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"Comprehensive Exam Written Questions"

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QUESTION_1: A wide range of research designs is available for use in educational research. It is imperative that the research methodology be selected based upon the characteristics of the study, as opposed to the preferences of the researcher (Gay, Mills, & Airasian, 2006). Briefly define qualitative, quantitative and mixed method research designs. Using these definitions as a foundation and after reviewing 2 research studies related to your dissertation research topic, determine the most appropriate research design for your intended study.

Gay, L. R., Mills, G.E. & Airasian, P. W. (2006).

Educational research: Competencies for analysis and application

(8th ed.). Upper Saddle River, NJ: Prentice Hall

Research Methods: Choosing the Appropriate Method

Researchers face a number of questions and decisions in the initial development of a thesis, design or project. One of the most important aspects is settling on how the research should be conducted. Once a question is posed as the first hurdle in the research process, there needs to be a determination of how the data should be collected and reported. The primary research methods are quantitative, qualitative or mixed methods. A researcher may have a compelling question, but choosing the appropriate methodology will actually improve the study, and insure that the question has a more accurate aim toward the answer. In other words, the answer you get depends on what, how, and why you ask.

A potential research study under consideration focuses on determining how students use various media sources for learning and research, particularly in regard to bias and critical thinking skills. The decision to use quantitative and qualitative study depends partly on prior studies, partly on questions you might ask, and the scope and depth of the study. Questions that arise will naturally depend on the purpose of the study, including population group, educational theory or public policy agendas. Examples of questions might include "What are the number and characteristics of high school students who use the Internet for study" "For what purpose do students use the

Internet" "What difference does the use of Internet in the classroom make in student success?" "What are the important issues in student use of the Internet" or "How does the use of the Internet affect student development of critical thinking skills?" Part of the decision may depend on the scope of the study – is it national, regional, local? Is the study based on prior work? Will the answer best be determined by finding out how may students have used and benefited from internet use, or is the researcher interested in how the students and teachers use the internet? The first question might be best answered with a quantitative study, the second question by qualitative study. Another way of putting this – teacher wanting feedback on his work will likely get varying qualities (and perhaps accuracy) of answers through formal student evaluations, a colleagues observational evaluation, "rate my professor", a formal review for tenure and through the grapevine. Choosing a methodology will involve using a particular lens and framework to focus and arrange the study.

A planned study of students' research and critical thinking skills, with a focus on impact of media and bias could plausibly be done through quantitative, qualitative or mixed methods. A review of literature found quantitative and qualitative studies that relate to this topic. An example of a quantitative study is titled "Effects of Multimedia Software on Achievement of

Middle Schools Students in An American History Class" by Karla
Kingsley and Randall Boone. The qualitative study is Designing
Meaning with Multiple Media Sources: a case study of an eight
year old student's writing processes." This paper will review
characteristics of these methods, and discuss the studies to
determine the most effective approach for a study.

Quantitative, Qualitative and Mixed Method Defined

Quantitative studies have their roots in the physical
sciences while qualitative study comes from social sciences. A
mixed method approach borrows from both. A comparative list of
characteristics as suggested by Creswell (2008) provides a
general guideline to understand these methods:

Quantitative	*Qualitative*
Researcher directs study	Study derived from participants
Narrow questions	General, broad questions
Numerical data	Data presented in participants word
Statistical analysis	Thematic description
Unbiased and objective	Biased and subjective

Quantitative research rose out of the philosophy of
positivism, in which knowledge is accumulated and presented
through selection, analysis, and explanation of observed
phenomena (Onwuegbuzie, 2002). This systematic, step-by-step
approach reflects the increasing industrial base of life in the
19th century. The classic social studies of the 1900's by

Frederick Taylor in which he observed workers, and use experimental interventions to improve worker performance reflect this interest [and could be viewed as an early example of a phenomenological case study using experimental, action research] (NetMBA, 2008) However, as reflected in the factory floors and urban life, breaking things down into discrete parts was not necessarily effective in understanding people. An alternative to positivism was interpretive and contextual models. Finally, in the 1960's some researchers reasoned that mixed methods could use the best of both methods (Onwuegbuzie, 2002), there has been some debate about the viability of combining methods that have their roots in opposing ideas (positivist versus relativist). This may be problematic if a mix study does not indentify or appropriately integrate inherent conflicts.

According to Creswell (2008) mixed methods combines quantitative and qualitative data collection. A mixed method approach has the advantage of the analytical and descriptive scope of quantitative study, such as showing statistical trends among a socioeconomic group, while qualitative aspects provide a more in-depth look (how do some members of these groups perceive their life).

Another way of putting it – a person may study an ant under a microscope, may look at the ant in its habitat, or may consider the ant in terms of its relations to other forms of

life. The ant may be compared and classified to other ants,
counted to determine population numbers, studied for biological
and social characteristics.

A consideration of these characteristics might suggest that
quantitative study might be more scientific, and therefore more
accurate (or truthful). Some researchers may find comfort in
mathematical formulas, and may view qualitative studies as
"messy". Others may avoid quantitative data because of
discomfort with statistical analysis. However, if there is
agreement that numbers do not necessarily reflect complexity,
and in fact can be used to distort truth (such as in economic
bubbles), while narratives can offer their own distortions of
bias, then a researcher should honestly consider what method
will most effectively answer the question at hand, and not
solely the comfort zone or bias of the researcher. As pointed
out by Yancher and Williams (2006) in a critique of method use,
poorly designed or ill-considered use of methodology can result
in confusion. There needs to be care that the chosen method does
not distort the results. Overly complex method may muddy the
results. On the other hand, it makes sense for a researcher to
bring their expertise and knowledge to a study. Most of all,
the answers should be meaningful and serve a purpose. However
the truth is sought, or a case built, or a theory developed,

researchers should keep in mind that findings are tentative and further understanding is the overall goal.

Rubin and Babbie explain that choosing a method depends on issues such as feasibility and purpose (2001). For example, government researchers working for the Department of Education will likely be working on broad based research to discover trends, and certainly has the resources to conduct the study. Usually this research is designed to influence or determine policy by discovering trends. A teacher may want to find out if a particular pedagogical theory actually works in the classroom, and so conducts a case study or action research project to see if its workable.

The key is that the research question needs to be well matched to the research method, and the research method needs to make sense for the study. For example, a researcher may feel uncomfortable in a participant observation study, and settle for doing a survey of others work, or ask participants to complete a survey. While the study may be valuable, important information may be missed, and the researcher will not have gained skill and experience. In other words, the choice of research methods should be determined after a specific research question is formulated. Gorand, Rushforth, and Taylor (2004) discovered much doubt and ambivalence in a study of educational researchers and method preferences. Respondents identified lack of rigor and

quality as being problems related to method choice. In point of fact, comfort with a method is not synonymous with skill. But the heart of the study was the tendency to develop a "methodological identity" (akin to other professional and personal identities.)

Quantitative researchers use literature to develop the research questions and hypothesis. Qualitative researchers do not use literature as much, but the literature assists in showing the importance of the problem (Creswell, 2008).

Research Designs

Choosing a research method also requires focusing on a particular design. Quantitative, qualitative, and mixed methods use a variety of research designs, and these should be chosen respective of the purpose and goals of the study. Quantitative research designs include experimental (to test), correlational (comparative) and survey designs (describes). Qualitative research designs include grounded theory (develop theory from study), ethnographic (group study in setting over time), and narrative (tell stories of people). In a mixed method approach requires deciding on how the methods should be combined.

Appropriate Research Study

The bottom line is trying to figure out what method may best help you discover and add to the body of knowledge, and perhaps contribute some insight. A quantitative study may

support prior data, and with the right questions, provide additional information. Given the rapid changing nature of society, it may also show some trends and cast doubt on assumptions.   Qualitative research may reveal new aspects or details that are not brought out in quantitative data. Mixed methods may make it possible to explore and explain phenomena in a more accurate and compelling way than the methods on their own.

Creswell suggests three components should be a part of choosing a research design. In analyzing the choice, a researcher may ask:

1) The research problem – Is the problem best understood through looking at trends or explanation, or is further exploration required through in-depth study?

2) The audience – Is the audience familiar, interested in, or has expectations?

3) The researcher– Will training, experience and skills be appropriate?

Description of Research Studies

A quantitative and qualitative research studies were examined to assist in determining what type of study would be appropriate for a study related to student use of media resources. The studies bear a reasonable resemblance in terms of research topic and population group. Both studies, finished in

the last few years, related to student use of multi-media, and involve children.

Quantitative Study

A quantitative study titled Effects of Multimedia Software on Achievement of Middle Schools Students in American History Class was conducted by Karla Kingsley and Randall Boone in 2008/2009. The purpose of the study was to find out the effectiveness of educational software in attaining student achievement goals. This study stemmed from current broad interest in meeting standards. The authors mention that commercially produced software is marketed without supportive research, and yet schools need to have some level of assurance that resources of time and money is well spent, given the annual pressures of meeting NCLB standards. This study also follows up on other studies developed to measure use of technology in schools. The authors followed the guidelines set up by Institute of Education Sciences (IES), which require a rigorous, scientific methodology.

Several aspects of this study points to why a quantitative approach was used. First the study is concerned with broad based use of a technology in school systems, with national implications. The study also follows other quantitative studies. More particularly, the authors sought to find out a correlation between multimedia use and student outcome scores, using a

control and experimental group. A sample of 184 student test scores was used. Overall, the study followed the "criteria for methodology, data collection, analysis, and description for scientifically based research as explicated in the No Child Left Behind Act" p. 5. The researchers did not have a personal relationship with the sample population, but chose a particular district because it would meet the need for generalizability, based on its size and socioeconomic factors.

The characteristics of rigor, a sample population, and goal of correlating statistics are quantitative. The authors also ensured that the research design could be replicated. The study had broad policy and economic implications. Of course, conceivably the researchers could have decided to do a qualitative study of how students use this program, but this would have been based on a different set of questions, with a smaller population. The focus of the study was not on how the students felt about the program, but on how effective the program was in producing desires results, as shown in scores.

Qualitative Study

A qualitative study titled Designing Meaning with Multiple Media Source: A Case Study of an Eight-Year-Old Student's Writing Processes serves as a comparative example. The purpose of the study, by Jason Ranker, was to discover how a student used diverse media sources to write and create. The study

developed out of the researcher's work at school as a teacher and researcher. This case study came out in an organic way after the teacher completed a larger research project. Ranker became curious about how a particular student used and adapted diverse sources, including video games, television, Web pages, and comics. Ranker writes,

> I became interested in the possibilities of popular culture, writing, and permeability through one of my students. While I was a teacher of his second/third grade combination class, John was a student with whom I had struggled, in every way I knew how, to interest in writing – but with little success. Towards the end of my time as his teacher, John began to write in a way that reflected his interests in comic books, video games, cartoons, and Web sites. (p. 2)

During his study, Ranker came up with these questions: "What popular-cultural materials did John draw upon during composition time? How did he make use of this material in order to produce print and extended text? How did the media that he drew affect his writing?" (p. 3) As these questions illustrate, while superficially a study of one person may seem simple, the questions are fairly complex, and also relate to factors that depend on the feelings and interests of a student. Ranker states that taking a close up look allowed him to look at intricacy of

a child's use of media, and the individuality of creative choices. Ranker's research process was subjective, open to student's decisions, and precise. This study is a microcosm of popular culture and media's influence on children.

Ranker used theoretical frameworks as a lens to better understand and conceptualize the student's work. If the study had been done as survey of students in classes, of sufficient sample size, it would have been a different study, based on suppositions of student's media use. Opened ended questions could have been used, and findings would have given a slightly broader picture. By confining his study to one student, Ranker was able to create an in-depth, compelling and complex portrait of one student. Ranker defines his role as a 'participant as observer'.

The issue of bias is important in quantitative or qualitative research. Trustworthiness is an important issue in both types of research. In quantitative research, we need to know that measurements and results are reliable and valid. In qualitative, trustworthiness has to do with reactivity, researcher biases, and respondent biases. A reading of the study reveals that Ranker did not interfere with the students work, although there was an interpersonal relationship as a teacher who cares about his student's success. The student was able to do his work as was natural to him. Ranker also makes an effort

to control bias by relating the findings to particular theories, which brings other voices into the research (Rubin & Babbie, 2000).

Discussion

The most striking difference in these studies is that the quantitative study looked at how effectively a multi-media program (designed by a corporation) helped students achieve good scores. This is a numerical result, using a sample population. The qualitative study looked at how a student made creative use of media, using his own design (not a company's) to find out he could achieve his own goals. The other significant difference is in objectivity and strictness of the process. The students did not decide what questions to use or answer. The qualitative study was dependent on the student's objectives. However, taken together, both studies illustrate the impact, broadly, and more deeply, that multimedia can have on student's achievement in school. The most powerful commonality was that many of the students in the quantitative study were having similar problems struggling with literacy – reading and writing – and being able to understand and communicate concepts.

This research topic related to students use of media, in terms of achievement, and more particularly bias and critical thinking is current and relevant. On the one hand, there seems to be a general feeling that student use of media is ubiquitous,

and more research in this area might be redundant. However, quantitative data can have surprises concerning assumptions. For example, the phenomenon of cut and paste writing with the Internet has been studied. This subject is of wide spread interest because of the growing influence of technology and popular culture in education. There is also the assumption that students, particularly Millennium students, are only interested in learning online or through technology based communications. From the standpoint of trends there seems to be an ever-growing influence of media upon students, whether it be popular culture or social networking sites.

Using Creswell's simple criteria it seems justifiable to use a qualitative method:

1. Given the assumptions based on trends, an in-depth study would provide a more complex base of information. A qualitative study is also appropriate because it focuses on learning and communication, which involves complex processes.

2. The audience, likely educators would probably be more interested in and perhaps better understand a qualitative study.

3. As a researcher, this writer's background was in journalism, with training in participant observation, and an interest in bias, use of sources, and overall media.

As a qualitative method, the research design methods could be case study, participant observation, in-depth interview, ethnography, and grounded theory. Choosing a method and design will depend on questions, population, viability, and prior literature. A qualitative study seems preferable because of an interest in how and why students use multi-media sources.

Question 2: Integration and Synthesis of Relevant Theory and Research

Many programs designed to meet the educational needs of adult learners are based on ideas about andragogy from experts such as Malcolm Knowles, Stephen Brookfield, and Jack Mezirow. Each generation seems to have its own values, attitudes, and beliefs (Hicks & Hicks, 1999), and the generation of adult learners today is very different from those described by Knowles in the 1970s. Compare the characteristics of today's adult learners with previous generations of adult learners to determine if the concepts of andragogy are still valid. Predict how instruction and learning may need to change to meet the needs of this new generation of adult learners.

Brookfield, S. (1986). *Understanding and facilitating adult learning.* San Francisco: Jossey-Bass.

Hicks H. & Hicks, R. (1999). *Boomers, xers, and other strangers: Understanding the generational differences that divide us.* New York: Vintage Press.

Knowles, M. S. , Holton, E.F., & Swanson, R.A. (2005). *The adult learner: The definitive classic in adult education and human resource development* (6th ed.). Burlington, MA: Elsevier.

 Mezirow, J. (1991). *Transformative dimensions of adult learning.* San Francisco: Jossey-Bass.

Ready or Not: Adult Education and Millennial Generation

The Millennial generation is presenting challenges and opportunities to education generally and adult education particularly. Adult education, with the growth of technology and the array of choices seems, at first glance to be particularly well matched to the needs of this rising generation, with numbers that nearly match that of Baby Boomers. However this generation appears to have well defined expectations of education, and theories of andragogy may not necessarily be adequate to the task of meeting this generation's needs. Adult education has been through changes before, and should be in a position to adapt. Given the growth and professionalization of adult education, with an emphasis on standardized formats particularly in online classes (such as Web CT based curriculums) the challenge will be keeping up with student expectations.

There was a time, which seems almost quaint now, when adult education was viewed as a specialized field, not in the mainstream of education. Adult educators were arguably marginalized out of the Academe, and adult students were put into set categories: high school drop outs trying to get a certificate or diploma, students trying to attain vocational training, or people seeking life enrichment (Jarvis, Griffen, (2003). This was the state of things in the 1960's. But the

culture was changing fast with the onslaught of the baby boomers, who by their sheer numbers, attitudes and aspirations shaped all aspects of social and economic life, including education. Malcolm Knowles refined a theory of androgrogy as Baby Boomers came of age. Knowles developed a theory that is compelling and seems to reflect the aspirations of this generation. However, does the andragogy theory of Knowles and other adult education researchers still apply to the generation now coming of age, the so-called Generation Y or Millenials? Using an ecological framework, this paper will compare and contrast prior generations of adult's learners with current learners, examine assumptions about Millenials, while linking principles of andragogy to the needs of this generation.

<div align="center">Andragogy</div>

Adult Education theories have focused on the following concepts: a) student centered learning b) empowerment c) critical reflection. Building on the seminal work of Thorndike and associated scholars in the 1920's, Knowles was able to identify effective approaches to teaching adults based on the characteristics and needs of adults. Thorndike and other educators had been influenced by the current psychology, a behavioral model, as a way to understand how people learn which was in turn influenced by science and industry. Eventually researchers began to notice that not only could adults learn,

but they perhaps learn differently than children (Merriman, 2005).

Knowles identified the following characteristics of adult learning (Merriman, 2005).

1. Learning moves from dependency to self-directedness

2. Learning is rooted in experience

3. Learning is linked to social roles

4. Learning changes from delayed learning to fast application and subject focus to performance.

Knowles did not look at andragogy and pedgagogy as being exclusive, but as part of a continuum. Knowles was prescient in seeing that education was changing rapidly in term of systems, delivery, and technology, seeing a time when education would not be constrained by time or place (Hiemstra & Sisco, 1990).

Jack Mezirow was interested in how learning has the power to change individuals. Mezirow looked at three domains of learning: a) task, work related b) interpersonal and interactive understanding and c) emancipatory, which is self-reflective and leading to transformation; as perspective is change meaning is changed (Merriman, 1999 and Imel, S, 1998). Stephen Brookfield was also interested in learning that induces change and critical reflection, and addressed findings that show adult cognition and social interaction and personality is dynamic, experiential, with expertise gained through practice (2005).

Baby Boomer Characteristics and Environment
Characteristics

At the time Knowles was researching adult education in the 1960's and 70's baby boomers were growing and beginning to take on adult roles. The size of this generation has generated a cottage industry among business, media, academics with a surfeit of studies, examinations, articles of the baby boomers. Hicks and Hicks covered this ground in a book that explores generational differences and influences, with an emphasis on popular culture and shared cultural values and attitudes of a generation. The Boomer generation is described by Hicks and Hicks in stark contrast to their parents, as consumerist, permissive morality, and wanting instant gratification.

Other descriptions of this generation include optimistic, process oriented, and an appreciation for convenience (Dziuban, Moskal & Hartman,). Boomers grew up in a time of disorienting and polarizing events, with the assignation of JFK and MLK, Viet Nam War, the growth of divorce, and rise of civil rights and growth of suburbia. Communications technology continued to grow and influence life, and mass communication and technology (television, computers, fax machines) shaped this generation and overall society. This generation also came of age at a time when public education, from elementary through college was considered to be important and expected (Trow, 1999). Revealingly, a

recent Pew Survey (2009) reviewed significant feelings of foreboding and disappointment among this group, which belies the image of optimism.

Education Environment

The Post War era saw robust growth and changes in American education. There was a significant increase in student enrollment in universities and colleges. The statistics from 1972 – 1982 (as Boomers came of age) are particularly telling in terms of adult education. Most of the growth was among those 25 and older, with 35 years and older with 77% and 25 to 34 a 70% increase, as compared to 35% overall increase in student enrolments. During this same period, there was also two-third increase in female students and a remarkable increase of 85% of minority students. Another telling change during this period was the change from grants to loans as a source of support. In 1975 loans were 21% of student support, by 1984 loans provided 66% support (Trow, 1999). Education became increasingly specialized, with education purpose divided between research, teaching, liberal arts and vocational studies (Rice, 1999).

During the 1960's there federal and state level legislation ramped up funding for vocational education, benefiting both community colleges and proprietary schools (Hittman, 1999).

Socioeconomic environment

Boomers grew up in a time of prosperity and stable economic circumstances, with movement to suburban living. At this point, many families could still afford a one-income household. Later boomers (born mid-50's to mid-60's) experienced changes, with increase in divorce rates and mothers having to go to work (Patterson, 2007).

Technology and Learning Environment

While technology was playing an increasingly important role in the 60's, 70's and 80's, most teaching was done in a classroom environment, and use of technology was supportive to teaching, such as slides, films, and overhead projectors. Distanced education was still mail, television or radio.   As evidenced by Knowles and Mezirow's work during this period, an important shift was beginning to taking place during this period. Barr and Tagg summarize this shift neatly: in the old paradigm, college was a place to "provide instruction", now it was becoming a place to "produce learning", reflecting an increasingly consumerist society.

Television was a dominant medium in lives of boomers and their parents, bringing the news into living rooms, sometimes in a shocking and graphic way (JFK assignation, Vietnam) and bringing the consumer culture to full flower. Even as events created a feeling of disorder and chaos, and some boomers (and

for that matter, older adults) rebelled there remained a sense
of authority, and knowledge as something that could be attained.

        Millenials Characteristics and Environment
Characteristics

    Recently there has been a spate of writing in popular and
academic press about Millenials (or Generation Y). Millenials
are defined as the generation born approximately 1980 to 1995,
or in some resources 2002 (years vary depending on source). This
is also a large cohort, at over 80 million, which matches or
exceeds the size of the baby boomer generation (Pew Research
2008). It is important for adult educators (many of who are baby
boomers) to consider and understand characteristics of
Millenials. This generation, according to Oblinger, enjoy group
activity, retain close relationships with parents, do more
homework and housework and less TV watching, take pride in being
smart, are attracted to technology, and are quite ethnically
diverse (2003).

    Some have remarked on this generation's expectations and
sense of entitlement. Being goal oriented, they are willing to
accept as much help and support to achieve success (McGlynn,
2005). Once again, these summaries of generational
characteristics should be viewed as summaries and do not
necessarily reflect individual differences. What can be taken
away from this list is an interesting combination of

traditionalism (parental respect and family ties) with a comfort level with diverse technology. In fact Oblinger (2003) notes that this generation does not look at computers as "technology" but a natural part of life. Understanding this attitude may be difficult for educators who may still be trying to absorb and adapt to new technology.

As a generation, Millennials experienced such public events as the Columbine shooting, Desert Storm, and a presidential impeachment. They tend to be positive, practical, and appreciate structure and schedules as a way to copy with busy lives (Journal of College Admission).

Sweeney (2006) suggests that Millenials may have some striking personality differences with Generation X students, although the evidence is based on limited study. However, the results of a study of Northwestern Ohio College of Medicine students is interesting in terms of figuring out effective instructional strategies. This study showed that students tended to have more abstract reasoning ability, were warm, outgoing, adaptive and mature, rule conscious, more bold and adventuresome, sensitive and apprehensive, open to change and experimentation organized and self disciplined and less solitary and individualistic.

Education Environment

From a personal standpoint, Millenials have grown up in a more regulated (for safety reasons) and test oriented (NCLB) school environment. From a systems level, there has been tremendous change in education as Millenials have come of age, change which reflects an increasingly consumerist, individualized, and privatized economic philosophy as well as more choices in learning institutions. Ability or access to funding education is an increasing concern. Technology, with the growth of online education (in a hybrid or completely online format) has brought new opportunities and challenges for educators, and has enabled spectacular growth among non-traditional proprietary schools. Adult education has expanded beyond specialized vocational providers to creditable sources of advanced degrees in a range of fields.

Socioeconomic Environment

The trends that late boomers had begun to experience, with divorce and the economic requirement of a two-income household came to fruition for Millenials. For example, in 1972 three out of four children grew up in a two-parent household, by 1998 only half of children grew up in two parent households (Standfort, 2002). In spite of this, Millenials are often described as closely connected to their parents, who wield substantial influence over their decisions.

Technology and Learning Environment

The access to technology and reliance on testing, which encourages rote learning, presents both opportunities and challenges for educators. Having grown up around an array of communication technologies (such as cell phones with text messaging) these students may have a habit of multi-tasking and therefore shorter attention spans. The emphasis on testing and focus on facts may result in less critical thinking skills. These students are used to being assessed, and prefer clear goals and feedback. They have developed skills in teamwork, creating social networks (albeit electronically) and organization (Elam, Stratton, & Gibson, 2007). Some Millenials have had more sophisticated technology at home than at school, and may reasonably believe they have better grasp of technology than their parents or teachers.

They prefer learning that is oriented to groups and problem solving (Junginger, 2007). Because of technology, Millenials are used to learning in an associative, chunky, non-linier style, and are able to combine different information in new ways (rappers sampling songs is an example of this) (Dede, 2004). These students are exposed to a diverse variety of media in which to learn, and prefer visual and audio learning, with a focus on activity and achievement (Sanders, 2006).

A revealing series of focus groups by Sweeney (2006) showed that students rarely read books, write handwritten letters,

communicate electronically with friends, and frequently use YouTube and other applications. Students also shared they don't necessarily prefer online classes, and enjoy in person classes if the instruction is engaging, active and not a "boring lecture". Some students did not like online because responses were too slow. Students expect organization and compelling engagement whether it is online or in the classroom. Many in this generation grew up in gaming and thrive on this stimulation.

Adult Education: What Now?

Adragogy has emphasized self-directed learning, critical reflection, social roles and transformation. There has been an inherent democratic quality to adragogy, which is both pragmatic (providing opportunities for adults to seek their vocation and try new ventures in life-long learning) and idealistic (you can make your dreams come true). Rooted in progressive concepts of John Dewey, truth was not archived, but something to be continually discovered (Noddings, 2007). In an era of information overload it is easy to make the case for critical thinking.

At first glance the growth in adult education, particularly through distance education programs seems to be well timed and well matched to this linked-in generation. Adult education also provides a range of choices that would appear to meet the needs

of an increasingly diverse population. But adult educators need to be cautious in making assumptions.

Assumption One: Millenial students prefer online education, because they are comfortable with an array of technology, so adult education should prefer to focus on this direction.

Millenials students have high expectations for a learning environment, no matter if it's by computer or in person. They key is interactivity, whether it on computer or in class. They need the feeling of connection and feedback, and they want this quickly (Barone, N.D. and Ramaley & Zia, N.D.). While older adults have turned to distance education out of necessity Millenials often prefer interaction of groups, and the active support of instructors, which is harder to find in the less personal environment of distance education (McNelley, N.D.) This does not mean that online courses will not benefit these learners, it simply means that online courses need to stimulate and engage a generation that grew up on gaming and multi media tools.

Assumption Two: Technology is most important aspect of their lives and education.

This is a generation that feels comfortable creating their own presence on the web, with YouTube, MySpace and make use of multiple applications. Student attitudes toward technology is also important. Millenials do not look at their devices as

technology unless it is something they don't understand, i.e. cell phones are *not* technology, applications are activities, *not* technology. Technology is something that is in the background of their lives. They also expect technology to be adapted to their needs, not the other way around (Oblinger & Oblinger, N.D. and Roberts, N.D.) In essence, technology should be used effectively, appropriately, and to its maximum potential so that students can be engaged and stimulated.

Assumption Three: Millenials are passive learners who get through school by memorizing facts and taking tests.

It is true that this generation grew up with an emphasis on standards and accountability, although at the same time academic theorists were espousing the need for critical thinking. There seems to be a yawning gap between reality of what happening in primary and secondary education and the expectation that students will suddenly become critical thinkers. However, Millenials use of computer technology has turned them into experiential learners who prefer learning by doing, and often, by creating (McNelley, N.D.). This happens to fit in well with constructivist theory, and over arching goals of adult education that encourages student centered, discovery learning.

Assumption Four: Student do not respect expertise, because they are so immersed in popular culture, and easy access to information.

A sample poll of students at the University of Pittsburg says otherwise, with students wanting their professors to be passionate and knowledgeable, and also able to make good use of technology. This poll also showed that students preferred a teaching environment that evenly balanced lecture with interativity (Roberts, N.D). What this means for andragogy is that students are capable of learning multiple ways – they can direct their learning, they thrive with teamwork, and respond well to the support and knowledge of instructors.

Assumption Four: Technology leads to isolative and multi-tasking behavior and lack of interpersonal communications, Millenials are in their own technology driven world, which impairs ability to learn.

Current Internet based applications that youth use have an emphasis on social networking. While educators may judge this as being superficial from their perspective, from an andragoical perspective it is important to "start where the client is". For reasons that may be that may be driven by rapid changes in society, in family, work, school, and growth of technology, students prefer learning that emphasizes teamwork, structure, and engagement with social connections. Moreover, interpersonal communications is not defined as "in person" and technology enhances, not interferes with communications. Text messaging is

synonymous with talking (Oblinger and Oblinger, N.D. and
Roberts, N.D.).

*Assumption Five: Millenium students don't read, and so can't
learn, and this creates obstacles in traditional and online
classes.*

Research has showed that Millenium learners (aka Net Gen)
avoid large amount of texts, which is likely too passive and
perceived as a time waster. Their exposure to interactive web
sites (and for that matter gaming) means they respond better to
text in a graphically rich environment. For andragogy, the
emphasis should be on concepts, and giving Millenium students
the opportunity for inductive discovery, develop hypothesis in
an interactive manner that is visual and kinesthetic (Oblinger
and Oblinger, N.D.).

*Assumption Five: Millenium students are so much into
entertainment and technology they do not care about the world
around them.*

Although it may seem counter-intuitive, Millenium learners
want to be actively engaged in their communities, and care about
things that matter. A report, from the Center for Information
and Research on Civic Learning and Engagement (CIRCLE) and other
sources show that while students do not necessarily trust the
spin from media and politicians they are interested in working
to help improve their communities. Research also shows that

college makes a significant difference in youth engagement in civic affairs, with non-college student being less likely to participate in community activities (CivicYouth, 2009).This interest also fits in well with andraogical principles of transformational and action oriented learning, and for that matter effective problem solving, which ideally employs both experience and critical thinking (Brookfield, 2005).

As this demonstrates, it is important that adult educators not make superficial assumptions about Millenial students. This is not to say that these andragogical principles no longer have merit. As Millenials become adults, it is difficult to believe that they would not want to feel, in Knowles words, "accepted, respected, and supported" and that there should be a "spirit of mutuality between teachers and students as joint inquirers", (Brookfield, p. 29, 2005). These concepts of andragogy appear to mesh well with this generations need for social connections and improvement at both the personal and community level.

Andragogy does not need to abandon principles developed by Knowles, and other theorists, but in the spirit of Millenials, to add and elaborate on this framework for understanding of how adults learn. It is a given that Millenials will someday dominate adult education as students and then teachers. Frand summarizes the views of this generation: Computers are not technology, the Internet is more important than television,

reality is not always what it appears to be, that doing is preferred to knowing, learning is akin to the trial and error of a video game, multi-tasking is life, typing is a given over handwriting, responses must be immediate, and there is little distinction between creator and consumer (Oblinger, 2003).

The implication for adult education and andragogy is to build on the foundational principles of Knowles, Mezirow, Brookfield and others (including John Dewey). It is not a matter of choosing between online or in class learning, individual, self-directed learning or reliance on expertise. There is also additional challenge for adult education: to simultaneously serve the needs of multiple generations, which include many non-traditional part time students (Oblinger and Oblinger.). Malcolm Knowles's principles of self-direction, experiencial learning, social roles, fast application and performance still apply, and can be easily integrated in to the needs of the Millenial generation.

Imagine a future in which learning is truly multi-dimensional and multi-functional. Far out sounding technology like virtual reality and holograms might be part of this. The Internet already shows great multi-media possibilities when done correctly (such as the National Geographic site or BBC site, which use text, photos, videos, steaming, sound). But instead of thinking of future learning as leading toward one direction,

such as more tech oriented, it is probably better to view it as multidirectional, with personal and social goods. Technology and globalization have already transformed the world; learning provides the tools to respond and take a hold of this transformation.

Successful and effective adult education will need to be prepared to be flexible, interactive, creative, responsive, fast, socially engaged, adaptable, supportive, challenging and varied. Its not about the technology, its about the need to learn and understand. It's time to refresh, reset, and retool as necessary for this potentially exciting next stage.

QUESTION_3: Philosophy shapes research. Research shapes practice. Discuss how the liberal, progressive, behaviorist, and humanist philosophies of education have shaped or developed learning theories. Incorporate in your discussion examples of specific learning theories germane to each philosophical tradition. Then select three of the theories you have articulated above and evaluate how those theories have impacted your philosophical stance.

Gutek, G.L. (2003). Philosophical and ideological voices in education. Mass: Allyn & Bacon.

Education Philosophy and Theory: Experience, Influence, Practice

Education has long borrowed from and been influenced by different philosophies, some rooted in classical traditions, and some modern or post modern. From these philosophies, researchers have developed specific theories to understand and improve the process of learning. Education has a rich and complex wellspring of philosophical traditions and theory upon which to draw and practice. Among these philosophies are liberal, progressive, behaviorist and humanist schools of thoughts, which continue to influence and complete for attention among American educators.

Philosophy can be defined as a way of viewing the world, characterized by certain attitudes, desires, and values, with cultural, ethnical, and religious connections. Gutek (2004). offers a useful explanation of philosophy and its relation to education: Metaphysics, or reality is what we know, as formalized in curriculum; epistemology, or knowing, shows us how to teach; axiology, or ethics, supports character development and logic help to organize pedagogy approaches and curriculum development.

A theory (for learning or whatever) can be understood to be something that helps to explain what we observe in the world. In science, theory is not just a casual idea tossed about; it is based on analysis and usually follows scientific method of

reasoning and step-by-step process. Gutek (2004) suggests theory can be ideas or principles formed to be used for practice. Theory can be based on deductive, inductive, or simply what we observe around us. Gutek further explains that theory can link philosophical perspectives to practice.

Although there is seems to be a compulsion to classify concepts into neat divisions, philosophy and theories often overlap and certainly influence others. By the same token, some philosophies and theories are quite opposite to the other. This simply reflects human nature, which is at times consensual and conflicted. For example, Smith (1999) came up with four orientations of learning: behaviorist, cognitive, humanistic, and social-situational.

<div align="center">Liberal Philosophy</div>

A liberal philosophy in education is strongly rooted in American life, beginning with the Revolution. Liberal ideas came our of the philosophers of the enlightenment, which emphasized reason over religion, as life became more industrial and urban, and a middle class developed. Diderot, Rousseau and Locke believed in the progress through economic, social, political and educational avenues (Guteck, 2004). The liberal emphasis on individual progress and the right to espouse ideas permeates American education, although ideas of community good and national goals are interwoven into policy. The liberal belief in

pluralism is also reflected in the American higher education system, which is the most diverse in the world, and lacks a central governing authority (Trow, 1999).

John Locke's ideas of individualism and a free market continues to influence American life and American education (Gutek, 2004). American higher education is as competitive as the business world, especially as state support has been reduced, and education increasingly reacts to a consumerist society (Trow, 1999). Another influential philosopher was John Stuart Mills, who taking Jeremy Betham's work, believed that liberal ideas of progress and improvement may require active government intervention. Mills also pushed the marketplace of ideas, in which all ideas, bad or good, were free to compete and thrive or die on their own merits (Gutek, 2004 & Noddings, 2007)

Liberal education philosophy reflects these traditions, which combine original classical liberalism characterized by individualism balanced with government inducements for social progress and reforms. Liberal education balances individualism with community, is optimistic in temperament, and continues to believe in constitutional ideas of separation of church and state and private property. Liberals tend to be flexible, process oriented and incremental in reaching goals.

In schools, liberal ideas are expressed through flexible and creative curriculum designs and instructional methods.

Students are encourages having individual initiative, but also collaborating with others in groups. Change is linked to current needs and interests (Gutek, 2004).

Learning theory associated with Liberal philosophy includes dialectic instruction, critical thinking and reading. Liberal pedagogy puts an emphasis on teacher as expert, directing instruction. Instructional methods may include lecture, dialectic, study groups, reading and discussion (Zinn, 1983). A liberal arts education appreciates knowledge for its own sake, learning is for enrichment and life growth, not merely vocational.

<div align="center">Progressive Philosophy</div>

Progressive ideas have their roots in liberalism and pragmatic philosophy. Similar to liberalism, progressivism seeks incremental change and reform using consensus and pragmatic ideas. Reflecting its liberal, enlightenment roots, it emphasizes reason (Gutek, 2004). The progressive philosophy is exemplified by the progressive era, in the 1900's, in which individuals and organizations sought to improve unjust and dangerous social and economic conditions at grassroots and political levels.

John Dewey was a major influence in progressive philosophy, particularly his ideas on discovery based, experiential learning that followed scientific method ideas, which reflects earlier

influence of use of inductive reason. Rousseau's naturalistic
approach to learning in the environment was also used a
complement to Dewey's pragmatism of children exploring the
environment(Noddings, 2007). Progressive education is
collaborative and holistic, and encourage ongoing interaction
with the community.

Progressive philosophy developed divergent schools –
student centered and social reconstruction. The student-
centered philosophy is individualist and bottom up in approach,
with learning that begins with the child's interests. Children
learn to employ activities and ideas that will lead to a better
world. The administrative school took a social, group approach
to reform, with schools viewed as laboratories to change the
world.

These approaches reflect the ongoing tension in American
life of individualist and communitarian approaches to solving
problem. People leaning toward individualism may be suspicious
of the aggressive, activist attitude of social
reconstructionists, which focus on social policy, while social
reconstructionists feel that a student centered approach may
neglect larger issues. The Progressive Education Association
formed the following principles for progressive education:
natural development, motivated through interest, teachers as
guides, holistic development, including psychical health, to

include children's home in process, and experimentation (Anderson, 2004).

Theories associated with progressivism encourage self directed and experiential. Constructivism has been a major outgrowth of progressivism. The components of constructivism include creating knowledge of prior experience (or constructing knowledge); active learning that adapts and modifies understanding with new understanding. The process requires a teacher as facilitator with students focusing on their interests (Hoover, 1996).

Jermome Bruner created a constructivist learning theory called Discovery Learning. It is an active, problem solving learning process that uses experience to seek and discover knowledge. Learning may involve objects, ideas, and experiments. Types of learning include guided discovery, problem based, simulation, case base and incidental. Learning encourages independence, responsibility, motivation, creativity and is customized to students needs (Learning Theories, N.D.)

A more recent learning theory that can be traced to progressive ideas is Problem-Based Learning (PBL), in which learning is hands on, directed to problems in collaborative, context rich settings. There is no right answer, and students learn critical thinking skills. PBL was developed at a medical school to replicate conditions on the job (Learning Theories,

N.D.)

Behaviorist Philosophy

Behaviorial education philosophy has its roots in the psychological studies of John B. Watson in 1920's. Watson determined that understanding people (or any subject) can be best through objective observation. Watson moved psychology from the mind and consciousness (and unconscious) of Fruedian psychology and self-direction and exploratory learning of John Dewey to a more mechanistic model of understanding people and learning. Significantly, Watson also thought that observed behavior is possible to control, and therefore responsive to stimulus. In this view, even thinking is a type of behavior. During this same period other researchers developed the concepts of classical conditioning (Ivan Pavlov's bell experiment, with involuntary response) and B.F. Skinner's operatant condition (voluntary response to reward and punishment)(Burger, 1986 and Carboneli, 2004).

As a philosophy, Behaviorism has a materialistic view of the world, and discounts mind/body dualism. It takes a reductionist view, "what you see is what it is". If a thought cannot be verified (such as a belief) then it is simply termed a disposition. Behaviorism can be characterized as a pedagogy that is concerned with practical, testable knowledge. Behaviorism puts learning in an environmental context, with people shaped by

their environment. This does not necessarily mean that a learner is a passive recipient, but will actively seek to change a behavior (or make an effort to learn) in order to change the outcome (or reward). In other words, there is a strong element of trial and error in behavioral learning. In this view, we learn from experience. This view fits in with the idea that learning is a process of change, and then develops into habit and expertise. Learning emphasizes mastery of a skills and tasks through reinforcement and practice that eventually leads to expertise (Carbonelli, 2004).

Behaviorism is still widely used for behavior modification and therapy, such as systematic desentization, in which are slowly exposed to a source of phobia. It has had a large influence in American classrooms, through direct instruction teaching methods, and as exemplified with current accountability measures that lead to test preparation (NCLB) is still widely practiced. Most people have experienced behavioral instructional methods, such as lectures, drills, and the like. This type of learning lends itself to computer based instruction, with tutorials and games, which often replicate classrooms experiences, albeit in a more stimulating form (Chen, N.D.)

An example of an approach to behaviorist instruction is The Personalized System of Instruction created by Fred Keller, a noted behaviorist. This method emphasized self-pacing, mastery,

motivation, teacher-student communication, proctors for testing and scoring, and personal-social support (Gallup, 1997).

Albert Bandura's Social Learning Theory is an outgrowth of Behaviorism. Bandura asserted that learning theory should target disposition, structure, ease of learning, effective sequencing, and a way to reward or punish (Kearsley,2009) (Bandura theorized that people learn from others through observation, imitation and modeling. The elaboration on behaviorism is the interplay of thoughts, behavior, and the environment. Bandura theorized that not only are we responding to the environment, our presence shapes the environment. Bandura went beyond the observed aspects of behaviorism and acknowledged the role of language and imagination. In other words, Bandura acknowledges both external forces (the environment) and internal states (the mind). While there might be reinforcement from the outside, self-regulation is a primary motivator. This explains why so often people's belief remains unchanged in the face of external persuasion (Burger, 1986).

<div align="center">Humanist Philosophy</div>

As with many other educational philosophies and approaches, Humanism in education was influenced by psychology. A humanistic approach to learning emphasizes personal freedom, dignity and potential. Learning is intentional, value-laden, and is set on discovering and constructing knowledge. There is a holistic

aspect to humanistic pedagogy (Learning-Theories.com). The overarching philosophy of humanism is that humans are rational, have morality and free will, and also have imagination and creativity. There are also political views of humanism in which people are governed by ethics such as equality, justice and plurality. In teaching, humanism is applied to help people reach their full potential (Aloni, 1999). There are commonalities in humanistic and progressive philosophies, with the emphasis on discovery and construction of knowledge.

Humanism has several roots from classical to modern times. such as existential philosophers such as Nietzsche, Kierkegard, and Sarte, and Frankl and American psychologists Carl Rogers and Abraham Maslow. Frankl's experience in a concentration camp led him to expound of the importance of search for meaning, even when struggles lead to doubt about life's purpose (Burger, 1986).   The work of Carl Rogers and Abraham Maslow are often cited as the major contributors to humanistic psychology. Rogers believed that people should be open to life, are worthy of positive regard, and direct their own experience. Maslow posited that people are motivated by seeking what they lack, and also the need for growth, as demonstrated by his well known model, Hierarchy of Needs (Burger, 1986).

The classical education of Athens, with a curriculum of arts and humanities retains some influence in educational

debates concerning curriculum and purpose of education. A classical approach embodies an idealistic vision of man. This tradition stayed alive through Roman, Renaissance, and Enlightenment times. Classical humanism balances liberal egalitarian ideas with traditional concepts of virtue and nobility (Aloni, 1999).

Humanism is also associated with Critical Pedagogy, in which education is seen as interacting with crucial social and political issues. Theorists such as Paul Friere and Jonanthan Kozal view learn as transformative and action oriented (Aloni, 1999). Education is viewed as an important, perhaps most important source of social change at the individual and institutional level.

Rogers suggested attitudes and characteristics of that would facilitate learning with humanistic qualities. Note that Rogers encourages facilitation of learning, not instruction. These elements include genuine, prizing and acceptance, and empathetic understanding (Smith, 2004).

Discussion of Philosophy and Theory: My Perspective

My philosophy, my way of viewing the world is influenced by my status as a "younger baby boomer" with older depression era parents. My attitudes reflect my roots as a democrat, unionist and literally my growing of age in the 1960's. I was raised Roman Catholic primarily in the post Second Vatican Council era,

in a predominantly protestant and Jewish community. My friends came from all faiths and backgrounds. I was raised to believe that I should pursue my goals, no matter what they may be, and that God would help guide me in the direction of His intent using the talents and tools He had given to me. I value the lives, experiences, perspectives and views of those around me and even made it a career, first as a journalist and later as a teacher, to help others to understand diverse perspectives.

Theories that are related to behaviorist, progressive, and humanist philosophies have had the most impact on my worldview, values, beliefs and attitudes, in both positive and negative ways. As an educator, I am now in the position to influence others just as I was influenced.

Behaviorism

I admit to some ambivalence about behaviorism philosophy, although my reaction is probably more emotional than rational. I am not comfortable with the Pavlov analogy, or the overall materialistic emphasis. I do not believe the core of human existence and behavior is always conditioned by environment or personal reward, at least beyond the level of basic survival. However, there is no denying that I was impacted by behaviorism, since it was so widely used in schools as I was growing up. I learned best when I was able to explore and experiment, as opposed to memorization, testing and grades. I put little value

in teacher's attitudes toward me or their rubrics. When a 5th grade teacher tried to hold me back a year due to test scores, my parents and I decided to move forward. I was placed in a low level track III based on testing. I later proved them wrong by advancing from C to A track in just a year and a half. In doing so I did miss key foundation material, including spelling and lower level math. Yet I advanced to become a writer, high school newspaper editor and to the highest level of math taught at a very college prep centered public high school. As a trained actor, I am aware that behavior affects us on many levels in terms of interpersonal communications, how we react to the world around us and how others react to us. Certainly much of my experience as a student was through direct instruction, with lectures, drills, and demonstrations. As an instructor, I use lectures, and many students want and need this type of teaching, particularly if they are resistant to reading or have poor reading literacy levels.

Albert Bandura's social learning theory is interesting to me as a communications professional. As an example, the belief that people learn through observation, imitation and modeling is something I use as a teacher of speech and theater. For this reason, group learning is much more effective. Imagine trying to give a speech without ever seeing someone give a speech, or getting on the stage without ever seeing someone else perform.

I can see a practical side to behaviorism, and there remains a strong place for direct instruction in education. But there are inherent limitations with behaviorism. My general philosophy, carried out in my values and aspirations, is to see behaviorism as a useful tool, a starting point, but also an easy out and a limitation. The trial and error and active aspects of behaviorism are appealing. I tend to be creative and think outside the box. From an educational policy standpoint, too much emphasis on drilling and testing creates superficial knowledge but lack of understanding. Linier thinking has its place but the broader scope of exploration allowed through other methods of exploration may better prepare students for the rapidly changing world in which we live and work. Philosophically, I am a strong believer in the power and importance of critical thinking, which we need more than ever to solve problems. Critical thinking involves examining assumptions, understanding bias, self-understanding, use of logic, values reality based perspective but is also able to use imagination (Brookfield, 2005).

Progressive

I admit to some attachment to progressive philosophy having gone to Chicago schools, given John Dewey's work. More particularly, I appreciate Constructivist learning theories, which emphasize self directed and experiential learning. The

activist and changing nature of Constructivism appeals to my curiosity and creativity. Life in our rapidly changing world is fluid without the limitations and boundaries of a traditional industrial society. Students today face the reality of multiple careers in their lifetime where once the only prospect was multiple jobs and with my Depression era parents, a single employer was the expectation of life's work experience.

Bruner's Discovery Learning theory fits in with my general philosophy that life should be stimulating, fun, and challenging. The idea of teacher as a facilitator also fits in with my general philosophy of wanting to help others.

I was the beneficiary of Constructivism in school, with the opportunity to take an Experimental, Self Designed Curriculum as part of my studies in college. I was also part of an experimental program in high school, classrooms without walls.

Humanism

Humanism's emphasis on personal freedom, justice, and search for meaning is a good match for my ideals and values, although I think it is a difficult thing to attain and maintain in an educational system that often seems too immersed in conformity and consumerism. Humanism can be found in classroom with teachers that inspire and students who thrive in a nurturing environment. The liberal arts component of humanism is also important, particularly as education becomes increasingly

specialized and career oriented. I am saddened by the decrease in liberal arts curriculum and the focus on material aims. I prefer inspiring students to think in terms of the entire person, the society in which they live and in applying a diverse life and intellectual experience to any task they take on.

It is difficult for me to think of my philosophy in an intellectual way, because my values are so intertwined with what I do as person in every aspect of my life. As a journalist, I was also a teacher, and journalism ideals of freedom and justice, and trying to figure out what it means. As an actor I was both teacher and entertainer, inspiring thought and perspective. I also appreciate the transformative power of learning at an individual and social level, as elaborated by Paul Fiere. When we teach a student, we may change that student, and then may change the world.

At its most basic teaching and learning is a relationship that is based on trust. Following the ideas of Carl Rogers, learning requires trust, respect, and openness. Learning can also involve transformation, which can be painful as we confront ourselves and the world, and if possible improve our world, as Paul Friere and others believe. The process of transformation may involve conflict. Most of all, learning should be a pursuit of passion, in whatever form it takes. Philosophically, I believe learning requires fearless curiosity and conviction.

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