The Connection Between Instructional Design & Medical Writing: Case Studies to Improve Your Skills

By Julie Munden

On the evening of the summer solstice, Wednesday, June 21, 2017, the AMWA-DVC held its annual business meeting followed by a dinner presentation that highlighted a hot topic in our industry: the connection between instructional design and medical writing.

The evening proved to be more than just exploring this hot topic. It was literally hot at the Sandy Run Country Club in Oreland, PA, because a few hours before the meeting a wicked thunderstorm rolled through the area and caused a power outage. It was toward the end of the presentation that a fire started in the kitchen, setting off the alarms and sending our members rushing out to the parking lot.

Despite the rising heat and lack of power, our speaker, fellow AMWA-DVC member Deborah Anderson (DGA Communications), led a lively and interactive presentation with grace under fire. Not having the use of a projector to share her slides, Debbie leaned on her theatrical skills and presented, The Connection Between Instructional Design & Medical Writing: Case Studies to Improve Your Skills. What Debbie did in an hour presentation before we were evacuated from the building went beyond expectations.

What Is Instructional Design?

Debbie first defined instructional design (also abbreviated as ID) and told the audience that many medical writers do instructional design, but they just don’t realize it. She admits to falling into this same trap, but after going back to school to earn her PhD and working in the promotional medical education space, Debbie has since mastered instructional design as it relates to medical writing and has become an expert in her field.

"Many of the pharmaceutical companies that I work with have instructional design departments with specialists who take a hard look at the content of their training pieces," explained Debbie. "It's a relevant and timely topic and is gaining momentum in the pharmaceutical and training spaces."

What Does a Forest Have to Do With ID?

Using the scenery through the windows directly behind her, Debbie continued her presentation by pointing to the variety of trees on the golf course. "Look at the leaves on that tree and if you take one leaf and look at its color, structure, and the veins running through it.... That's medical writing," explained Debbie. "Now look at that leaf and its relationship to the branches and then look at all of the trees, from many different angles, and you see a forest.... That's instructional design."

She continued to explain that not only are you looking at what's in the forest, you're also looking at the different angles of the forest. "Looking at those angles requires critical thinking, which requires you to look at one perspective, but in a 360-degree way. You're looking at a writing or learning piece from a full-rounded view and not just a tiny perspective," said Debbie.

Understanding the Pieces of the ID Puzzle

Putting the pieces of the "forest" together is how to approach instructional design and medical writing. Debbie shared an algorithm she keeps at her desk. It contains 7 points along with examples of the questions that she asks her clients at the start of each new project:

1. Goal-What does the learner need to do at the end of the piece? Do they need to repeat back information? Use the information with a customer? Take action upon learning the information? What is the point of the training?
2. Program-What is the actual end deliverable (eg, eLearning module, Webinar, podcast)?
3. Audience-What type of learners make up your audience (eg, PhDs, nurses, pharma sales reps)? What are their characteristics and geographic differences? How many learners make up your audience?
4. Training-Is the training/piece actually necessary? How will the training be given (eg, online, print, Webinar, live)?
5. Limitations-Does your client have the budget for the training/piece? Are there technical limitations that your client is up against? How long will it take to execute the piece? What limits does your client have in terms of its available resources?
6. End deliverable-What are you ultimately submitting? Is it an outline or a full-blown training program with eModules, workshops, and Webinars?
12 Tips for Accomplishing the Review and Revision Process More Efficiently

By Kathy Molnar-Kimber

Kent Steinriede, M.S. (InVentiv) and Darryl L’Heureux, PhD (Bristol Myers Squibb) presented a thorough overview of the review and revision process at the Princeton Conference on April 22, 2017. Review and revision applies to essentially all medical writing documents. Steinriede and L’Heureux presented too many great tips to cover them all, so here are a dozen.

1. Define both the internal stakeholders (team members) and external stakeholders (eg, authors at universities, peer reviewers at journals, readers at health authorities and regulatory agencies).

2. Clearly define the target audience, which may include some stakeholders but may be much broader.

3. Check to be sure that the document fulfills its purpose: Does it have sufficient background and significance? Do the results and discussion align with the conclusions? Are limitations included?

4. Check that the organization of the document flows in a logical manner and leads readers to agree with its ultimate purpose.

5. Provide a clear document review strategy to all reviewers, as lack of a review strategy leads to more and more reviews. The lead writer or review project manager should clearly explain the roles and expectations of each of the reviewers up front. For example, if many experts are involved and have contributed to the document, ask each expert to focus on their specific section, such as the pharmacologist reviewing the pharmacokinetics and pharmacodynamics section.

6. Include well-defined review and revision practices (first round allows new citations and reorganization but the second review does not) to avoid having key decision makers jump in late in the process.

7. Create a team and set a cooperative, collegial atmosphere that builds alliances and relationships. The team should include the key leaders and the ultimate person who decides (eg, the corresponding author for publications.) Spreadsheets can help keep track of the various reviewers, their importance, timeliness, and status of reviews.

8. Answering these questions is critical and will set the foundation for your project and also set expectations for you and your client. Debbie explained how vital it is to know these pieces and incorporate them into your contracts to protect you from scope creep (when the project goes beyond what was agreed upon—and we all know this is a reality).

9. Taking a Closer Look at Medical Writing & ID

Where does the medical writing piece fall into this algorithm? Debbie describes the primary focus of the medical writing as the training and end deliverable pieces. The other 5 pieces focus on instructional design as well, but ultimately the medical writing is the key tie-in to executing a complete training piece/project.

Next, Debbie described the 3 essential keys to medical writing as it relates to instructional design:

- Learning objectives
  - Critical to your piece
  - Always use verbs
- Assessments
  - Based on learning objectives
- Content
  - Visual
  - Audio
  - Verbiage

10. Learning Objectives

First, Debbie emphasized the importance of the learning objectives in any training piece/project. "I can't stress to you how critical the learning objectives are in instructional design; you have to use verbs that are measurable," said Debbie. "Such verbs include explore, discuss, review, list, describe, summarize, and differentiate. "Understand is a useless verb; don't use it in your learning objectives," said Debbie. "You can't measure "understand."

11. Assessments

Next are the assessments. To write them, medical writers typically use Bloom's Taxonomy (see Figure 1), an industry-standard framework that lists 6 categories that measure an end user's critical thinking skills. Depending on your project and what your client wants the end user to learn, you will craft your learning objectives using this framework, which ultimately helps you write the assessments. Bloom’s Taxonomy verbs are a great resource for writing professionals.

12. Content

"Your content needs to include the learning objectives, and they need to make a connection to the assessments," said Debbie. "Sometimes," she explained, "when you go back and re-read the content, you realize you're off track, so you need to go back and read your learning objectives again. Instructional design is about making sure everything works together. Ask yourself, does the voiceover match? Are the graphics clear? Is there color contrast?"

What Has Been Different So Far?

As the heat rose in the dining room and dessert was being served (the ice cream didn't melt!), Debbie walked around the room with her laptop and showed the audience her slides. She scrolled through to demonstrate that her slides contained more graphics and minimal bullets and text. She pointed out that she doesn't follow the 7x7 rule (no more than 7 lines of text and no more than 7 words on each of those lines): the slide would still contain too much text. "When you have too much on your slide, it's not helpful at all to the learner," said Debbie.

Finally, Debbie concluded her presentation with 5 case studies that lacked the instructional design component and asked the audience to provide solutions to improving and revising each case study. It was at this point in the presentation that the fire alarm went off and the audience was abruptly escorted out of the building. While gathered in the parking lot, a few of the DVC Executive Committee members asked Debbie if she would be available to do a follow-up Webinar on the near future to answer any outstanding questions. Debbie graciously agreed, and on August 22, 2017, she hosted a follow-up Q&A Webinar.

Julie Munden is a Senior Medical Editor and Content Manager for Curtis Learning, LLC, a pharmaceutical sales training agency located in Bala Cynwyd, PA. She has over 25 years of experience in medical editing and has been a member of AMWA since 2003.
By Jacqueline M. Mahon

Not So Accidental

Showcasing members who contribute time, energy, and expertise to AMWA's Delaware Valley Chapter

Cyndy Kryder is coauthor of The Accidental Medical Writer book as well as Pencil Points, an amusing, educational newsletter packed with tips for freelancers. It is a gift to us and one of many contributions Cyndy makes to the field.

Second, we must ask: Where does she find the time? Particularly since one short biographical account mentions shoe shopping with two daughters—surely an activity that ought to take precedence. Here are Cyndy's positions with our AMWA-DVC chapter:

- 2 years as Secretary (2008-2010)
- 1 year as President Elect (2010-2011)
- 1 year as President (2011-2012)
- Manager of the Linkedin group (2012-2017)
- Ongoing open-session and roundtable presenter

Cyndy started her business as a medical communications consultant 25 years ago, having transitioned from a career as a speech-language pathologist. Clearly this is a busy—and efficient!—woman. "It's all very interesting and fun," she said. "I've met some great people along the way." As secretary, Cyndy maintained communications with national AMWA, recorded minutes at DVC officer meetings, and helped promote DVC events. As president, she monitored DVC adherence to national AMWA regulations, supervised committee progress, and, according to colleague Julie Munden, led with grace and dedication. "She is thoughtful and caring and interested in how AMWA works," Julie added. "Her ideas have helped improve processes and relationships within the organization."

One major accomplishment was transitioning the DVC newsletter from print to electronic. "The DVC is quite organized and competent," Cyndy remarked. "It's a terrific pathway to leadership at the national level. Ideally, service with AMWA national is based on local experience. If you leap over your local chapter, then you will likely be unprepared to understand AMWA's structure and organization."

Cyndy noted that many "micro-volunteering" opportunities are available. "You don't have to take on a formal role. You can help with the DVC Annual Freelance Workshop, or the Princeton conference, or the regular dinner meetings. Any number of small tasks can be undertaken."

I wondered, why an "accidental" medical writer? "Oh, I never dreamed of being a medical writer," Cyndy responded. Her mentor, AMWA Fellow and former DVC member Donna Miceli, was instrumental in the conception and pursuit of a new path. Cyndy's clinical background nicely lends itself to the work. Without this experience, Cyndy noted, she would not have been prepared to understand AMWA's structure and organization.

"I've met some great people along the way."
I am involved in AMWA both locally at the Delaware Valley Chapter and nationally. At DVC, I am the chair for the DVC Freelance Workshop. Nationally, I am the section editor for the "Freelance Forum" section of the AMWA Journal. The benefits that I get from volunteering for AMWA are both personal and professional. I have grown both personally and professionally by networking. It has been great for me. I have met some great people. Not only have I been able to network with them, but I have had them refer me for some great freelance writing opportunities. I have given a webinar for DVC as well as for AMWA national. I have also written a pocket training for AMWA national with a DVC colleague of mine. The exposure that I have received from being involved as a volunteer in DVC and AMWA national has been fantastic in generating freelance opportunities for me.

If you'd like to be saying this next year and beyond, volunteer for your AMWA-DVC chapter today at volunteer@amwa-dvc.org.

Ruwaida Vakil, MS, is a freelance medical writer, medical communications specialist, and owner of ProMed Write, LLC. A former bench-top scientist, she has over 14 years of experience in the medical communications industry. She specializes in CME, clinical trial recruitment material for healthcare professionals and patients as well as the development of sales training material.

Upcoming Events

CME Palooza Fall 2017 Wednesday, October 18, 2017
A 1-day event that will feature a series of unique sessions focused on topics relevant to the broad CME community. Broadcasts will stream live on the LIVE page of CME Palooza website and will be available for viewing shortly after their conclusion on the Archive page. There is no charge to view or participate in any of these sessions.

National AMWA Meeting November 1 to November 4, 2017
AMWA's Annual Meeting will be held in Orlando, Florida. AMWA-DVC is well represented with workshop and open session speakers. Please support the home team and join us for Happy Hour on Thursday, November 2. Meet in the Walt Disney World Dolphin Hotel lobby on Thursday, November 2, 2017, at 6:00 pm. We'll walk over to the Swan Hotel at 6:30 pm to Todd English's bluezoo for a happy hour reception that includes food, drink, fireworks, and fun! Cost to members is $15. Register HERE!

If you would like to write an article about one of the sessions for the Winter 2018 issue of Delawriter, please send a note to Delawriter Editorial Team.

CME Basics Training Camp November 15 and MAACME Annual Conference November 16
MAACME 7th Annual Conference is being held on Thursday, November 16, 2017 at the Hunt Valley Inn Wyndham Grand in Hunt Valley, Maryland. This conference is designed to meet the educational needs of CME professionals working in a variety of settings, including academic centers, specialty societies, medical education companies, hospital and health care systems, and medical writing. Pre-conference basics training camp is held on Nov. 15. For more information, visit www.maacme.org.

AMWA-DVC’s Annual Holiday Networking Event on Thursday, December, 7, 2017
Celebrate a great year and join your fellow AMWA-DVC colleagues for food and cheer at the Triumph Brewery in Princeton on Thursday, December 7, 2017 from 6:30-9:30 pm. Enjoy appetizers, buffet dinner, dessert and beverages (wine/beer/soda/coffee/tea) with old and new friends! REGISTRATION COMING SOON!

AMWA-DVC Freelance Workshop
Save the date, March 17, 2018, for the Freelance Workshop is being held at the DoubleTree by Hilton Hotel Philadelphia - Valley Forge in King of Prussia. More details to come!

AMWA-DVC Princeton Conference
Save the date, Saturday, April 21, 2018, for the Princeton Conference. More details to come.

Calling all CME Writers
We'd like your insights on the best way to write an educational needs assessment. The annual survey on best practices opens September 18 and closes October 6. All respondents will receive the raw results by Thanksgiving. While some questions are repeated to track trends, this year's new questions address interprofessional education, storytelling techniques, and the reference list. If you have written at least several needs assessments, please visit the survey site.

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