A study was conducted to identify to what extent graduate students report exhibiting characteristics of adult learning theory and to compare these characteristics based on current work environment. Of the 90 graduate students who participated, 55 were majors in the Educational Leadership Program, a graduate experience that presented the theory and skills necessary for effective administration within the context of elementary and secondary education institutions; 35 were majors in the Higher Education Administration Program, an experience designed for those who work in higher education institutions, adult education agencies, and community colleges. Respondents were asked to rate their level of agreement with 10 items constituting adult learning characteristics. Only 2 of the 10 characteristics of adult learning were significantly different according to academic discipline Therefore, student mindsets might be more similar than faculty, administrators, or students initially perceived. A surprising result was the difference between the educational leadership and higher education students regarding their views on active learning. The educational leadership students who perceived a greater need for active learning were K-12 teachers preparing for principalships in public schools. Another difference was the indication that educational leadership students showed a greater need for immediacy. (Contains 16 references.) (YLB)
Adult Learner Characteristics Among Graduate Education Students: Comparison by Academic Discipline

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Running Head: Characteristics of Graduate Learners

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Abstract

The methods used in providing college level instruction are often reliant on the teacher's interpretation of the learners' abilities, interests, and motivations. Much research on adult learning has suggested that certain considerations should be given to the mature adults in the college classroom. The current study provides a discussion of the learning preferences of graduate students in two similar but independent fields of study, providing a general framework for college instruction geared towards adult learners.
"Adult Learner Characteristics Among Graduate Education Students: Comparison by Academic Discipline"

The movement toward the continual study of institutional effectiveness has forced many academic administrators to address questions related to teaching quality. Despite this movement, higher education institutions continue to rely primarily on voluntary participation in faculty development efforts and student opinions surveys of teacher performance. Although these measures represent dramatic advances in areas such as post-tenure reviews, the responsiveness of many institutions has been slow to address questions of learner characteristics and preferences, with the majority of learner-preference discussions focusing on such issues as writing or communication apprehension, the Meyers-Briggs typology, and the Kolb learning style matrix.

For institutions offering graduate education programs of study, the issue of understanding learning styles and preferences is complicated by the introduction of adult learning theory. Adult learning contends that adults learn differently from children and adolescents (Cross, 1981; Knowles, 1983) and that the learning process is greatly enhanced in situations where real-world, empirical uses are provided (Schell & Rojewski, 1993). Cross (1976) particularly noted that adults are not one dimensional in learning style, and that such factors as leisure and pleasure are strong motivators to engage and participate in the learning process. The challenge, then, to faculty working in
offering graduate-level instruction is to design and offer programs which serve both the knowledge or conceptual base of the institution, but also the unique needs of adult learners.

The purpose for conducting this study was to first identify to what extent graduate students report exhibiting characteristics of adult learning theory, and second, to compare these characteristics based on current work environment. To fulfill this purpose, a random sample of graduate students in a college of education were identified in the areas of educational administration and higher education administration. These two academic disciplines were selected based on the diversity of work environments (elementary or secondary school focused on children and adolescents as compared to college and university administrators) as well as the ability to garner student participation.

Background of the Study

Nature of Graduate Study

The graduate school experience continues to be one of the predominant factors which sets American higher education among world leaders. Over 1.6 million graduate students study in American colleges and universities each year, including significant numbers of international students (United States Department of Education, 1993). This experience is determined to be unique for a host of reasons, including individualized attention, human and financial resources, access to academic holdings, and tradition.
The concept of tradition embedded in the graduate school experience has held a two-fold effect on graduate school training. First, this tradition allows for the perpetuation of an academic culture based in research methodology instruction as well as discipline specific learning. This factor alone guarantees those in the professorate the ability to maintain some degree of control over the future of academic labor markets, as well as maintaining control of the criteria for faculty preparation, hiring, and promotion.

The second effect the traditions of graduate school have had on the contemporary experience is that of what has been termed "academic hazing" (Kolstoe, 1975). This hazing ritual often includes less collaborative relationships with students and the continued abuses of graduate "assistants" or learners. Miller and Husmann (1993) identified such an experience in their personal observations, reporting such incidents as extensive personal work for their graduate advisors and general feelings of disappoint related to the prestige of earning their degrees.

Despite abuses such as these and others portrayed in the popular media, graduate-level instruction utilizes a variety of teaching methods. Although the lecture method has proven to be effective in conveying information-intensive subject matter in a time-efficient manner (Russell, Hendericson, & Herbert, 1984), graduate faculty often make use of seminars, individual study opportunities, and small group discussions. Additionally,
portfolio assessment methods have also become fashionable among graduate advisors (Newman & Miller, 1997).

Many graduate schools, consistent with their undergraduate colleagues, have employed a conceptual framework based on a scholar-practitioner model. These models, and derivatives of these models, contend that graduate education must have elements of practical application embedded in the larger curriculum and the overall experience. Such an instance bodes well for the inclusion of adult learning theory, yet little has been attempted to cross-fertilize the approaches of graduate education with adult learning.

Adult Learning in College

If graduate programs are to be successful, faculty must respond to students as changing adults. The abundant research on how adults learn and develop indicates that adults do learn differently than children, and that age does not hinder the ability to learn (Glickman, Gordon, & Ross-Gordon, 1995). Rather, as people age, they learn differently.

Intensive research into theories of adult development and theory has produced a rich knowledge base which Habermas (1970; 1971) has narrowed into three basic categories of knowledge acquisition: the technical, the practical, and the emancipatory. Mezirow (1981) described these domains as seminal to the foundation of adult education and learning. Mezirow suggested that adult educators implement curriculum that allows for student control (technical), communicative action (practical), and self-
reflection (emancipatory). The theory of perspective transformation (Mezirow, 1991) emphasizes the importance of the change process in adult learning. This theory calls for reflection in the aftermath of life-altering events and supports the notion of critical thinking as a means of development.

The theory of andragogy (Knowles, 1980) is one of the most recognized theories of adult learning. Presented as an adult alternative to the theory of pedagogy, the androgogical model is based on the characteristics of adult learners. Knwoles' four basic assumptions about adult learners posit that adults need to be self-directing and want to immediately apply knowledge, and that adults bring important experience to the classroom along with a desire to solve practical problems (Glickman, Gordon, & Ross-Gordon, 1995).

Brookfield (1986) combines the work of Knowles and Mezirow in his guidelines for the facilitation of adult learning. Central to Brookfield's principles is that facilitators are nurturing, encourage self-directing behaviors in students, ask for critical reflection, and approach the teaching process in a collaborative manner (Glickman, Gordon, & Ross-Gordon, 1995). Classrooms are characterized by mutual respect of teachers and students and a safe environment for practice and exploration.

The challenge for graduate and undergraduate faculty, then, is to continuously create an environment in which students are recognized for their professional achievement and experience. In order to meet the needs of adult learners, faculty must steer
away from the traditional lecture-note-test method of
transmitting information. Students are motivated to learn when
they are actively engaged in the process and the new knowledge
has immediate application to their personal and work lives.
Faculty improve the learning environment when students have the
opportunity to test new ideas, communicate with others, and
reflect.

**Research Design and Methods**

Based on the need to identify the appropriateness of adult
learning theory application to graduate instruction, a
researcher-developed survey instrument was created. The 12-item
instrument was based on the primary characteristics of adult
learning motivation, and included one categorical response
question related to self-identification of age group, and one
question requesting respondents to identify a personal rationale
for participating in adult education programs, such as graduate
study. Respondents were asked to rate their level of agreement
with the 10 items constituting adult learning characteristics
(see Table 1) utilizing a 1-to-5 Likert-type scale, with 1=Strong
Disagreement toward the item, 3=Neutral perceptions of the item,
and 5=Strong Agreement that the individual perceived themselves
as graduate students desiring the characteristic.

The sample of the study included graduate students in the
College of Education at The University of Alabama. As a
primarily exploratory study, doctoral level students from the
Educational Leadership Program and the Higher Education
Characteristics of Graduate Learners

Administration Program were identified for participation. The two fields of study were selected due to availability of individuals, as well as the diversity represented in the two graduate student bodies. The Educational Leadership Program enrolled individuals who had significant experience working in K-12 public schools, while the Higher Education Administration Program enrolled a variety of students with experience working on college and university campuses. Participation in the study was voluntary during the Winter of 1996-1997, and a total of 55 Educational Leadership students and 35 Higher Education Administration students were involved in data collection.

As a cautionary note, the relatively small samples sizes, while representative of the College of Education at The University of Alabama, reinforce the concept that the current study was exploratory, and serves a template for further study by both individual institutions and those studying adult and graduate education.

Findings

Of the total of 90 graduate students completing the survey questionnaire, 55 were majors in the Educational Leadership Program, a graduate experience intended on presenting both the theory and skills necessary for effective administration within the context of elementary and secondary education institutions. The remaining 35 participants were majors in the Higher Education Administration Program, an experience designed for those who work
in higher education institutions, adult education agencies, and community colleges.

Respondents were first asked to indicate their age by identifying which age group best represented them. The majority of respondents, 30%, were between 21-30 years old, followed closely by 28% who reported an age between 31-40, and 24% who reported an age between 41-50 (see Table 1).

The entire group agreed to strongly agreed with 8 of the 10 characteristics of adult learning, agreeing most strongly with the statement that adults may be impatient with courses and outlines that seem unrelated to their needs (see Table 2).

Educational Leadership graduate students agreed most strongly with the statement related to adult learning that adults may be impatient with courses and outlines that seem unrelated to their needs (mean rating 4.63). This statement was followed by adults respond positively to learning in which the information has some personal meaning (mean 4.49), and adults learn best when they are active participants in the learning process (mean 4.36). In comparison, the Higher Education Administration students agreed most strongly with the statements of adults have a great number of varied experiences upon which to add new information (mean 4.40), adults respond positively to learning in which the information has some personal meaning (mean 4.34), and adults see themselves as self-directed individuals capable of managing their own lives (mean 4.31).
An analysis of variance on these data, comparing the mean ratings of the statements based on academic major, revealed two differences. Educational Leadership students rated the statement adults may be impatient with courses and outlines that seem unrelated to their needs significantly higher than their Higher Education Administration peers (F-Prob .0001; alpha .05). These Educational Leadership students also rated significantly higher the statement that adults learn best when they are active participants in the learning process (F-Prob .0052; alpha .05).

Data were also stratified according to age, and an Analysis of Variance procedure identified a significant difference on the characteristic of adults need to consolidate what they have learned before going on to new concepts or skills. The difference was between the 41-50 year old and the 51-60 year old groups, where the 41-50 year old graduate students agreed more strongly (mean 3.81 as compared to mean 2.57, respectively, with F-Prob .0448) with the statement than their peers.

Discussion and Conclusions

The results of this exploratory study suggest several similarities and differences in the perceptions of higher education and educational leadership graduate students. As only two of the 10 characteristics of adult learning were noted to be significantly different according to academic discipline, there may be more of a similarity in mindset among students than faculty, administrators, or even students initially perceived. As fewer academic units support stand-alone departments, the
merger of educational administration and higher education programs may have a base of commonality in terms of student learning styles. The base may be simply reflective of adult learning, or may be an indication that graduate professional programs have and could make use of a similar base of instructional methodology.

A surprising result was the difference between the educational leadership and higher education students regarding their views on active learning. The educational leadership students, who perceived a greater need for active learning, are K-12 teachers preparing for principalships in public schools. The difference may simply be a reflection of the teachers' instructional style and recognition of their work to maintain the attention of young children and adolescent learners.

Another difference among the K-12 and higher education students is the indication that educational leadership students show a greater need for immediacy. Those in educational leadership "want it now" which is perhaps a reflection of their work environment. Their higher education peers, in contrast, may be more willing to respond at a slower pace in applying what they learn. This may identify a difference based on program function. For example, completion of the graduate program in educational leadership typically leads to the principalship or superintendent position, while those in higher education programs generally do not have an immediate career advancement upon completion of their degree.
The study also suggests that graduate students who are 51-60 years old may perceive a certain degree of self-empowerment without job-related pressure. The general perception is that older students are gaining a broad exposure to knowledge for personal efficacy rather than skill mastery for application to a professional career. This need for personal development is consistent with the notion that adults have an intrinsic need to evolve and grow.

This exploratory study provides a foundation for future research regarding the perceptions of graduate students on several levels. Additional information about the commonality of higher education and educational leadership graduate students could provide a template for implementing complimentary programs. Further research is necessary for understanding the difference in the graduate students' desire for classroom instruction that promotes active learning and immediate application. Graduate programs, such as master's level certification for principalship positions, may serve different student needs and goals. An exploration of age and gender issues may provide insight into the personal and professional goals of graduate students and how to best provide them with effective instruction.
References


Table 1
Respondents By Age and Discipline

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<th>Age</th>
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Missing data: 9
## Mean Ratings of Adult Learning Characteristics By Field of Study

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<tr>
<th>Characteristic</th>
<th>Ed Lead Mean (SD)</th>
<th>Hi Ed Ad Mean (SD)</th>
<th>Combined Mean (SD)</th>
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<tbody>
<tr>
<td>Adults see themselves as self-directed individuals capable of managing their own lives.</td>
<td>4.14 (.590)</td>
<td>4.31 (.582)</td>
<td>4.21 (.590)</td>
</tr>
<tr>
<td>Adults have a great number of varied experiences upon which to add new information.</td>
<td>4.34 (.551)</td>
<td>4.40 (.650)</td>
<td>4.36 (.589)</td>
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<tr>
<td>Adults benefit by relating what they are studying to what they know.</td>
<td>4.34 (.615)</td>
<td>4.25 (.741)</td>
<td>4.31 (.664)</td>
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<td>Adult learners tend to be more goal-oriented and feel the pressure of time more than traditional learners.</td>
<td>4.27 (.826)</td>
<td>4.17 (.706)</td>
<td>4.23 (.779)</td>
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<tr>
<td>Adults may be impatient with courses and outlines that seem unrelated to their needs.</td>
<td>4.63 (.729)</td>
<td>3.94 (.872)</td>
<td>4.36 (.853)</td>
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<td>Adults learn best when they are active participants in the learning process.</td>
<td>4.36 (.778)</td>
<td>3.88 (.758)</td>
<td>4.17 (.801)</td>
</tr>
<tr>
<td>Adults need feedback during the learning process.</td>
<td>4.29 (.685)</td>
<td>4.14 (.601)</td>
<td>4.23 (.654)</td>
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## Characteristics of Graduate Learners

### Table 2, continued

**Mean Ratings of Adult Learning Characteristics By Field of Study**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Ed Lead Mean (SD)</th>
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<th>Combined Mean (SD)</th>
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<tr>
<td>Adult learners need to apply their learning content</td>
<td>3.78 (.936)</td>
<td>3.68 (.758)</td>
<td>3.74 (.868)</td>
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<td>immediately to real-life situations.</td>
<td></td>
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<tr>
<td>Adults respond positively to learning in which the</td>
<td>4.49 (.634)</td>
<td>4.34 (.591)</td>
<td>4.43 (.619)</td>
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<td>information has some personal meaning for them.</td>
<td></td>
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<tr>
<td>Adults need to consolidate what they have learned before</td>
<td>3.56 (.957)</td>
<td>3.22 (1.08)</td>
<td>3.43 (1.01)</td>
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<td>going on to new concepts or skills.</td>
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