

Lesson Plan:

Topic-Based Writing and DITA XML Basics Workshop

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INFO 6810: Managing Information Literacy Instruction

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Lesson Plan

Audience: Professional – undergraduate-level interns who will be working on technical writing projects and using a DITA-based component content management system. Interns presumably have an arts and humanities or social sciences background and some experience with academic writing.

Goals: In this workshop, students will learn to differentiate narrative-style writing from topic-based writing. They will learn how to write a short process document in a topic-based style. From a conceptual standpoint, students will also learn what XML is, what DITA XML is, and how it relates with topic-based writing. Finally, students will learn how to search for help with their topic-based writing and DITA questions, including searching the web as well as proprietary resources.

Learning Outcomes

Outcome 1: Students will be able to construct a simple process document using a topic-based writing style.

Outcome 2: Students will understand how DITA XML's structure relates with topic-based writing.

Outcome 3: Students will be able to list the internal and external resources available to help them resolve future topic-based writing or DITA XML questions.

Evidence of learning

Evidence for Outcome 1 will come from the in-class exercise of creating a topic-based process document as a group. Students will show that they are able to effectively group task-based information, concept-based information, and resource-based information (Activity 1). Additional evidence will come from short, basic topic-based process documents that they construct in small groups (Activity 2).

Evidence for Outcome 2 will come from students answering in-class questions about how they think these topics relate.

Evidence for Outcome 3 will come from student responses to the evaluation tool, after the lesson concludes.

Assumptions

- Students (interns) presumably have an arts and humanities or social sciences background and some experience with academic writing
- They understand the basics of operating a computer
- They have already gone through 1 or 2 prior days of orientation, in which they have been introduced to the organization's knowledge repositories, its overall structure, and their specific duties for the internship

Materials

Materials Needed

- Student computer access (desktop or laptop) and an internet connection

- Instructor's computer and a projector
- Topic-based writing worksheet

What needs to be prepared in advance?

- Instructor's presentation slide deck
- Activity 1: Come prepared with 3 everyday tasks that your audience is likely to be familiar with doing
- Digital copy of evaluation form
- Topic-based writing worksheet

Learning Activities and Lesson Description

This lesson is only intended to act as an introduction to these concepts and resources; it takes a lot of practice and trial and error to become truly proficient, so the goal of delivering this lesson is to expose the students to topic-based writing, help them get a bit of practice in a supportive environment, and equip them with resources they can use after the session. This workshop would best be delivered in conjunction with a longer orientation session that builds upon these concepts to give students additional practice writing topic-based content that is organization-specific, and allows them to do so using an appropriate component content management system. This lesson plan has been designed to help students understand what DITA XML is so that when they do begin to use a CCMS, they are acquainted with the markup style and DITA structural requirements. Teaching this lesson without additional follow-up through individual-level instruction or group workshops will not be as effective as including this as part of a series.

Of the six frames described by the Association of College and Research Libraries (ACRL), this lesson is primarily based on the second, "Information Creation as a Process" (ACRL, 2016). This frame acknowledges that information research and creation processes vary based on context, i.e., workplace information creation and distribution will vary from academia (ACRL, 2016). The ACRL articulates several knowledge practices of learners who are developing this component of information literacy, including that they can "transfer knowledge of capabilities and constraints to new types of information products" and "assess the fit between an information product's creation process and a particular information need" (ACRL, 2016). Given that technical writing is a specialised discipline with defined information needs and information creation norms, this lesson seeks to help students transfer their existing knowledge of formal writing to this new context. It also seeks to help them understand how workplace information needs inform the way technical content is created and shared. To a lesser degree, another standard, "Searching as Strategic Exploration," is incorporated, as students are to be provided with resources that can help them match their information needs with existing resources that can provide them with guidance on technical writing.

There are two activities in this lesson that build upon one another. Both allow students to practice applying topic-based writing principles to a simple process. Students will first work in coordination with the instructor to talk through the steps involved in a process. The process is to be selected based on 3 options offered by instructor. Then as a group they will work with instructor to group these steps in to topics. The second activity will have students do this process in small groups, self-selecting which process they would like to document. Students will then come together to talk through how they made their decisions.

Lesson Procedure

Total time: 50-60 minutes

Step	Description	Time
Intro & Agenda	Provide students with learning outcomes and agenda for the session. Explain that this session will explain topic based writing and give them an introduction to DITA XML.	<5 min
Topic based writing (TBW) - INTRO	Show example of narrative writing (a journal article) and a topic-based document (e.g., a recipe). Ask students what differences they notice. <ul style="list-style-type: none"> What are the purposes of both of these documents? When might one style of writing be appropriate over the other? <p>Explain that the recipe is an example of TBW. TBW is appropriate for process documents because it is simple, easy to read, and only gives the reader key information they can use right away.</p>	5 min
TBW – content reuse	Explain that TBW is not just making a process simpler or breaking it into steps – a key feature is also making <i>reusable</i> content. Explain that re-use is often achieved through use of a component content management system (CCMS) and explain that this will be talked about more later in the session. <p>Demonstrate what re-use could look like across three process articles: Adopting a Cat, Fostering a Cat, and Purchasing a Cat.</p> <p>Highlight the common elements among them. Each article contains a topic entitled “Bringing Her Home,” for example, while Adopting a Cat and Fostering A Cat articles both have a topic entitled “Finding a Rescue,” but Purchasing a Cat does not.</p> <p>Explain that topic creation should always be done with content re-use in mind.</p>	10 min
ACTIVITY 1	Explain to students that you will be trying this out together using a simple process. Give the students a few options they can vote on using things the students have all probably done at some point, e.g., making a sandwich, purchasing a cell phone or other electronic device, finding employment. Brainstorm, as a group, what steps are involved in this process. Ask them what steps they would take, what information they would need to know, and so forth. Try to get 5-6 suggestions or more. Then ask students to help you place these in categories. For buying a device, you might ask students which steps are preliminary research, which are tips & tricks, and which are action steps. Then, arrange these into a few “topics” that the students come up with.	10 min
DITA XML – INTRO	Explain XML – eXtensible Markup Language; semantic markup that is meant to be machine AND human readable. Marking up text with XML does not assign any kind of formatting. Compare with HTML. <p>Define DITA – Darwin Information Typing Architecture. Explain that most industries that rely on XML have different standards for how it should be used. DITA is standard for publishing and technical writing. Explain that DITA basically provides a structure for XML use by defining specific content types (concept, task, reference). Compare DITA with standard XML to show standardization and uniformity.</p>	5 min
TBW & DITA XML OVERLAP	Ask student what relationships they see between these concepts.	5 min

	Explain that TBW creates small “chunks” of content that can be re-used. DITA defines “buckets” for this content: concept, task, or reference. Applying DITA XML to topic based writing allows machines to understand how to organize and apply these principles to written content. Explain that this is where CCMS comes in. Provide brief explanation of how CCMS works – topics (marked up with DITA XML) live in a central repository and can then be re-combined within different process documents.	
ACTIVITY 2	Explain to students that they will now have time to try out writing a short process of their choice using TBW, keeping in mind the idea of re-usability, if applicable. Have students work in small groups (2-4). Distribute copies of topic-based writing worksheet to each student. Allow 10 min for constructing the processes. Circulate among groups to answer questions and check process. For the final 5 minutes, ask whole class what processes they chose, what difficulties they had when developing topics.	15 min
TBW & DITA Resources	Refresh students on organizational resources they can consult for help: knowledge bases, communities of practice, intranet, etc. Point out key people who can answer questions. Introduce to internet resources: DITA Awareness Group on LinkedIn, Oxygen Style Guide for DITA, StackExchange	<5 min
CONCLUDE	Thank students for time and participation. Ask them to complete the short survey with their feedback.	<5 min

Assessment Techniques

Activity 1: Writing a Topic-Based Process (Guided)

The goal of this activity is to help students begin to think about processes from a topic-based perspective. By using everyday tasks that students can connect with, this activity enables them to translate their own experiences into topic-based processes. Students are provided immediate feedback on their suggestions and get to see in real-time how they can construct a topic-based process of their own.

Activity 2: Writing a Topic-Based Process as a Group

Building on the previous activity, this allows students to brainstorm their own process or task, and then create a short process document that follows TBW principles. Students have the opportunity to reflect on the material they have learned and on the prior activity, and to incorporate this into making a topic-based process independently. The instructor can provide individualized feedback by circulating between groups. Then, as a class, students will talk about why they made the decisions they did and what difficulties they encountered. This is intended to help them think critically about the processes they engaged in and to learn from their peers’ experiences as well as their own.

Evaluation tools

The brief survey at the end of the lesson measures students’ perceptions of their learning. The first three questions ask students to indicate if they feel that they have achieved the learning objectives articulated at the start of the lesson, using a 5-point Likert type scale. Question 4 asks students what resources they now know they can visit for help, intended to measure the outcome of Learning Objective 3. The remaining 3 questions ask students to describe what they found helpful, what they would change, and any other comments they may have, which allows the instructor to make adjustments for future sessions.

References

Association of College and Research Libraries. (2016). *Guidelines, standards, and frameworks*. Retrieved from <http://www.ala.org/acrl/standards/ilframework#process>