Identity Crisis: Librarian or Instructional Technologist?

By Ryan L. Sittler

It is confession time. When I developed an interest in instructional technology, I did not understand how deep and involved the profession is. I had never heard of the field "instructional design" and thought it was just a fancy term for "how you teach a class." I cannot speak for all librarians, but while working on my library science degree I certainly was not taught how to do the things that an instructional technologist knows how to do. Make no mistake, though, I *thought* I knew how to do it. I suspect others are in the same situation.

Some adaptation of the instructional technologists skill set is now useful for practicing librarians. Interestingly, both professions have an amusing similarity: the average person probably does not understand what these professionals actually *do*. Trust me on this! Over the past three years, without fail, I have had the following conversation many times:

Acquaintance: "So Ryan, what do you do?"

Me: "I'm the Instructional Technology/ Information Literacy Librarian at California University of Pennsylvania."

Acquaintance: "Oh, very interesting." (*ponderous expression)*

Me: "Hehe, you have no idea what that means, do you?"

Acquaintance: "Haha! Nope! Sorry about that. Do you just help people find electronic books or something? Do you do tech support?"

Me: "No worries; this happens all the time. Do you have a few minutes? Let me explain."

This is a nice icebreaker when I meet new people. But it has taught me that not only is *librarian* a mysterious profession to some folks, but also when you add in *instructional technology/technologist* you are entering a realm that is even more unfamiliar. My experience, incidentally, is that this is not just a few individuals – it is most people that I encounter.

However, this changes when I meet other librarians. Sometimes, that conversation goes more like this:

Librarian: "So Ryan, what do you do?"

Me: "I'm the Instructional Technology/ Information Literacy Librarian at California University of Pennsylvania."

Librarian: "Oh, very cool. I do a lot of that stuff, too. You know how it goes; we all wear so many hats."

Me: "I know, all too well! Working on anything cool right now?"

Librarian: "Well, I'm working on . . ."

Me: "Nice! Sounds fun. What ID model are you using?"

Librarian: "Excuse me?"

Me: "What instructional design model are you using?"

Librarian: "I'm just . . . ya know . . . doing what I always do. There's a model?"

Me: (*pass out)*

My flair for the dramatic aside, this is just one example of a real life conversation in which I have participated.

Now, you might be thinking to yourself "OK, but do I really need to know some model in order to do my job properly? Do I really need some sort of special training in order to make better use of instructional technology in my career?" The short answer is: it depends. The long answer is: the rest of this article! The following thought piece will define and discuss instructional technology/design (and by extension, the instructional technologist), in the context of librarianship, as well as addressing convergence with librarianship and misconceptions about the interplay between these two professions.

Defining the Librarian in the Context of Instructional Technology

Traditionally, librarians are information professionals. We select, organize, and manage information sources so that we can then help others to find the knowledge that they seek. We are also, of course, generalists – we need to know a little about "everything" so that we can better help our broad population of patrons. Some of us may pick up a subject specialty in one specific area, but that does not diminish the need for an assortment of skills and knowledge in a wide variety of areas. It is for these reasons, and others, that we wear so many different hats in our profession. The modern librarian is called upon to do a variety of things that, though necessary, may not fall within the strict definition of "information professional." We are experiencing convergence with aspects of other fields and that is affecting what we do and how we do it. And some of these items fall within the field of instructional technology.

The notion that librarianship and instructional technology/design are converging is not new. Steven Bell and John Shank even coined the term for this convergence as "Blended Librarianship" in 2004 (Bell & Shank, 2006). Over 6 years later, I meet many librarians that purport to have a fundamental understanding of instructional technology/design skills. However, when the conversation goes deeper, I find that they are mistaken in their self-assessment.

So, how much convergence has taken place? Are librarians full-on instructional technologists? Or do we just occasionally make use of some of these skills? I will save these answers for the end. First, we have to get a handle on what "instructional technology" *is* if we are going to discuss it. Therefore, we will talk about this next.

Defining the Instructional Technologist

Friends and colleagues tend to have their own concept of what instructional technology might mean. Typically, the first phrase they throw at me is either "is this like DVD players and projectors?" or "this has to do with computers, right?" I usually respond with "well, projectors and computers *might* be a part of it . . . but think about technology as meaning 'techniques' and you will be a bit closer." We will start here with a definition and try to create an image of what this all actually means.

Instructional Technology or Educational Technology?

The technical definition for instructional technology, as stated by the Association for Educational Communications and Technology (AECT) Definitions and Terminology Committee (2001) is:

> Instructional Technology is the theory and practice of design, development, utilization, management, and evaluation of processes and resources for learning. The words Instructional Technology in the definition mean a discipline devoted to techniques or ways to make learning more efficient based on theory but theory in its broadest sense, not just scientific theory (4).

This is one definition; however, not everyone uses this phrase to discuss the field. The term "instructional technology" is often used interchangeably with "educational technology," which is sometimes replaced with "learning technology." Or, depending on with whom you discuss the issue, you might find someone using one of a half dozen other terms! Each idiom carries its own definition. Confounding this issue is that "educational technology" was recently redefined by AECT. Again, this causes misunderstanding.

So, do these terms all mean the same thing? Uses and definitions for these phrases have changed throughout their existence (and I have met just as many people that insist they are one in the same as those that insist they are different). However, as with any type of label or naming convention, some people attach their own connotations to the terms used (Lowenthal & Wilson, 2010). This creates a problem when trying to discuss "instructional technology" in the context of librarians. One person may interpret it as a librarian well versed in instructional design theory and pedagogy, someone else may interpret it as a librarian that is quite good at the design and development of multimedia-based learning objects, and still someone else may interpret it as a librarian that feels comfortable using a computer to find information. Quite a disparity; quite problematic.

Common terminology is a challenge in this field. So, I will use the terms "instructional technology" or "instructional technologists" throughout this article to encompass all of the phrases mentioned above. Otherwise, things would get quite confusing! However, I am in the camp that views "instructional technology" and "educational technology" as being different entities *when discussing the subject with non-instructional technologists*. The reason is that trained instructional/educational technologists converse with one another from a common history, vocabulary, and (generally) education. The same phenomenon exists in librarianship – e.g., Technical Services Librarians and Public Services Librarians are able to interact with one another based on a common background and way of viewing their profession.

Finally, I should mention that people often confuse this term with an "information technologist." Though a librarian or instructional technologist might be comfortable with information technology, this is a separate field. All three professions share some aspects with one another but require separate skill sets and knowledge.

So, What Does an Instructional Technologist Do?

Instructional Technologists may wear many different hats depending on what they like to do and where they are employed. Job selection may also depend on the level of education they have completed and/or the coursework they elected to pursue. Others, however, may be given the job title "instructional technologist" without any real training or experience in that arena – but they may have practical or tangential experience that qualifies them for the profession. The following are examples of the types of careers Instructional Technologists/Designers may pursue. Though other possibilities exist, these illustrations are included to create a clearer image of this profession that is more concrete for the reader.

Business and industry has a lot of potential for the aspiring Instructional Technologist. He or she may wish to become an independent Instructional Designer that contracts with pharmaceutical companies to develop training on how to complete certain task-specific processes (such as chemical safety). Others may work for a corporation, like Dick's Sporting Goods, as part of an internal Instructional Design/Training department that develops instruction on the proper use of Point of Sale software. Each of these examples would entail the Instructional Designer working with a Subject Matter Expert and Stakeholders to define what needs to be accomplished with the training, as well as important factual information that needs to be included.

The business environment is not appealing to everyone, of course, so other Instructional Technologists may gravitate towards working with the military. The armed forces have a history of hiring Instructional Technologists/Designers to design, develop, and assess face-to-face training, online modules, manuals, and simulations for various needs. As above, Subject Matter Experts and Stakeholders would be involved with the process. Depending on with whom you discuss this topic, you may hear that this is the most difficult arena to enter . . . as well as the most profitable.

Another large sector for Instructional Technologists is in education. They may work as a Director of Learning Technologies at a university, overseeing an entire staff of employees that provide assistance with instructional design, learning object development, media production, and provide

project management for the implementation and maintenance of a Course Management System. On a smaller college and university scale, they may serve as a Learning Media Producer or Instructional Designer. Finally, in primary and secondary education, they may work as a Technology Integration Facilitator or District Project Manager.

OK. What Type of Training and Education Does This Person Need?

People working in these positions may have a variety of educational backgrounds. Though the following is not meant to be exhaustive, it is a snapshot of the expertise/training needed for these types of careers. Depending on the program, and its focus (instructional technology, instructional systems design, instructional media, etc) the coursework may be more thorough in one aspect over another. Further, some programs emphasize theory over practical skill sets.

Instructional design and development (or instructional systems design): This area specializes in designing and developing effective, pedagogically sound, instruction. This concept was developed by the military in the early 1900's and has since been expanded by numerous models and theories for designing instruction. Today, two of the most commonly taught are the ADDIE and Dick and Carey models, though many more exist. After you have implemented your instruction or learning solution, this component also calls for some form of assessment (more on that in a bit!)

Pedagogy (and/or educational psychology): No surprise: it is difficult to design and develop pedagogically sound instruction or if you do not know anything about pedagogy or educational psychology. These individuals have expertise in how the mind processes instruction, as well as how to leverage these mental processes for the highest benefit to the learner.

Media/multi-media utilization and/or production: As the field of communications began to explore the effects of modern media on people, and how audiovisual communication could be used to teach, some researchers began to look at the educational value of media and how to best utilize it. Education in this area may be limited to selection and utilization of media for teaching and learning, but may also include production (video, audio, scriptwriting, etc) of original media content.

Technology planning and/or integration or project management: Other terms may be used here, but once you have created your pedagogically sound instruction (which may or may *not* utilize advanced technology, depending on your definition) you need to find a way to integrate it. These individuals know how to take what has been created, integrate it, assess it, and then decide how to proceed.

Librarianship and Instructional Technology: Convergence

Earlier, I promised to address the following statements: how much convergence has taken place? Are librarians full-on instructional technologists? Or do we just occasionally make use of some of these skills? Based on skill sets and education alone – librarianship and instructional technology have a long way to go before they are truly converged. Nonetheless, librarianship has a lot to gain from instructional technology. Consider the following:

Are you going to be offering new technology-based services in your library? You will need some experience with technology planning or project management. Are you going to be creating online tutorials that show patrons how to find a particular piece of information? You had better brush up on your media production, pedagogy, and instructional design skills. Are you building a new, robust information literacy program at your college or university? Better yet, is some of your instruction going to be done online? Are you going to be *assessing* it to see if it was successful? Gee, you had better be studying up on all of these topics!

Common Misconceptions

The preceding statements are just a snippet of some ways in which these skills are becoming necessary in librarianship, but they are very real examples. However, as I stated near the beginning of this article, I have met individuals that misunderstand the fundamentals of instructional technology as well as over-

estimate their skills in this area. I was one of those individuals.

The following statements are meant for fun. They are examples of some misconceptions that I had about instructional technology when I started my career in librarianship. If you have made any of these declarations, your secret is safe with me. Additionally, I am including some things to consider in relation to each topic. Enjoy!

I know about instructional design (or pedagogy) because I know how to teach. I was wrong. Not all great teachers are great instructional designers. And not all great instructional designers are great teachers. This seems counter-intuitive. But consider this: did you ever have a "great teacher" that was quite engaging but lacked substance in his or her coursework? Likewise, did you ever have a "lousy teacher" that clearly laid out the subject matter but lacked charisma and left you feeling unengaged? My guess is that you did.

Next time you are ready to teach, consider the following: did you do a thorough analysis of your learners? Do you know their entry behaviors (the skills and abilities with which they enter your classroom)? Are you trying to teach too much information for the time allowed? Have you tried any model to design and develop your instruction? What is your educational philosophy, and do you practice it? How do you know that what you are teaching is what the students need to know? Do you actually understand pedagogy, or do you just think that you do?

I do not need special training or equipment to produce instructional media because modern technology is so easy to use. Once again, I was wrong. But there is some truth here, depending on the individual and/or situation. It is true that the technologies needed to produce media in 2010 are quite different from those of even ten years ago. Consider video cameras and editing software. They are cheaper, easier to use, and there are tons of resources available on the Internet that can show you how to use them. If you cannot afford a true video camera, you could probably even just use your cell phone to shoot the video and then edit it together with free software like Microsoft Movie Maker. If you have a natural talent for this or if your goal is to just produce "something" then the above statement is true.

The statement becomes false if you want to produce something of decent quality and are not innately gifted at media production. Others, for better or worse, need to develop that skill. Consider a "B" movie with low production value versus a Hollywood blockbuster with a high production value. What is more engrossing to the viewer? (OK, some of us love "B" movies . . .) The point is that unengaging, poorly produced instructional media may turn off the learner. And they, in turn, may not watch (or absorb) the content you have produced.

Next time you are ready to produce something, perhaps an online tutorial, consider the following: do you need to storyboard your production? Why or why not? Will you be using voiceover? Have you completed a script? Will you be using professional voiceover talent? (Hint: always get a professional to do the voiceover or go take vocal training lessons). Do you need background music or SFX? Are you using graphics, images, or video? Who will produce them? How long will your production be? Does it need to be pared down if it is going to be over thirty seconds? Should your 1 video/ tutorial/podcast actually be 5 or 6 shorter ones? Is the production engaging? Are your fonts, SFX, etc, consistent? Do any shots hold too long, or not long enough? Do things move too slowly or too quickly? If something changes in 6 months, will it be easy to go back and correct your assets, or will you need to start over?

I am a librarian that knows how to use technology in my daily job duties, including teaching – I am basically an instructional technologist. / I am an instructional technologist that knows how to use technology to find information – I can basically do anything a librarian can do. OK, I was wrong on the first one. The second one just seemed like a nice parallel. Anyway, both statements are false, but both fields do borrow skill sets from each other. The convergence of these fields is not one sided. Though we did not discuss how instructional technologists borrow skill sets from librarianship, one example would

be reference interviewing and research skills. When tasked with designing instruction, a good instructional designer needs to ask the right questions – and do great research – to design and develop the best instruction possible.

The misconception I had, though, is that a librarian is automatically skilled to be an instructional technologist or vice versa. That perhaps providing a little extra professional development can completely close the gap between each profession. This is untrue. Both fields are still quite independent, despite their growing convergence, and more will need to be done if these fields are to ever completely integrate.

So, are you an instructional technologist? Consider the following: how many instructional design models do you know? When would it be appropriate to use one over another? Are there differences between them, or are they all basically the same? When would it be appropriate to use formative or summative assessment in your instruction? What do you know about pedagogy? What is the difference between Objectivism and Constructivism? Does it matter? What works better in your instruction? What do you know about media production? What preproduction issues do you need to consider before you begin creating instructional media? What is your plan for integrating new technologies into your services? Do you need these new technologies? How will you manage them? How can they best be utilized? Will they increase learner comprehension? Will they increase learner performance?

Conclusion

Instructional technology is an interesting and deep field that, in comparison to librarianship, is quite young. It also has various definitions and this has led to confusion about what it actually means – particularly in relation to librarianship. I have discussed informally the topic of convergence with other librarians, and I am always surprised at the responses that I receive. Some believe, as I once did, that they are already essentially an instructional technologist. Others indicate that they know little about the field (even if they are utilizing skills from it on a regular basis).

I hope that you consider exploring the "how" aspect of instructional technology. It is a fun field and learning to develop, and implement, these skills is rewarding. As the professions continue to converge, just a little education and/or training in these topics can go a long way to enhancing your expertise as a librarian. I am optimistic that you have a clearer understanding of what an instructional technologist does and why they are able to do it. If not, please feel free to get in touch with me. My contact information is on the next page.

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