The University of Arkansas developed a distance education (DE) baccalaureate degree program in human resource development (HRD) that may serve as a model for developing DE at any level. The program, which was designed on the basis of a statewide needs assessment and competencies researched by the American Society for Training and Development, is unique from the standpoint of its use of support services. Support services have traditionally been viewed as separate from but supportive of technologically based cognitive and affective learning. In the new HRD program, support services have been defined in terms of factors that support socialization of learners and faculty. When the HRD program was developed, the following five components of effective DE programs were discussed from the standpoint of how their interaction could result in a synergistic and humanizing learning experience for adult learners: organizational philosophy; course content; learner characteristics; location of teachers and learners; and technology/media. After the discussions, instructors in the HRD program adjusted their instructional approaches to accommodate various levels of readiness to learn self-direction and the unique characteristics of adult learners. They also conducted orientation sessions, periodic site visits, and once-per-semester centralized meetings/learning activities with all participants. (Contains 14 references.) (MN)
Humanizing the Technological Learning Experience: The Role of Support Services as Socialization in a Human Resource Development Distance Education Program

Inadequate research and conceptual application has highlighted the importance of support services for learners and faculty in a distance education system in humanizing the technologically based learning experience for the learner. This conceptual paper explores the humanizing results of the interaction of support services as a socialization agent in a human resource development (HRD) distance education program at the University of Arkansas, Fayetteville, Arkansas.

Research and conceptual application has not highlighted the importance of support services in humanizing the technologically based learning experience for the learner. This conceptual paper explores the humanizing results of the interaction of support services as a socialization agent in a statewide human resource development (HRD) distance education program at the University of Arkansas, Fayetteville, Arkansas. Support services as a socialization agent including factors of organizational philosophy, content, learner characteristics, location, and technology require further conceptual application and research.

The paper begins with a description, initiatives, and technical issues of the undergraduate human resource development program followed by a discussion of the primary components of an effective distance education program. It is important to place socialization within a larger system rubric of effective distance education so that the role of support services can be better understood within a comprehensive learning system. Finally, support services are discussed as socialization agents or factors. Each socialization factor of organizational philosophy, course content, learner characteristics, teacher/student location, and technology is discussed followed by conclusions and implications.

Degree Program Description, Initiatives, and Technical Issues

The University of Arkansas based on a statewide needs assessment developed a baccalaureate degree program in human resource development. The curriculum was developed based on feedback from the needs assessment and competencies researched by the American Society for Training and Development (ASTD). The degree program is for working adults with several years of work experience at the senior level. Requiring 125 semester hours, the program allows students with work experience and/or prior work-related training and education to receive up to 33 credit hours for experiential learning through development of a portfolio. HRD courses and job-related internships provide the courses and practical application of skills required for degree completion on a two-year rotation. Students must meet 56 general education studies requirements, most of which can be taken in a two-year postsecondary setting such as a community college. The program, two cohorts of approximately 35 diverse students, is currently being offered via compressed video at eight sites throughout Arkansas. Two HRD courses are offered over a nine-week period each semester for five hours each on Friday evenings and Saturdays on a two-year rotation.
Studies have been conducted on a variety of degree programs containing similar elements. However, research addressing an undergraduate HRD program with the specific components of the program described above is limited. Many nontraditional degree programs have been studied, but none are similar to the present studies' focus on support services and how they interacted as a socialization agent in humanizing the learning experience for learners in the distance education HRD program.

Program initiatives included (a) provision of a baccalaureate degree program for underrepresented adult learners, (b) skill development in HRD competencies, (c) application of skills through internships, (d) provisions for considerable credit granted for work and prior training and education through development of a portfolio, and (e) cohort learning experiences through a technologically-based learning process. Initiatives (a) through (d) are being evaluated through a federal grant awarded to the University of Arkansas to evaluate the HRD program and will not be discussed in detail. Initiative (e) cohort learning experiences through a technologically based learning process requires development of a conceptual framework prior to evaluation.

Cohort groups enter and rotate together through the two-year program. This allows for a minimum of 90 contact hours per academic year. The actual number is closer to 100 hours. During these many hours learners are involved in administrative and course orientation, learner/instructor interactions, content-based group activities during class, and a centralized meeting where all learners have the opportunity to interact with other cohort members, instructors, staff, and support personnel.

Technical issues in development of the HRD program included site selection, distance education equipment availability and compatibility, and faculty-related issues such as experience with distance education.

The HRD program is offered at multiple sites throughout the State of Arkansas. These sites are geographically and culturally diverse. For example, the first cohort included learners from Northwest Arkansas, a predominately Caucasian population with a recent influx of Hispanics. Northwest Arkansas is currently one of the fastest growing geographic areas in the U.S., home of the University of Arkansas and of several Fortune 50 corporations. Cohort one also included learners located in the delta region of Arkansas. The delta is an agricultural-based region with a large African-American population generally underrepresented in higher education.

Site selection was influenced by identifying needs for the program coupled with University outreach initiatives. One of the initiatives was outreach to traditionally underrepresented populations such as ethnicity, age, gender, and socio-economic standing. The HRD program has been successful in helping to achieve many of these goals, especially in the delta region of the State. To date, the program is offered in eight sites throughout the State, including two in the delta region. The current sites are Fayetteville, Springdale, Helena, Blytheville, Hope, Harrison, Little Rock, and Fort Smith. There are plans to expand numbers of sites in several additional locations such as Pine Bluff.

Once sites were tentatively selected, each site was evaluated for equipment compatibility and room availability. Program administrators were assisted by the University's College of Education compressed video facilitator who contacted each site to ascertain compatibility and began discussions on scheduling between sites and the carrier (telephone company). The compressed video facilitator who also served as technical facilitator during course delivery handled all technical requirements and problems.

Participating faculty in the HRD program were content experts and many had prior experience with distance education. This experience helped to alleviate some anxiety and facilitated program start-up. However, prior to start-up some faculty were still concerned about technical assistance during course delivery. In response to these concerns, a decision was made to train graduate assistants to serve as technical aids during course delivery with the compressed video facilitator serving as primary technical support. The results of this approach were atypical to expectations in that as faculty became familiar with the equipment, they assumed more and more technical responsibilities. Also, with the exception of system start-up and major problem solving performed by the compressed video facilitator, faculty assumed primary responsibility for adequately manipulating the technology without jeopardizing instructional quality.

Components of an Effective Distance Education System

The system model is an effective tool that may be applied in the practice of distance education at any level. Each component, source, course design, technology/media, interaction, and learning environment is supportive of and
interacts with one another to supply the instructional link, interaction, unity and support between students and instructors. The systems model in Figure A, is adapted from a model by Greg Kearsley and Michael G. Moore (1996). The model's main characteristic is that it may begin at any point on the circle and is forever a continuous process.

Source:

The knowledge to be taught is provided by the program and it's content experts based upon the mission and philosophy of the organization. The learners may also be potential sources of knowledge based on their life experiences.

Design:

The course development is a product of designers/instructors and media specialists who have knowledge of instructional principles and the technologies that will be used to deliver them. The instructional designers work with the content experts to provide the assessments, course objectives, learner activities, media content, and evaluation and research. The media specialist works with the content experts and instructional designers for the creation of the instructional materials: text, graphics, audio, and video.

Technology/Media:

The communication and delivery of the course content between teachers and learners in distance education is through some form of technology. The type of technology to be used is based upon the learners needs, course content, design, media, availability, and cost considerations.

Interaction:

The types and degrees of interaction between teachers and learners vary according to the students needs, teaching philosophy of the organization, the course design, students location, and the type of technology used in the course (Moore & Kearsley, 1996). In addition to the instructional interaction, students also require interaction with supportive and administrative facilities.

Learning Environments:

With the types of technologies that are being used today, the delivery of a distance education course can take place in any type of environment: work, home, classroom, learning center, and traveling. Because of the technology and non-traditional classroom and learning environments, students may be required to adapt to changes in their learning techniques and study habits.

Determining Factors for Socialization in Distance Education

Support services have traditionally been viewed as separate from but supportive of technologically based cognitive and affective learning. On-going formative evaluation of the HRD program suggested that support services be defined in terms of factors that support socialization of learners and faculty. The factors of organizational philosophy, course content, learner characteristics, location of teacher/learner, and technology/media interacted to create a humanizing learning experience (see Figure B).

A common issue with distance learners is "their isolation and loneliness, given their physical separation from...students and instructors" (Eastmond, 1995, p.46). This isolation can lead to a de-humanizing learning experience.

Each of the five factors above is critical in socialization of learners into a new (technological) learning environment. "Insufficient socialization is a common criticism of distance education" (Verduin & Clark, 1991, p.100). Swartz (1997), suggested that mediated communication [distance education as an example] is communication separated by time and space and is thus limiting our ability to communicate.

Socialization is a complex process when applied to learning. According to Brezinka (1994), socialization is a process in which people become social as well as a process whereby they are made social. Socialization can be organizational,
occupational, cultural, or educational. In a formal learning context, socialization refers to the process by which new members learn the norms, values, and acceptable behaviors of the learning group that they are entering.

Socialization for learning includes the methods and behaviors the instructor or facilitator uses the technical learning processes employed, and the social interaction of learners. Researchers have differing views of socialization. Feldman (1981) and VanMaanen (1975) said socialization has three phases:

1. Anticipatory. All learning and learning experiences prior to entry into the new learning environment.
2. Individual and environment encounter. The point at which the norms, values, goals, and expectations of the individual and the learning environment meet and the socialization process happens.
3. Acquisition When individual learners change and acquire new relationships, values, and behaviors.

Each of these phases or steps in socialization was evidenced in the HRD distance education program and is used as the conceptual framework for the socialization aspect of the study.

The general conclusion of this research is that interaction of these factors determines the extent to which learners are socialized to learn and thus may have a tremendous impact on learner success in the HRD degree program. One of the primary assumptions of this study was that there is a causal relationship between socialization as interaction and adult learning. While some researchers advocate that socialization as the development of a social personality and education are separate constructs (Brezinka, 1994), many researchers (Knowles, 1984; Kember, 1995; Fingeret, 1983) recognize the importance of social interaction as a critical process in adult learning. Each of the five components or factors for socialization of learners in a distance education system are discussed followed by a brief discussion of the influence of the interaction of these components on learners in the undergraduate HRD program.

Organizational Philosophy The philosophy of the sponsoring organizations and the individual philosophies of primary members of organizations influence learner's socialization. In other words, what organizations symbolize through policies, rules, procedures, and financial commitments and the learning/educational philosophies of organizational members such as instructors and administrators affect to what extent learners are socialized into a technological learning system. For example, an organization that promotes distance education for nontraditional students located in several geographic locations yet maintains policies that require that all students attend freshmen orientation is not promoting learner socialization into the technological learning community.

Faculty that display andragogical teaching behaviors are more supportive, facilitative, and empathetic especially to adult learner needs and concerns. An andragogical instructor philosophy tends to support socialization of adult learners (Knowles, 1984). Because the department in which the HRD program resides is Vocational and Adult Education, many faculty in the HRD program have terminal degrees in, believe in, and exhibit adult learning/andragogical principles. Additionally, Dr. Malcolm Knowles served as an adjunct faculty in the department for several years until his retirement from academia. His influence is evidenced in many HRD courses through the use of learning contracts and other methods to stimulate self-directed learning.

Although learners eventually become part of the learning process and system when instructors' learning philosophies are andragogical, many learners are not prepared to readily accept responsibility for their own learning. Instructors in the HRD program adjusted instructional approaches to accommodate various levels of readiness of learning self-direction. For example, one site required content remediation on several occasions. This was accomplished by an additional site visit and extra discussions during breaks and after regular class times. The instructor observed that students at this particular site were less vocal when using the technology than "in person." One possible conclusion may be that these students were more intimidated by an andragogical, self-directed approach to learning than to a more traditional pedagogic instructional approach. Thus, learners became socialized to varying degrees into the technological learning process.

Course Content In many ways course content affects learner socialization. Human resource development as an area of study requires learners to experience topics such as individual and organizational communication, team development, analysis, performance improvement techniques, and interpersonal skills development to name a few. Student and faculty interaction required during class activities in support of these and other related topics enhance interaction, changes in behaviors, and often times changes in values and beliefs.
Formative evaluations of the HRD program revealed that learners' beliefs and values were affected by the course content. For example, both formal and informal evaluation and observations of course participants revealed that at the beginning of the program many learners did not appreciate or value the HRD profession. Many participants were attending simply to "get a degree." Later in the program, learners began to comprehend the extent of the content of effective HRD in organizations. On several occasions the researcher as instructor in the HRD program observed conversations, especially during discussions of case studies, concerning how learners had changed their attitudes towards HRD and that they could now appreciate what the HRD professionals in their organizations did or did not do and how they could transfer learning from a HRD context to their specific work context.

**Learner Characteristics** Learners differ in their attitudes toward learning and in the way they respond to different learning environments and methods. Individual characteristics are: prior learning and life experiences, age, ethnicity (cultural viewpoints), gender, motivation (values, attitudes, expectations), and family/work support.

Adults bring with them to the learning environment prior learning and life experiences that have either a positive or negative consequence on their learning. "The resource of highest value in adult education is the learner's experience" (Knowles, 1984, p. 29). For example, negative experiences from a secondary school environment may cause a negative attitude toward adult education, especially technologically based education. An abusive home life or other negative life experiences can have a detrimental affect on an individual's ability to learn.

As adults age several physical attributes that affect their ability to learn begin to change. Changes in eyesight and hearing are the two most common senses that can impact adult learning. In compressed video learning environments, the emphasis in learning styles is primarily on visual learning with auditory a close second. Thus, visual and auditory learners are affected when their eyesight and hearing begins to weaken, especially in a compressed video learning environment.

Ethnicity (culture) and gender may play a role in learning in that traditionally underrepresented groups may have fewer experiences required to be successful in a technological learning environment that requires self direction and motivation. Traditional adult learners are young white males, well educated, and white-collar workers (Brookfield, 1986). Learners from traditionally underrepresented groups may be at a disadvantage when encountering a compressed video learning environment. Cultural viewpoints affect situated learning (Rescind, Leaven, & Teasel, 1991). Learning that is shared through social interaction and shared cultural viewpoints may have an advantage over other more traditional learning concepts. Many questions remain concerning socially shared learning concepts and technologically based learning environments. For example, questions such as "to what extent does a virtual learning environment affect group or culturally-shared learning?" require research and conceptual framework development.

Motivation (values, attitudes, needs, expectations) of adult learners to learn is closely linked to each of the characteristics listed here. For example, individuals from underrepresented groups may have negative attitudes toward education and thus be less motivated to learn. Positive past experiences with education cause higher expectations and may affect values. Both intrinsic and extrinsic motivations are involved in adult learning (Kember, 1989; Knowles, 1984).

Non-traditional educational programs, especially those offered over a compressed video system in the evenings and on weekends require additional support for the learner. Family and work supports are critical to learner success, especially in non-traditional program offerings. Time away from family and work by learners is required in many adult education programs. Class time, project work, and homework assignments require many learner hours that might otherwise be spent on family activities or work requirements. Pressures placed on learners by family or work members may adversely affect their success in an adult education program (Knowles, 1984). Conversely, family and work support can serve as a catalyst in learner success.

Learner characteristics play an important role in learner success in adult education programs. Each characteristic alone may not be critical to learner success, however, characteristics tend to be cumulative in their affect on adult learners. For example, an older learner from a traditionally underrepresented group that has little family support is at a significant disadvantage when faced with a new learning environment such as compressed video or other non-traditional learning environment.
Distance education implies a separation of learner and instructor (Keegan, 1990). Distance education systems address participant communication in many ways. Systems include one-way communication where the learners can hear and see the instructor and the instructor can see one site and hear all others by choosing a site; two-way communication where instructors and chosen learners can see and hear one another; and multi-communication where all sites can see and hear all other sites simultaneously. Each of these technical systems provides varying levels of "virtual" communication (human communication separated by time and space). Separating learners and instructors through mediated learning poses interesting problems around social learning, shared cognition, and the role of physical presence in learning.

The inability of participants (learners and instructors) to be in physical proximity with each other is a continuing issue with distance education systems. The "loneliness of the long distance learner" (Eastmond, 1995, p.46), has an influence on learner success in distance education. Swartz (1997) suggested that learner’s social interactions were facilitated when they could be in personal contact. Learners need a sense of belonging that is possible only through a "collective affiliation" (Kember, 1995) that requires communication through shared language, nonverbal cues, and "real-time" visual access. Additionally, socially shared cognition may be impacted by the use of electronically based learning environments. The fact that learners are not communicating verbally or nonverbal in the exact same time and space influences their ability to share socially constructed learning as well as interpret nonverbal clues that may be culture-specific. Physical distance between learners decreases interpretation of nonverbal signals (Swartz, 1997).

Neither socialization nor learning can effectively happen in a "virtual" learning environment without curricular revision and on-going evaluation. Adult educators and developers of andragogical adult learning environments that use technology-based educational systems, for whatever reasons, are compensating for the technology. In other words, the technology does not enhance the adult learning experience, so instructors and facilitators must devise methods to overcome the obstacles associated with educational technology that is generally designed from a pedagogical paradigm.

To address a few of these socialization/learning issues, the following activities were implemented as integral components of the HRD program: (a) an orientation session given first class period in each semester to all sites from a single primary site with both instructors, (b) planned, periodic site visits by each faculty to each learning site, and (c) a centralized meeting/learning activity held each semester with all participants. Each of these characteristics is briefly discussed:

An orientation session is given on the first class period for each new cohort group. The session originates from a single primary site with all HRD instructors attending. The orientation session is delivered to all sites in a specific cohort. The session agenda consist of introductions of students, faculty, and support personnel, a review of course syllabi (deliverables and requirements), and a review/exercise in technology expectations and use. The technology use activity includes having learners interface with the interactive video equipment and familiarization with specific idiosyncrasies of the system such as how to avoid "stepping on" speakers (not waiting on the signal to be sent before interrupting a speaker), and protocol during equipment down-time.

Each instructor in the HRD program schedules site visits. Site visits generally consist of three activities: 1. Informal meetings with learners prior to or after class meeting, 2. Formal consultation sessions with groups at a time other than class time, and 3. Formal class meetings and related content-based activities.

The informal meetings with learners provide opportunities for socialization and social interaction/dialogue important to socially shared cognition and instructor-student socialization. Limitations to informal meetings include time constraints, limited accessibility for all learners, and the influence of individual learner characteristics and personalities.

Formal meetings/sessions are held with an entire site group. These sessions consists primarily of facilitation of course-content or program-specific requirements such as examination reviews and internships or portfolio guidance or consultation.

Formal class meetings originate from each site a minimum of once per semester. Instructors teach a class from each site. This allows for site groups to interact with the instructor and receive nonverbal feedback in "real time." Evaluations revealed that learners felt closer to the instructor and the program after the site visits.

Formative evaluations and informal instructor observations and discussions revealed that learners considered the centralized learning activity as an important and integral part of their social learning. The following is a detailed discussion of the centralized activity:

A weekend centralized meeting/learning activity includes all program participants, i.e., all cohort learners from all
cohort groups, instructors, staff, and support personnel such as graduate assistants. Based on survey responses from a survey completed by participants at the end of the centralized meeting, the most beneficial socialization-related interactive aspect of the HRD program is the weekend centralized meeting. This meeting is held approximately mid-semester in a central location in Arkansas (held for the past two years in North Little Rock). The location is also one of the eight delivery sites.

The weekend meeting is divided into two general categories: (a) orientation and program components/initiatives, and (b) course content-related activities. Orientation consists of ice-breakers and games for learners to get to know one another and affectively prepare them for learning activities, and informal open-session discussions around concerns, expectations, and how learners are adapting to the program. After orientation and icebreakers, separate sessions are conducted on program components of advising, internships, and portfolio development.

During orientation the instructors formally and informally participate with learners by serving as facilitators and by participating in icebreakers or games. This interaction allows all learners to socialize with instructors in close physical proximity. Additionally, learners have the opportunity to socialize with learners from different cohort groups. These activities are especially pertinent for learners that have been "virtually" socialized, i.e., socialized using the teleconference system, with no opportunity to be physically together. Feedback from learners indicates that the socialization activities between students and faculty and between students are the highest rated of all activities during the weekend session.

It is interesting to note that by the end of the weekend, learners have begun to acquire "new relationships and new values and models of behavior" (Feldman, 1981, p.315). Each of the three phases of socialization discussed above was in evidence to a limited degree. The anticipatory phase was evidenced through learners sharing of past learning experiences with each other. Individual and environment encounters where the norms, values, goals, and expectations of individual learners and the learning environment established by the program leaders was observed through discussions between students and faculty concerning the weekends' format, the learning environment, and how learners might change or improve the sessions. Finally, the third phase of acquisition when individual learners change and acquire new relationships, values, and behaviors was evidenced through the increase in informal conversations between cohort groups and sites and the increase in informal networking through exchanges of email address and telephone numbers between learners from different sites and cohorts. Additionally, learners supported their appreciation of the weekend session through verbal agreements and nonverbal cues.

Each of these phases or steps in socialization was evidenced in the HRD distance education program and is used as the conceptual framework for the socialization aspect of the study. This was evidenced through observations of increased frequency and duration of interaction between individuals from different sites and from different cohort groups. Additionally, interactions between students and faculty increased and through observations of nonverbal cues took on a more "informal" appearance. Learners remarked that before the centralized meeting they were unsure of their ability to complete the program but that after talking with other students and faculty members they felt better about the program and about themselves.

Technology/Media Technology such as the compressed video system and electronic media such as web pages, instructional software, and email are discussed.

The primary compressed video equipment used for the HRD program is manufactured by V-TEL, a widely used compressed video system in higher education. System interfaces and components include a touch pad controller for audio-visual controls and system controls, a PC and keyboard interface, and a mouse. Ancillary equipment includes a videocassette player/recorder (VCR), and an "elmo", and instrument similar to an overhead transparency projector. Each site has two color monitors, varied microphone configurations, and at least one camera. Sites have similar support equipment such as VCR's and "elmos."

The Telephone Company with the exception of one site that is transferred through an ISDN line links sites through T1 lines. Each site has a designated technician responsible for technical hook-up and trouble shooting when technical problems arise. Several learners have learned to use the technology and serve as part-time technicians.
Component Interactions Each of the five components or factors for socialization of learners in a distance education system were briefly discussed. Taken separately each of the factors should be considered important for adult learners' success in a mediated learning environment. It should be understood however that viewed separately these factors might not have a critical or long-term influence on learners. However, based on observations in the HRD program the interaction of these five factors tends to provide a holistic, almost synergistic change process for adult learners. Generally speaking, the factors of organizational philosophy, course content, learner characteristics, location of teacher/learner, and technology/media interacted to create a more humanizing learning experience for learners than if these components had been absent from the learning.

Conclusions and Implications

Models help to clarify an original concept. The models depicted and discussed herein were developed based on field experiences to enhance the effectiveness and humanity of an adult learning program within an institute of higher education. Nothing discussed here should be considered an original model or concept. The models used are a synthesisization of several existing, original concepts in an effort to improve distance education programs for adults.

Each of the five components of an effective distance education system (Figure A), program, course design, technology, interaction, and the learning environment, served as a foundation for the discussion of the five components or factors for socialization of learners in a distance education system. Each of the components was discussed followed by a discussion of the interaction of the components. It was recommended that taken separately each of the factors should be considered important for adult learners' success in a mediated learning environment and that based on observations in the HRD program the interaction of factors provided a synergistic and humane learning process for adult learners.

Adult educators and others involved in technologically based education for adults can use the information discussed and recommendations made herein to improve the humanity of distance education processes for adults. A primary implication of this conceptual approach is that the emphasis in any adult education distance program should not be on any one component or factor, but on integrating many factors. Integration of methods and factors that have histories of success in other learning environments should be experimented with in each learning environment and with each different group of learners. What works well with one group may not work at all with another.

It is incumbent upon adult educators and administrators of distance education programs for adults to address the issues discussed here and to adjust existing programs to include a more holistic approach to distance education; Approaches that include all the "buzzers and whistles" necessary to deliver a program and to appease "technophiles" and administrators enamored with technology, coupled with a sound understanding of andragogy and the fact that humans seek learning that involves the whole person - feelings and intellect (Knowles, 1984) in a social environment that honors the human spirit.

References


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