

HRD University Curricula in a World of E-learning—A Primary Comparative Study and Review of Barriers and Solutions

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HRD university curricula from seven online Master's degree programs are compared with their on-campus counterparts. With the exception of one university that does not provide a similar Master's degree program on-campus, curricula are identical in three universities, while curricula in three other universities differ in only one or two courses. A review and discussion of barriers and solutions for online HRD programs provides information for institutions that intend to offer HRD degrees online.

Keywords: HRD Online Degree, Distance Education, E-learning

Technology, the leading force in the Information Age, is transforming education around the world with the concept of e-learning. Along with other disciplines, Human Resource Development (HRD) curricula go beyond traditional classroom settings to offer online instruction to university students. As e-learning participants, HRD university programs appear to be thriving and expanding their courses and degree curricula.

From an online (Google) search, *curricula* is defined as “a program of study offered at a college or university,” a definition Kuchinke (2002) used to investigate the characteristics of HRD university curricula. The term *e-learning* covers a wide variety of applications and processes. This paper uses Hambrecht's (2000) broad definition of e-learning as “the delivery of content via all electronic media, including the Internet, intranets, extranets, satellite broadcast, audio/video tape, interactive TV, and CD-ROM” (p. 8), including online learning, computer-based learning, web-based learning, distance education, virtual classrooms, and digital collaboration.

Currently, e-learning is one of the fastest growing and most promising delivery systems in education. Reports indicate that major online universities such as Walden University, Capella University, and the University of Phoenix have experienced an enrollment explosion. Walden University had 2,000 students enrolled in online courses two years ago; the current enrollment is 20,493. Capella University had 6,380 students in 2002; the number increased to 14,600 in 2005. The nation's largest online college, the University of Phoenix, currently enrolls 300,000 students. The popularity of online degree education has also gained Congressional attention and support. Students can now qualify for federal financial aid without attending classes on a physical campus (Walsh, 2006). Currently, several US universities offer both online and on-campus Master's degree programs in HRD.

Sora (2001) referred to e-learning as a force for profit and efficiency in the context of the traditional university. Research has shown that e-learning is as effective as traditional classroom learning when measured in terms of student grades that indicate targeted knowledge content (Johnson, et al., 2002), and has the advantages of flexibility for the individual students' time and learning pace, and reduced cost. E-learning also provides HRD professionals with alternative intervention techniques, such as technology-based training and other learning opportunities.

Current e-learning studies mostly focus on general concepts in online university programs; only a few have systematically examined HRD online programs (*HRE Online Research Projects*, 2006). There is growing interest in online HRD programs (Leneer & Johnson, 2002), and seven HRD Master's degree programs are identified to deliver entirely online. In addition, HRD online university curricula are limited to Master's degrees; an extensive online (Google) search found no HRD online Ph.D. programs in the US. Therefore, this study focuses on universities that offer Master's degree programs in HRD that are delivered entirely online.

Online documentation on curricula in seven university HRD Master's programs indicates that six of the seven universities offer identical or similar on-campus programs. A comparison of the online and on-campus curricula examined differences between the two instruction delivery methods, and suggested solutions to basic concerns.

Problem Statement and Research Questions

As with other disciplines, HRD practitioners and professionals recognize the importance of utilizing internet teaching and learning technologies if their institutions are to survive the effects of globalization (Marquardt & Berger, 2003; McLean, 2001). They have adopted internet technology to the extent that it is common for traditional, classroom-based HRD courses to integrate at least some e-learning technology such as WebCT, email, and instant

message communication (Lenear & Johnson, 2002). Technological tools in the classroom are being used to an increasing extent to enhance effective teaching and learning. Even though such tools are used regularly by teachers and students in their daily lives, such use is still a change from an on-campus classroom-based setting. Surprisingly, only a few articles examine how university curricula transition from traditional on-campus classroom settings to online settings. The presentation of HRD curricula in the two settings suggests important information at the same time as it considers major challenges during transition. In order to provide greater access for learners to study HRD programs, this study will investigate the transition from on-campus to online course work, and provide HRD professionals information about the feasibility of on-line programs. Therefore, this paper seeks answers to the following research question:

1. *What differences exist in curricula between online and on-campus Master's degree programs in HRD?*
2. *What are the major barriers to transferring HRD curricula from on-campus to online instruction?*
3. *What solutions overcome transfer barriers of HRD curricula from on-campus to online instruction?*

Method

The methodology used in this paper included an extensive Google search to locate universities that offered HRD degrees online. The author also reviewed literature from four Academy of Human Resource Development (AHRD) journals: *Advances in Developing Human Resources*, *HRD Review*, *HRD International*, and *HRD Quarterly*. Further, the *AHRD International Conference Proceedings* also provided up-to-date research. After identifying seven universities that offer HRD online Master's degrees in the US, further keyword searches of the selected universities located additional pertinent studies on issues for those online programs. In addition to keywords from specific universities, *e-learning barriers*, *e-learning solutions*, and *distance education* were also used to search for articles.

Theoretical Framework

This section is not intended to be comprehensive. Rather, it offers basic information about possible challenges when traditional curricula go online. The conceptual framework for the research question is to determine if HRD curricula should be exactly the same whether the delivery methods is online or face-to-face.

Kuchinke et al. (2001) stated that designing courses for online instruction does not consist of simply translating course content—including lectures, overhead slides, and exams—into online application format and posting it on the web. Poor quality instruction in both settings, on-campus and online, is not only ineffective, but also deprives the learners of the opportunity to engage in the many learning opportunities that e-learning technology offers. Therefore, when transferring HRD curricula online, universities should first consider the nature of teaching and learning face-to-face versus online in order to offer knowledge most appropriate for online delivery and make any necessary content modifications. If HRD university curricula show little or no difference between online and on-campus instruction, online curricula would have overcome many barriers in the transition process from on-campus to online curricula. However, face-to-face instructional settings have been criticized for encouraging passive learning, and ignoring learners' individual differences and needs (Johnson et al., 2000). Transferring the content from face-to-face to online delivery is also questioned by educators who do not feel that online education will solve difficult teaching and passive learning problems.

In addition, Bower (2001) indicated that university faculty specifically expressed concerns about resisting participation in the latest wave of online instruction. The concerns include adequacy of institutional support, change in interpersonal relations with students, and quality of online instruction, which mainly implements the concept of student-centered education. In order to cope with the shift from instructor-centered to student-centered learning, both students and instructors face many challenges. Besides, research emphasized the importance of accommodating different student learning styles (Cotton & Gresty, 2006); too often students have little choice in what, how, or when to learn. When content is meaningless to students, when they are taught as if they were passive recipients of knowledge, or when they have little involvement in online instructional tasks, students will have little incentive to construct their own knowledge and little motivation to retain information or transfer its use to other situations.

Current e-learning technology provides potential opportunities for instructors to utilize various methods to recognize interdisciplinary needs in education and to provide environments that reward collaborative efforts. Having the conceptual framework of learner and instructor profiles in traditional classroom and online settings will provide a baseline for examining the differences between online and on-campus HRD university curricula. It will also help researchers discuss various findings.

Results and Findings

Research Question 1: What differences exist in curricula between online and on-campus Master's degree programs in HRD?

Although HRD Master's degrees can be earned online, most curricula are the same as on-campus program curricula (see Table 1), so students will not have different contexts or take different courses if they choose online programs. Kuchinke et al. (2001) asserted that if the HRD online program at the University of Illinois (UI) was to be as rigorous as the on-campus program, it must mirror content, structure, and requirements of the on-campus program.

Table 1. *Universities Offering HRD Online Master's Degrees and Comparison of Online and On-campus Curricula*

University / Degree	Online Curriculum	On-campus Curriculum
Colorado State University Master of Education in Education and Human Resource Studies	ED 600: Introduction to Research Methods VE 500: Career and Employment Concepts VE 506: Human Resource Development VE 601: Philosophy/Organization of Workforce Education VE 665: HRD Consultation & Analysis of Organizations VE 667: Power, Politics & Influence in Organizations VE 668: Learning Transfer VE 669: Performance Management VE 670: Strategic Human Resource Development VE 671: Performance Consulting and Causal Analysis VE 698: Research 2 Elective Courses (Colorado State University - Division of Continuing Education, n.d.)	VE601: Philosophy/Organization of Workforce Education ED602: Action Research VE500: Career and Employment Concepts VE506: Human Resource Development VE665: HRD Consultation & Analysis of Organizations VE667: Power, Politics, and Influence in Organizations VE668: Learning Transfer VE669: Performance Management VE670: Strategic HRD VE698: Research 2 Elective Courses (Colorado State University - School of Education, n.d.)
Differences: Only one research course is different. The online curriculum requires taking <i>Introduction to Research Methods</i> while the on-campus curriculum requires taking <i>Action Research</i>. The online curriculum also requires one more course than the on-campus curriculum: <i>Performance Consulting and Causal Analysis</i>.		
Indiana State University Master of Science in Human Resource Development	ITE 605: Developing Performance-Based Occupational Curriculum ITE 656: Int. and Cross Cultural Teaching ITE 659: Occupational Internship ITE 670: Systematic Design of HRD Programs ITE 675: Leadership of Human Resources in Education and Training ITE 695: Rationale and Evaluation of HRD Programs ITE 698: Research Methods in Industrial Technology Education Option A: ITE 685: Major Project plus electives Option B: ITE 699: Master's Thesis plus electives (Indiana State University - Distance Education, n.d.)	ITE 605: Developing Performance-Based Occupational Curriculum ITE 656: Int. and Cross Cultural Teaching ITE 659: Occupational Internship ITE 670: Systematic Design of HRD Programs ITE 675: Leadership of Human Resources in Education and Training ITE 695: Rationale and Evaluation of HRD Programs ITE 698: Research Methods in Industrial Technology Education Option A: ITE 685: Major Project plus electives Option B: ITE 699: Master's Thesis plus electives (Indiana State University - Industrial Technology Education, n.d.)
Differences: Curricula are identical.		
North Carolina State University Master of Education in Training and Development	EAC 759: The Adult Learner EAC 580: Designing Instructional Systems EAC 582: Org. & Operation of T&D Programs EAC 586: Methods and Techniques of T & D EAC 581: Advanced Instructional Design EAC 583: Needs Assessment & Task Analysis EAC 584: Evaluating Training Transfer & Effectiveness EAC 585 Integrating Tech into Training Design EAC 595j: Ethics in the Workplace & Ed. EAC 595d Change Process: Theory and Practice EAC 551: Introduction to Research in ACCE EAC 692: Research Project (North Carolina State University - Training and Development Online, n.d.)	The Master of Education in Training and Development is not offered.
Differences: The Master of Education in Training and Development degree is only available online.		

Texas A & M University	<p>EHRD 601: Foundations of HRD EHRD 681: Seminar Elect 3 out of the following 4 courses— EHRD 612: Training & Development in HRD EHRD 613: Career Development in HRD EHRD 621: Communication in HRD EHRD 625: OD & Performance in HRD EHRD 630: Adult Learning OR AGED 610: Principles of Adult Education EHRD 627: Research & Development in HRD OR EHRD 628: Research & Publishing in HRD EHRD 690: Theory of EHRD Research-STAT I OR STAT 651 Statistics in Research I 5 More Elective Courses (Texas A&M University - Distance Education, n.d.)</p>	<p>EHRD 601: Foundations of HRD EHRD 681: Seminar Elect 3 out of the following 4 courses— EHRD 612: Training & Development in HRD EHRD 613: Career Development in HRD EHRD 621: Communication in HRD EHRD 625: OD & Performance in HRD EHRD 630: Adult Learning OR AGED 610: Principles of Adult Education EHRD 627: Research & Development in HRD OR EHRD 628: Research & Publishing in HRD EHRD 690: Theory of EHRD Research-STAT I OR STAT 651 Statistics in Research I 5 More Elective Courses (Texas A&M University, n.d.)</p>
Differences: Curricula are identical.		
University of Illinois at Urbana-Champaign	<p>HRE 400: Principles of Human Resource Education HRE 411: Instructional Design HRE 472: Learning Technologies HRE 530: Organization Development EPSY 407: Adult Learning and Development HRE 585: Program Evaluation HRE 532: Strategic Human Resource Development EPS 500: History of Work and Educational Policy HRE 536: International Human Resource Development (University of Illinois at Urbana-Champaign - HRE Online, n.d.)</p>	<p>HRE 400: Principles of Human Resource Education HRE 411: Instructional Design HRE 472: Learning Technologies HRE 530: Organization Development HRE 585: Program Evaluation EPS 415: Information Technology Ethics EPSY 407: Adult Learning and Development OR EPSY 408: Learning and Human Development with Educational Technologies HRE 412: Instructional Techniques OR HRE 490: Advanced Facilitation Skills for HRD Professionals HRE 532: Strategic HRD OR HRE 535: Consulting in HRD OR HRE 536: International HRD (University of Illinois at Urbana-Champaign – HRE, n.d.)</p>
Differences: Only one online course is different from the on-campus course. The online curriculum requires <i>History of Work and Educational Policy</i> while the on-campus curriculum requires <i>Instructional Techniques or Advanced Facilitation Skills for HRD Professionals</i>.		
University of Louisville	<p>ELFH 600: Intro. to Research and Statistics ELFH 616: Internship and Portfolio Seminar OR ELFH 699 Thesis ELFH 605 Leading Training and Performance ELFH 614 Planning and Evaluation ELFH 606 Program Evaluation ELFH 662 Organizational Analysis ELFH 664 Facilitating Change in Organizations ELFH 672 Instruct. Design and Development ELFH 611 Intro. to Performance Improvement 3 More Elective Courses (University of Louisville - Department of Leadership, Foundations and Human Resource Education, n.d.)</p>	<p>ELFH 600: Intro. to Research and Statistics ELFH 616: Internship and Portfolio Seminar OR ELFH 699 Thesis ELFH 605 Leading Training and Performance ELFH 614 Planning and Evaluation ELFH 606 Program Evaluation ELFH 662 Organizational Analysis ELFH 664 Facilitating Change in Organizations ELFH 672 Instructional Design and Development ELFH 611 Intro. to Performance Improvement 3 More Elective Courses (University of Louisville, n.d.)</p>
Master of Science in Human Resource Education	Differences: Curricula are identical.	

University of Texas at Tyler Master of Science in Human Resource Development	TECH 5301: History and Philosophy of HRD/Technology GENB 5321/MBAO 6331: Research Methods Elect 6 out of the following 7 courses TECH 5320: Total Quality Management TECH 5331: Project Management HRD 5332: Instruct. Design and Assessment HRD 5333: Human Relations HRD 5336: Adult Learning HRD 5343: Foundations of HRD MANA 5350/MBAO 6371: HRM Elect 4 out of the following 6 courses CIS 5394/MBAO 6332: Info. Sys. for Managers MATH 6301/KINO 6370: Intro. to Statistics MANA 6330/MBAO 6313: Management HRD 5327: Instructional Delivery HRD 5313: Management of Instruct. Environment HRD 5331: Workforce Development (University of Texas at Tyler – TeleCampus, n.d.)	TECH 5301: History and Phil. of HRD/Tech TECH 5303: Research in HRD/Tech TECH 5305: Foundations of HRD TECH 5328: Leadership & Ethics in HRD HRD 5336: Adult Learning Theory HRD 5384: Change, Diversity, Conflict Res. HRD 5331: Workforce Development BUS 5350: Human Resource Mgmt. TECH 5331: Project Mgmt. TECH 5320: TQM HRD 5333: Human Relations HRD 5327: Instructional Design (University of Texas at Tyler - Human Resource Development & Technology, n.d.)
Differences: Only one research course is different. The online curriculum requires taking <i>Research Methods</i> while the on-campus curriculum requires <i>Research in HRD/Tech</i>. Although the online curriculum provides several elective classes, it is still limited compared to on-campus elective classes.		

In this comparison of seven online Master’s degree programs with their on-campus counterparts, the curricula are identical in three universities—Indiana State University, Texas A & M University, and the University of Louisville—while the curricula in three other universities—Colorado State University, the University of Illinois at Urbana-Champaign, and the University of Texas at Tyler—differ in only one or two courses. North Carolina State University does not provide an on-campus Master’s degree similar to its online program.

Research Question 2: What are the major barriers to transferring HRD curricula from on-campus to online instruction?

The comparisons show that most HRD university curricula are similar, with differences in only one or two courses. Those differences, however, are important to note. For example, in Colorado State University, the online curriculum requires “Introduction to Research Methods” instead of “Action Research.” This might limit the ability of e-learning to demonstrate complexity in some subjects, so those courses are not offered online. Further, since both online and on-campus programs deliver quality courses through different interfaces, it is reasonable to assume that there are barriers to making the transition from on-campus to online instruction.

Since online and on-campus HRD curricula are nearly the same, researchers noted barriers to transitioning from classroom to online instruction. Muilenburg and Berge (2005) investigated major barriers to students learning online (see Table 2). The four most important barriers to students learning online were a lack of social interaction, administrative and instructor issues, time and support for studies, and learner motivation.

Table 2. *Four Major Barriers to Students Learning Online*

Lack of Social Interaction	Administrative and Instructor Issues
-Lack of interaction/communication among students -Impersonal feeling of online learning -Fear of feeling isolated -Lack of social context cues -Lack of student collaboration -Preference for learning in person	-Lack of sufficient academic advisors online -Course materials not always delivered on time -Instructors do not know how to teach online -Lack of clear expectations/instructions -Difficulty contacting academic or administrative staff -Lack of timely feedback from instructor
Time and Support for Studies	Learner Motivation
-Fear family life will be disrupted -Online learning cutting into personal time -Lack of support from family, friends, employer -Significant interruptions during study or home/work	-Tendency to procrastinate or get started -Lack of personal motivation for online learning -More responsibility for learning -Easier, less demanding aspects of assignments -Lack of motivation in online learning environment

Johnson et al. (1999) concluded that several critical issues affected development and implementation of HRD online programs at UI. The issues considered most critical included (a) technology resources used in online programs, (b) knowledge and skills needed to participate in online programs, (c) training issues that needed to be addressed by program developers, and (d) types of technical support that should be provided (p. 436). Johnson and Wentling (1999) identified several program management issues at UI:

- Leadership and staffing for development of courses; including faculty leader, visiting faculty coordinator, team of graduate assistants, and web technology group for academic outreach
- Faculty involvement; including regular and adjunct faculty for whom the assignment is part of regular faculty load, and one lead and one support faculty for each course with a teaching assistant as support
- Relationship of program to department curriculum: the new online program is an extension of the Master's curriculum to a new audience; one program in a large portfolio that is treated like other programs
- Relationships with other departments to provide quality instruction to online students
- Financial issues; including use of online and department funds for development, academic outreach, tuition rate, on-load faculty involvement, pay for specialized technology support, and potential for sustainability

Research Question 3: What solutions overcome transfer barriers of HRD curricula from on-campus to online instruction?

Researches provided practical experience to resolve barrier issues, including some used in HRD online programs (HRE Online Research Projects, 2006):

1. *Barrier 1: Lack of social interaction.* Incorporating social presence into courses might promote better learning (Reio & Crim, 2006; Stone & Chapman, 2006). UI provides a synchronous hour—held weekly with participation by all students and led by the instructor—that is a key event during each course and most closely imitates a traditional classroom environment (Kuchinke et al., 2001). During the synchronous hour, the instructor uses a microphone to communicate with students, who respond by typing and posting their responses or questions in real time to an electronic bulletin board, which is an easier and more effective method than face-to-face team building and interaction (McLean, 2006). In addition, active and collaborative interaction is recommended (Johnson & Aragon, 2002). Each course is designed with both individual and group-based activities for students to solve problems, analyze cases, and develop group deliverables. Another effective strategy is to apply peer review and feedback from fellow students, which is as important as instructor feedback. Some students consider online learning impersonal, and Calvin (2006) indicated that self-regulated learning skills are related to e-learning satisfaction to a significant level. This idea can be used to prescreen applicants for online programs and reduce students' negative feelings.
2. *Barrier 2: Time and support for students.* UI provides potential students extensive individual counseling to determine whether online course delivery is right for them. To succeed in the pure e-learning environment, students need help to make the right decisions (Kuchinke et al., 2001).
3. *Barrier 3: Student motivation.* Faculty should (a) restrict online degree programs to Master's students and exclude undergraduates since graduate students might be more likely to possess the required study skills and levels of self-direction; (b) address issues of time management, scheduling, balance between work/home life, and describe the time required for the course in the introductory session, and explain the necessary time and effort needed for successful completion of the course; (c) encourage students to build networks to support each other throughout the course. Johnson and Aragon (2002) used incorporate games in the online environment at UI. A successful game for an online course, for example, applied the popular television show, "Who Wants to be a Millionaire," which used live synchronous sessions to summarize previously covered course content and provide a sense of community among the students. Another practice simulated a radio talk show with multiple DJs and call-in guests to gain students' attention.
4. *Barrier 4: Administrative and instructor issues.* It is extremely important that students are able to reach a support person during business hours to provide help and advice with technical difficulties. Receiving prompt responses to emails and phone messages is equally important for students, particularly during the initial stages of the program. Approaching students with an attitude of care and concern for their success is essential (Johnson & Aragon, 2002; Kuchinke et al., 2001).
5. *Barrier 5: Faculty involvement and financial issues.* Bower (2001) suggested that an important key to addressing barriers of transferring HRD curricula from on-campus to online instruction is open communication. Faculty should be included throughout the planning and implementation stages of distance education efforts. Participatory management practices elicit faculty input and keep faculty informed of distance education efforts as they evolve on the campus. When faculty is involved in decision-making about distance education, their concerns about the quality of the experience can be lessened. Further, university support for faculty involvement in distance education is essential and should take a variety of forms that recognize the range of faculty motivation and need. If the university does not display a readiness to commit to distance education, the outcomes may not be positive. Many studies have indicated that distance education classes require more faculty time than traditional courses. Institutions should recognize this and incorporate appropriate compensations when planning distance education initiatives. Recent

studies indicate that low-cost incentives such as public recognition, notes of appreciation, or special parking privileges are also effective demonstrations of support.

Conclusions and Recommendations

In a comparison of online and on-campus Masters' degree programs in seven universities, this study found that curricula are identical in three universities, while curricula in three other universities differ in only one or two courses. Only one university did not provide a similar Master's degree program on-campus. The study is significant for HRD professionals who are eager to provide online curricula that are similar or identical to on-campus programs. Advances in technology have provided great opportunity for new and more convenient learning products. Customized online curricula that is designed to meet students' needs might be an alternative for some online programs, however, creating comparable quality programs for online and on campus learning will be a challenge.

The review and discussion provided a basis for understanding how to make the transition from on-campus to online curricula. Findings indicate that students, instructors, and institutions all need to work together to make online programs successful. The paper also listed major barriers to student learning, critical issues affecting development and implementation of online HRD programs, and discussed documented strategies and practices in order to provide solutions to barriers and issues.

Online degree programs need to pay careful attention to principles of adult learning and instructional design, and take advantage of learning opportunities offered by the online medium. Although online instruction differs in several significant ways from on-campus instruction, the goal is still to provide effective learning opportunities so students can achieve their learning potential.

This study focused on HRD online programs, and may apply to comparable disciplines although it should not be generalized to other subjects. This primary comparative study suggests further exploration of program contents and suitable learning technologies. More research is also needed to verify the solutions to existing concerns while creating new HRD online programs, and examining barriers to offering an online Ph.D. program in HRD. Further research in comparing the syllabi from both settings will gain more understanding the changes of instruction from on-campus to online.

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