Lernhardt's and Greeno's (1986) stages of teaching related to the development of expertise (novice, advanced beginner, competent, proficient, and expert).

- 19) It is recognized that our knowledge related to teaching and learning is narrowly focused and fragmented. Teaching and learning have typically been studied as separate entities and the complexities have been ignored. There is clearly no single best method of teaching and most would claim that a search for a best method of teaching is misguided. ATI effects have been found, but they remain complex, multidimensional, and of limited utility. The process-product research constructed during the 1970s and 1980s involved, for the most part, the teaching of various skills such as those in mathematics, for which a large number of examples exist. However, a large amount of what is taught in schools, especially at the secondary level, involves knowledge about and understanding of issues, events, and conceptions that consist of declarative rather than procedural knowledge.

The rational, technical approaches to teaching represented by the ATI, process-product, task-analytic, and mastery learning paradigms have diminished in popularity. These traditional paradigms are viewed as too mechanistic, didactic, and structured by those who feel that all learning should be exploratory and consist of self-discovery.

Discuss what you consider to be taking place among the next generation of ATI, process-product, task analytic and master learning researchers and practitioners. Provide a critique of these developments. What makes inquiry psychological?

- 20) Provide a detailed reaction related to the following issues associated with teaching and learning. Present an evaluation related to the current status of these issues and a justification for your views.
- a renewed engagement of educational psychologists in the issues of practice
 - a greater focus given to knowledge and beliefs of teachers
 - a move away from the quantitative methods that dominated the process-product research
 - a disciplinary knowledge perspective in which it is assumed that domain specific knowledge matters (e.g., it has been found that teachers with highly developed domain specific knowledge tend to emphasize the conceptual, problem solving, and inquiry aspects of their subjects...less knowledgeable teachers tend to emphasize facts, rules and procedures and to stick closely to detailed lesson plans and/or text).

- Two trends in which much of the research on teaching and teacher learning has shifted away from the generic knowledge and skills that make up general pedagogical knowledge; especially the management aspects of classroom teaching, and toward subject matter – specific aspects of teaching and a focus given to routines and the atomization of knowledge.
- The issues related to the distinction between substantive and syntactic structures (e.g., the finding that the canons of evidence – the syntactic structures – and proof used to guide inquiry in a field are often a set of mechanical and meaningless series of symbols and procedures.
- Little research appears to be focused on efforts to improve practicing teachers' subject matter knowledge...this may be due to casting teachers in a negative light.
- Differences in subject matter knowledge and beliefs have been found to be related to quality of instruction and student outcomes.
- Increasing recognition of the centrality of the teacher and the implications of teachers decision making (i.e., how do teachers interpret political, ideological, and material contexts in which they work and bring about reforms)

Individual Differences, Measurement, and Assessment

- 21) Discuss the main trends in contemporary research related to cognitive and personality assessments. Make certain that your discussion focuses on alternatives to traditional cognitive and personality assessments. Present some directions for future research and clinical practice.
- 22) Present a detailed discussion related to the **psychometric efforts** related to the study of cognition that have taken place. Make certain that your discussion contains information related to the following issues: the view that psychometric techniques may be described as technically sophisticated but psychologically naïve; the view that the taxonomies of cognitive abilities models (Spearman, Thurstone, Guilford, and Carroll) remain widely accepted but there is growing disenchantment with the limited utility of the multiple factor models; the view that the factor analysis findings support mutually conflicting models but there is overall support for a set of broad abilities (Carroll, 1993); the view that the decomposition of performance on complex tasks has yielded diminishing returns; and the view that the technology of mental testing is lacking (missing) a theory.
- 23) Preview a discussion related to the development of a rationale to study affective and conative differences among learners. Include statements in your discussion related to the following: arguments for the study of affective and conative differences; arguments against the study of affective and conative differences (e.g., the view that the constructs are epiphenomena and of only temporary value, the question of adequate measures of the constructs, and the need to focus on the development of a general theory in contrast to a focus on individual differences; the view that the domain has remained largely fragmented, unorganized,

undefined as a field of inquiry, and thus underappreciated; distinctions between motivation (goals, needs, predecision state) and volition (intentions, efforts, self-regulation, post-decision state); findings related to the big 5 personality characteristics; findings related to affective complexes (authoritarianism, bullies and victims, sensation seekers); findings related to achievement orientations (need for achievement, evaluation-test anxiety, intrinsic vs. extrinsic reinforcement, performance vs. mastery goals, future time perspectives); findings related to action controls (mindful efforts, cognitive representations of intentions, and self-regulated learning); findings related to orientations toward self and others (self-concept, self-worth, self-efficacy); findings related to personal styles (see table on p. 283/Weinstein et. Al); and the notion that it is perhaps best not to treat styles as traits, but rather to view the styles as indicators of mediating functions.

- 24) Critically evaluate the extent to which assessment information (cognitive, affective, and conative) has been successfully used to plan behavioral and academic interventions. In your discussion make certain that you present a detailed description and critique of functional behavioral and cognitive, affective, and conative assessment efforts which have been used to plan interventions.
- 25) Describe the role of assessment in a learning culture. Should the school curriculum and assessment procedures be modified to accommodate the use of authentic standards? Why? Why not? What types of curriculum designs and assessment procedures are most likely to encourage the use of authentic standards?

Diversity

- 26) Describe the study of culture and ethnicity from a historical perspective. Make certain that your discussion includes the following components: the two main factors that led to a departure of the study of culture and ethnicity from the forefront (the absence of methodological advances and/or tools... the scientific approach focused on the study of mind in the individual... “brass instrument” experimental science.../.../...and a prevailing causal-objective, behavioral, psychometric view...a decontextualized view... Thorndike’s functionalism wherein “culture and left packing...too messy for scientific study aimed toward isolation and simplification”...culture and ethnicity were treated as independent variables or independent ATI variables studied in post hoc fashion); a reaction to the statement that schools are not only ineffective or inept in reducing the educational gap but they may actually structure inequality (e.g., segregation created by labels, such as “at risk”): a description related to what we know and don’t know early-age interventions (Hunt, 1961) and school effectiveness approaches (Walberg and Yek, 1973); a reaction to the statement that the study of culture and ethnicity requires greater attention to within group differences, which may be of greater significance than between group differences...race and ethnicity have been viewed as fossilized and dichotomized categories rather than

a result of a developmental process or as a trait along a continuum; and a comparative description related to three cultural approaches associated with the group-based inequality problem (the cultural deficit approach... early-age intervention programs, the cultural difference approach... Cole and Bruner... differences are not viewed as deficits... a multicultural education approach, and a cultural-historical interpretative educational anthropology approach... focus give to power relations... Vygotsky... partnerships... mutual accommodations... the elimination of school-based stratification).

- 27) The discipline of educational psychology emerged in the 20th century in a period that was less concerned about equality, and it evolved in ways not sensitive to group-based inequality or cultural phenomena in general. Instead, from the outset, educational psychologists were more concerned with individual differences and the measurement of abilities than with facilitating student learning. Most schools are still segregated by ethnicity and social class. Group-based inequality and distribution of wealth prevail. Ethnicity mediates development. Does the discipline of educational psychology have anything to offer? For the most part, the answer has been negative because group-based inequality (one SD across groups) is regarded mainly as a sociopolitical issue. It could be argued that the discipline of educational psychology is part of the problem since real factors underlying group-based inequality appear to extend beyond individual difference psychology, the discipline of educational psychology has little to offer.

Describe what the discipline of educational psychology has to offer beyond defining “best practices” from a functional perspective. How have educational psychologists approached the study of ethnicity and culture? Why should culture and ethnicity be of concern to educational psychologists? How can we give a greater cultural focus to our work? What are your recommendations related to the desired units of analysis?

- 28) Provide a detailed reaction related to the following issues associated with ethnicity and culture. Present an evaluation related to the current status of these issues and a justification for your views.
- educational psychologists seem to favor a methodological approach to culture related educational problems (e.g., traditional post hoc analyses and ATI research models).
 - Ethnicity and culture are treated as control variables...view race as a pseudoscientific category.
 - Educational psychology has been largely limited to playing a mediating role among paradigms... the discipline has not capitalized on its strategic field position in advancing the issues... focus has been given to teaching and learning not culture and development.
 - A fragmented research landscape ...disoriented research themes... segmentation of the discipline... “Culture remains a black box in the

field...wherein many of the mysteries related to group differences in achievement and to ATI phenomena like hidden...ethnicity, a sociobiological construct, still is confounded with class, history, and physical traits, conceptually and in practice.”

Policies and Practices/School Reform Efforts

- 29) At any given time, socially and politically constructed policies and practices within the field of educational psychology affect the discourse of the discipline(s). Critique current areas of theoretical and research methodological tensions within the discipline(s). Evaluate current status of these tensions and evaluate their impact on the discipline(s).
- 30) Discuss the tension between “excellence” and “equity” in education. What specific knowledge in educational psychology do you consider to be useful with respect to addressing issues related to social justice, diversity, and multiculturalism within educational and/or psychotherapeutic settings?
- 31) Discuss what you consider to be a number of positive and negative instances related to where we are currently positioned to bring about educational reforms to enhance the connections between psychology and education.