Identifying Multimedia Production Competencies and Skills of Instructional

Design and Technology Professionals: Results from recent job postings

Lee Daniels

East Tennessee State University

USA

danielsh@etsu.edu

Brent Hoard, William Sugar, and Abbie Brown

East Carolina University

USA

brent@brenthoard.com

SUGARW@ecu.edu

BROWNAB@ecu.edu

Abstract: We describe and discuss results from a recent analysis of over six

month's of Instructional Design and Technology job advertisements (n=609).

Specific job skills from these postings were categorized and analyzed. The data

set includes three job settings (Corporate, Higher education, and Combination).

We present pertinent results and compare these with earlier studies. Implications

on courses that teach multimedia production skills are explored.

Background information

Discerning and identifying multimedia production competencies of

Instructional Design and Technology graduates is both a recent and an

historically recurring issue amongst Instructional Design and Technology faculty

and researchers. These skills were identified in two sources: Earle and

Persichitte's (2005) AECT curriculum standards (i.e., *Use authoring tools to*

create effective hypermedia/multimedia instructional materials or products) and

Richey, Fields, and Foxon's (2001) instructional design competencies (i.e.,

Specify the capabilities of existing and emerging technologies to enhance

motivation, visualization, interaction, simulation, and individualization). Ritzhaupf,

Martin, and Daniels (2010) surveyed 231 professionals and reviewed 205

relevant job postings regarding the necessary multimedia competencies for

Instructional Design and Technology professionals. Reviewing six weeks of job

postings, Lowenthal, Wilson, and Dunlap (2010) sought to understand the tools

and technologies required of instructional designers and elearning professionals.

Romero and Watson (2010) examined "knowledge, competencies, experience,

and skills" found in relevant Instructional Design and Technology job

advertisements.

The authors also examined multimedia production competencies and skills

of Instructional Design and Technology students over that past few years

[reference withheld for blind review]. We surveyed 112 Instructional Design and

Technology professionals about multimedia production competencies of

Instructional Design and Technology graduates. Almost ninety percent of the

respondents (89.2%) were professionals employed in a higher education setting.

Over seventy percent of our respondents identified Dreamweaver (76.9%),

graphics applications (e.g., Illustrator, Photoshop and Fireworks - 76.9%) and

Flash (71.4%) as necessary computer-based authoring skills that an Instructional

Design and Technology graduate needs to possess. Over sixty percent of the

respondents identified the following key multimedia competencies: video files

(74.7%), non-linear navigation (63.7%), SWF files (63.7%), sound files (62.6%),

and linear navigation (60.4%).

Purpose of study

The purpose of our current study is to further comprehend these

necessary multimedia design competencies by conducting an analysis of job

postings listed over a six-month period (n=609). Our goal is to expand our initial

data collection and compare our results with other similar data analyses

(Lowenthal, Wilson, & Dunlap, 2010; Ritzhaupf, Martin, & Daniels, 2010; Romero

& Watson, 2010). We also wanted to compare and contrast the similarities and

differences between a particular job setting (e.g. higher education). This data

may help Instructional Design and Technology educators modify their respective

curriculums to meet the need of students, employers, and the profession in

general.

Methods

Over a six-month period, we collected and analyzed job postings (n=609) located from the following job board websites: American Society for Training & Development's (ASTD) job bank, Association of Computing Machinery's (ACM) job site, Association for Educational Communications and Technology (AECT) job board, Chronicle of Higher Education job listings, Higher Ed.jobs site, and International Society for Performance Improvement's (ISPI) job board and Monster.com. Job titles were quite varied and included the following job titles: e-learning specialist, instructional designer, learning strategist, training facilitator, and other similar instructional design and technology related positions.

Each job description was analyzed by identifying key characteristics. These included multimedia production skills and other related instructional design skills. Multiple researchers examined each job posting. Specific categories emerged from this analysis using a constant-comparative technique (Creswell, 2009 – see pattern theory and qualitative approaches; Glaser & Strauss, 1967; Lincoln & Guba, 1985). Our analysis yielded a total of 66 distinct categories.

Results

We briefly describe our results below. Of the 609 jobs in our search, 65% of the jobs were in the corporate sector (n=396) and 29.6% of the jobs were in the higher education sector (n=180). Approximately, 5.4% of the jobs were a combination of a corporate and a higher education job (n=33). That is, a job listing was for a for-profit organization (e.g., SunGard Higher Education,

University of Phoenix) that creates instruction for a higher education setting. 85% of the corporate jobs (n=338) required at least one multimedia/software skill, 82% of the higher education jobs (n=148) required at least one multimedia/software skill, and 97% of the combination jobs (n=32) required at least one multimedia/software skill. 96%of the corporate jobs (n=381) required at least one instructional design skill (e.g., needs analysis), 89% of the higher education jobs (n=160) required at least one instructional design skill, and 93% of the combination jobs (n=31) required at least one instructional design skill.

In addition to these multimedia and instructional design skills, there were a high percentage of eLearning, collaboration and communication skills within this job database. Over 80% of the jobs required applicants to design online instruction (n=488) and to effectively collaborate with clients, subject-matter experts, and faculty (n=492). Almost 70% of the jobs expected applicants to have effective communication skills (n=424).

Implications

We look forward to sharing and discussing the entire set of our data and corresponding results. We anticipate discussing the similarities and differences between our job settings, as well exploring patterns with each sector. We will discuss the interrelationship between multimedia and instructional design competencies. We also plan to compare our results with the aforementioned studies (Lowenthal, Wilson, & Dunlap, 2010; Ritzhaupf, Martin, & Daniels, 2010;

Romero & Watson, 2010). Overall, we anticipate the results may considerably enhance our respective curricula as well as that of other educators' Instructional Design and Technology programs.

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