Integrating the thematic approach into information literacy

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Abstract

- **Purpose** - The purpose of this paper is to review selected publications in library-related literature and discuss the thematic approach to course design in colleges and universities and how it has been implemented into information literacy courses.

- **Design/methodology/approach** - A literature review of peer-reviewed journals, professional journals, magazines, and blogs contextualizes the thematic approach to instruction at the college and university levels. Search terms included “thematic approach,” “thematic approach in education,” and “theme-based instruction;” the search was restricted to articles published in the last 20 years.

- **Findings** - In addition to information literacy courses, thematic-based instruction has been used in biology, chemistry, English, French literature, history, mathematics, philosophy, and sociology courses on college and university campuses. While instructors report that the thematic approach enhances student learning, few studies have directly tested the impact. No studies have been published within the library science literature.

- **Originality/value** - Thematic approach is a newer concept in the world of information literacy instruction. While many professional journal articles and blog posts provide in-depth case studies of how thematic-based instruction has been implemented, this article draws from all disciplines and features a succinct summary of what works, what does not work, and how to best implement a thematic approach in an information literacy course.

Introduction

In 1999, Mark Lung (p.18) gave a very basic explanation of the thematic approach that encompasses nearly all course types when he wrote, “It is not a curriculum as the term is
generally used, but a framework in which existing curricula can be organized.” This definition is better than the practical definition by Collins Dictionaries (2012) which notes that it is, “…teaching organized by theme rather than school subject.” Sometimes interchanged with integrated learning, a thematic approach allows teachers to put whatever course they are teaching into a perspective that might be more easily understood by students or framed around a problem that needs to be solved.

The thematic approach to instruction has remained relevant since the 1970s (Ward, 1996). The approach attempts to resolve one issue with which information literacy instructors might struggle, that of ”providing learning experiences that are coherent and relevant” to the everyday lives of their students (Ward, 1996, p. 72). This review considers how teachers are trained in this approach, notes how the thematic approach is used in higher education courses, and then focuses on how the thematic approach is used specifically in information literacy (IL) courses. Additionally, this review examines problems with traditional standalone IL courses and a possible solution to these issues through a thematic approach to instruction, focusing in-depth on themes that librarians have tried in their courses, and assessing the advantages and challenges these instructors found in using this style of course design.

The teacher training literature

Recognizing the importance of integrated instruction in addressing...21st century learning needs and preparing them to develop higher order thinking skills necessary in today’s increasingly global world, the question remains: How do teacher education programs develop these competencies in future...teachers? (Davies and Shankar-Brown, 2011, p. 2)

While the discussion of the thematic approach to instruction is approximately 40 years old (Ward, 1996), it is still highly relevant. This form of instruction is being taught to future teachers who most likely were taught using the thematic approach throughout their formative years. The authors reviewed online syllabi for courses for education majors and found that
several universities across the United States require future teachers to take courses that teach them the thematic approach. Among these universities, the University of North Carolina (UNC) Wilmington has implemented a program to demonstrate to students how to plan and implement the thematic approach to instruction (Davies and Shankar-Brown, 2011). California State University Northridge (CSUN) offers ART 579: Art Education Across Cultures which includes a section on “Thematic art education, issues and topics” (Henderson, 2014). Liberty University (n.d. para. 1) asks students to undertake EDUC 531: Teaching the Natural and Social Sciences which requires students to “implement a thematic teaching unit.” English 486: Teaching English at Indiana State University (Perrin, 2010, p. 9) has the specific outcome goal of using, “a thematic approach...that integrates multiple ways of knowing.”

**Thematic instruction in the higher education literature**

The thematic approach is reaching into higher education courses outside teacher training. What was once taught as a skill for educators in primary and secondary schools is now being implemented at a post-secondary level. From first-year to senior level courses, the thematic approach to instruction is slowly gaining popularity in classrooms across the curriculum. While numerous articles discuss this at the secondary and elementary school levels, the authors have chosen to restrict this review to articles and blog posts that discuss it only as it has been applied in colleges and universities.

Instructors in a variety of disciplines have tested a thematic approach to design their university courses and found it to be a beneficial teaching style. Only two research studies (Shultz *et al.*, 2009; Howard *et al.*, 2014) attempted to measure the impact of the thematic approach on student learning; most other articles (White, 1996; Lung, 1999; Viti, 2000; Sullivan-Catlin, 2002; Griffiths, 2010; Burns, 2013; Purinton, 2014) describe the perceived benefits of the
approach without providing quantitative or qualitative evidence. Shultz et al., (2009) taught a basic chemistry course aimed at engineering students, and tried to increase student interest by basing the entire course on a single application: “Is hydrogen the fuel of the future?” Focusing all coursework around this topic, student performance improved by nearly a full grade level, with students scoring more consistently on assignments throughout the semester as well as earning better final grades. The authors concluded that “keeping a course grounded in a consistent and relevant application can be an effective method for improving student engagement and performance” (p. 1053). Howard et al. (2014) taught introductory sociology courses “through the lens of a particular organizing theme” rather than as traditional surveys (p. 178). The department identified desired learning outcomes, but allowed faculty to choose the lens of interest to them. Thematic topics included Health and Illness; Sport, Inequality, Gender, Race and Ethnicity; Crime; and Family. The themes were announced in advance so that students could select the section of interest to them. Using pre-tests and post-tests, the authors found considerable gains in student learning. The authors concluded that the thematic approach was a “viable method” for teaching core concepts, but noted that the study was not structured in a way to determine whether thematic courses are “superior” to traditional survey courses in terms of students’ learning outcomes (p. 184).

Faculty who found the results of the thematic approach favorable used a variety of evidence to support their thinking. White (1996) endorsed what he termed a “restricted-topic approach” (RTA) in introductory philosophy that examined the “free will problem” (p. 138). While he noted that “topic burnout” is a concern for the instructor in this approach, he felt the narrower focus enabled more student-active pedagogical strategies. Ultimately, White argued that “surveys are less likely than the RTA to encourage a pedagogical stance that balances
conceptual content with analysis of that content (which I believe the RTA does automatically)” (p. 143). Lung (1999) made his biology classes more process-orientated by using a theme of a malaria outbreak in an East African community to “integrate units and provide relevancy” (p. 20). He determined the program to be a success based on students’ responses on questionnaires and surveys but noted his lack of quantitative data to support the conclusion. Viti (2000) used a thematic approach of “He Said, She Said,” to compare male and female novelists in 20th-century French literature and introduce feminist theory. She did not attempt to measure student learning, but she wrote that the theme emphasized to her students how gender informs both reading and writing and contributed to lively classroom discussions. Sullivan-Catlin (2002) used two themes, “food, hunger, and poverty” and “think globally, act locally,” to integrate service learning into an introduction to sociology course. Sullivan-Catlin found that the theme unified the disciplinary content and connected the community service component to what was being studied. Griffiths (2010) taught mathematics using the theme of “designing, ‘building,’ and ‘selling’ of a house for profit (which was then to be ‘invested’ in the stock market)” (p. 25). Griffiths used no qualitative or quantitative evidence to support his conclusions, but he identified the anecdotal benefits as students (1) being encouraged to explore ideas in greater depths; (2) being able to establish links between seemingly unconnected pieces of mathematics; (3) finding a greater scope for collaborative work and refining their communication skills; and (4) having greater opportunities for peer teaching (p. 27). Burns (2013) taught an English composition class aimed at first-year students that centered on sustainable local food systems. Results of her pre- and post-course surveys, focus groups, and reflective writing assignments showed that the students understood sustainability multi-dimensionally (p. 170). Burns reported that “by learning deeply about one theme, students start to see the relationships between culture, local ecology,
their own families, the money they spend, structures of power, policy formation, economic paradigms, and psychology;” but she also noted that students did express frustration about the complexity of learning about the issues thematically (p. 173). Purinton (2014) outlined three approaches to teaching a history course covering “The World Since 1945:” chronologically, regionally and thematically. Purinton used the themes of Globalization, the Cold War, and Decolonization in his teaching, and he reported that the thematic approach forced students to “think more deeply about assigned readings and lectures by exploring how they relate” (p. 3). Purinton noted that the thematic approach took more time to develop and required the instructor to have a high level of comfort with the material (p. 4).

**Thematic instruction in the library science literature**

Instructors who have tried using a thematic approach in standalone IL instruction have based their decisions on making the course content more relevant to their students. They commonly identified student motivation as problematic in IL courses; namely that students do not see the relevance of IL to their lives or other coursework and need to be motivated to learn about the topic. Frequently discussed in the IL literature, these issues of motivation are examined in this review to provide context for why instructors have turned to a thematic approach. Several case studies are analyzed as examples of thematic approaches that IL instructors implemented (Greenfield and Frisbie, 1998; Barry, 2011; Piper and Tag, 2011; Tagge, 2012; Stahura and Milanese, 2013; Valentine and Wukovitz, 2013). This section of the review concludes with the advantages and challenges in teaching IL with a thematic approach based on their experiences.

**Problems with Traditional Methods and Motivating Students**

Although arguments in favor of IL instruction date to the late 1880s (Holder, 2009, p. 1), librarians disagreed about the form it should take. James Kennedy, a librarian at Earlham, argued
against standalone courses in the 1970s, saying “the subject matter is dull, students will not see the connection with their coursework and therefore be engaged and motivated, the courses do not reach a large enough number of students, and students will not need the more advanced skills until later in their academic career” (cited in Holder, 2009, p. 6). More than 40 years later, engagement and motivation continue to be problems for instructors of standalone classes. Tagge (2012, para. 2) simplified it as: “The fundamental question about teaching information literacy in any environment is: How do we get students to care?” Valentine and Wukovitz (2013, p. 26) observed that “information literacy skills often have no context, thus no personal relevance or value” for their students. Situating IL courses in the disciplines and/or majors, as Badke (2011) has endorsed, or attaching them to writing courses are tactics used to provide this value and applicability, but how do librarians make standalone IL courses relevant?

Stahura and Milanese (2013), two librarians teaching a standalone, two-credit IL course, thought that student apathy moved beyond simple relevance and related directly to another common problem: students selecting ineffective topics for their main research projects. “[Participants] chose subjects they thought would be easy—topics, such as “gout” or “domestic violence” that were too broad, and often of no personal interest to the student. The end result? Passionless final bibliographies and students who hated research” (p. 354).

Besides choosing topics that they think will be easy, another pitfall for students is the selection of “fallback” topics. Holliday and Rogers (2013) reported that a student in their focus group used his standard topic – tigers – to write multiple research papers (p. 266). Piper and Tag (2011) found that while student topic selection “implies engagement, we found the opposite to be true. The process, more often than not, resulted in changed topics and minimal interest. More significantly, there was a lack of class commonality and interactivity” (p. 322).
The authors suggest that the solution to the problems of both student topic selection and apathy might benefit from an examination of what we teach and how we teach it. Jacobson and Xu (2002) examined course design as one factor affecting student motivation in standalone IL instruction and found that stimulation of the students’ interest and the instructor’s preparation and organization of the course were critical (p. 426). Standalone IL courses that are merely library orientation tours or a sequence of database tutorials are easily measurable for assessment purposes but do little to stimulate the students’ interest and are not applicable to students beyond their time at the institution (Seeber, 2014). Nor do they help put the information ecosystem into any meaningful context. While librarians have argued in favor of standalone IL courses in order to provide this context, instructors might continue to fall back on a curriculum that is easily mapped to the Association of College and Research Library (ACRL) competency standards (ACRL, 2000) but remains “tool-based and technology focused” (Jacobs and Berg, 2011, p. 385).

In an examination of 100 IL course syllabi, Elrod, Wallace and Sirigos (2012), found a major shift in the learning outcomes of IL courses between a 2006 study by Paul Hrycaj and their own review in 2011. Writing citations was the fifth most covered topic in 2006 (Hrycaj, 2006), after periodical databases (94%); web searching (93%); the online catalog (92%) and website evaluation (79%). By 2011, writing citations was the most covered topic (78%), followed by periodical databases (74%); the online catalog (64%); research strategy (61%); and web searching (59%). When librarians teach so narrowly about how to find and cite, we overlook one of the areas where students have significant trouble: using the sources (Ryan and Stark, 2014, p. 17).
Ryan and Stark are not the first to make the observation about the missing link between students and source usage. Fister (2013, para. 2) observed, “[S]tudents can find sources; the trouble is they don’t read them, or they read only enough to find a useful quote, or they choose sources that are not particularly insightful ones, or their paper becomes merely a description of the sources they’ve found with little analysis or original thought.” Standalone IL courses can perpetuate this problem, particularly when students are allowed to choose their own topics and stick to what they already know, think will be easy, or can summarize hastily right before the submission deadline. The way instructors describe the process of locating and selecting sources can be problematic, too. Holliday and Rogers (2013) noted that in the classroom they observed, both assignments and discourse could reinforce the perception that research is about finding the “right number” or the “right kind” of sources (p. 262). A discourse of “learning about” directs attention to the content of sources and away from a checklist of attributes. When designing a course, the thematic approach helps instructors to emphasize information in context and to explore the social nature of research through shared learning.

*Thematic Approach Examples*

Several librarians have experimented with the thematic approach in their standalone IL courses. No research studies have been done on this topic; the articles reviewed here are case studies, professional journal articles, essays or blog posts that do not attempt to analyze in a statistically significant way whether learning improved using a thematic approach. This might stem from the difficulty in measuring student learning, or in the ethics of devising an approved study that compares a traditional course design versus a thematic approach without any other variables. It also might signify that this is an emerging topic that needs to be explored more thoroughly in peer-reviewed literature related to library instruction. Case studies, essays, and
blog posts have limitations as evidence: they might not have been peer-reviewed, they might not contain a comprehensive literature review, and they might focus strictly on successful implementations. However, the authors believe an examination of this literature holds value for librarians hoping to improve their standalone IL courses because that is where the early stages of the discussion on applying the thematic approach in library instruction transpired. This section outlines the thematic approaches used in IL courses, while the next two sections examine the instructors’ perceived advantages and challenges when using this style.

Greenwood and Frisbie (1998) taught a one-credit course that was paired with a composition course, and chose to have their students watch the 1951 science fiction film *When Worlds Collide*. In the film, a new society formed another planet after Earth collided with a planetary body. For their final research projects, students were instructed to choose a role that they would fulfill in the new society. Their research project was intended to help them prepare for that role. Stahura and Milanese (2013) tried a similar concept in their two-credit course, exploiting a resurgence of zombies in popular culture to build a “zombie apocalypse” theme framed around rebuilding civilization after an army of the undead had nearly destroyed it. The students in the class had all “survived” Z-day and were asked to do research (i.e. annotated bibliographies) to support the new government. Teaching materials, readings, and assignments were modified to reflect the zombie theme. Final project topics included “disaster planning and preparation,” “economic recovery after a disaster,” and “mob mentality and crowd control” (2013, p. 355).

Barry (2011) took a different tactic by incorporating service learning into her two-credit course, asking her students to create annotated bibliographies for the Children’s Hunger Alliance, a non-profit organization that works to relieve food insecurity for Ohio children.
Students also had an on-site service component at the organization. Piper and Tag (2011) implemented different themes in their two-credit courses. One instructor used the social aspects of food as a common thread: food and culture, food and religion, hunting and harvesting, agricultural practices, body image, and food and passion and then planned accompanying instructional activities, readings, guest speakers and assignments. The other instructor centered the course around a common reading, *This I Believe: The Personal Philosophies of Remarkable Men and Women*, which contained archived essays from the original 1950s radio program by Edward R. Murrow and newly contributed essays from a weekly National Public Radio (NPR) program started in 2005. The instructor felt the collection was “ideal” because of the “historical/archival content, the breadth of topics, the coverage of contemporary issues, the intersection of a variety of publication formats (radio, print, Internet), and the links to intellectual property issues” (p. 328). Students each chose an essay from the collection, and were instructed to search for information about either the person who wrote the essay or a topic that was directly related to the essay’s content.

Valentine and Wukovitz (2013) also chose a common book, Eli Pariser’s *The Filter Bubble*, to use as a “starting point for research and reflection on the nature of information, how information is communicated, and how it is used” (p. 25). Their larger theme was online personalization. They began the course by examining bias on Facebook, that of being shown posts that largely share the account holders’ viewpoints, before moving onto other topics such as relevancy ranking vs. personalized search results, and evaluating websites using rhetorical analysis.

Tagge (2012) embedded research skills into a semester-long Comparative Societies course aimed at first-year students. She chose the theme “South Africa: Apartheid’s Legacy” to
create opportunities to utilize a variety of resources (including reference works, books, magazine articles, government documents, and scholarly articles) as they compared apartheid and post-apartheid South Africa.

Advantages in the Thematic Approach

The thematic approach can turn IL courses into a more “inquiry-based” process. Rather than completing a checklist of types of sources searched/consulted in order to complete a research process, inquiry learning “emphasizes active learning and development of analytical skills” (Moos and Honkomp, 2011, p. 232). In a series of papers discussing student motivation, the Center for Education Policy asserts that the inquiry learning model aligns with the four factors that affect student motivation (Usher, 2012b, p. 3). These factors are (Usher, 2012a, p. 4):

- Competence - the belief that students are capable of completing a task.
- Autonomy/control - the students’ ability to set appropriate goals and see a correlation between their effort and the outcome.
- Interest/value - students having a vested interest in the task and a feeling that its value is worth the effort to complete it.
- Relatedness - the need to be part of a group or social context and exhibit behavior appropriate to that group.

By meeting all four of these factors, a course using the thematic approach should increase student motivation. First, instructors build competence through scaffolding assignments. Second, autonomy is encouraged by allowing students to choose their own topics, even if that choice is somewhat restricted by the broad theme. Third, interest is engaged through the use of technology (as either a tool or potential topic) to appeal to the digital generation. Fourth,
relatedness is emphasized through peer-to-peer and peer-to-instructor interactions that are strengthened through the shared readings and discussions.

Most librarians who have taught with a thematic approach observed an improvement in student engagement with the course content, using surveys or course evaluations to judge the successfulness of the theme. Valentine and Wukovitz (2013) added the thematic approach to their course in response to course evaluations that consistently ranked the course material as lacking value to students despite positive rankings for the instructors. The revamp was not enough to save the course, which was retired after the Spring 2012 semester, thus preventing further research and evaluation. Still, Valentine and Wukovitz felt that the new structure was a success based on “overwhelmingly positive” comments in the students’ research journals, calling the materials “interesting,” “extremely relevant,” and “enlightening.” Overall, Valentine and Wukovitz found that “students seemed to not only grasp the concepts but were able to build on them” (p. 32).

Piper and Tag (2011) saw benefits in their course evaluations, both in terms of quantitative figures and positive student comments. One co-author had taught three sections that used the thematic approach and four that did not, and reported that evaluations were higher by .50 points in classes where the thematic approach was used and “witnessed a level of engagement and community in the classes I had not seen in the previous four” (p. 327). Several student comments also touched on the value of using the theme. The other co-author received student evaluations that were 4.25 on a 5.0 scale, and many students commented on how much they enjoyed the book that was selected (p. 331).
Stahura and Milanese (2013) felt their students’ final projects were much improved, both in terms of topic selection and the work submitted; plus “[s]tudent creativity shone through as topics were tied in with the zombie theme” (p. 355).

*Challenges in the Thematic Approach*

Courses using the thematic approach create some additional challenges for instructors. First, as Tagge (2012, para. 6) noted, “Presenting [oneself] as an expert on a topic in which I only had a slight background was one of the biggest hurdles.” This might be especially true for librarians without a liaison area and natural area of specialty. Another problem that instructors face is student buy-in. Stahura and Milanese ran into that particular problem with their zombie theme and allowed students who disliked the idea of zombies to choose another approved topic (2013, p. 355). The third significant challenge is the development process. Piper and Tag (2011) noted that courses using the thematic approach to instruction are “time consuming, requiring pre-planning, some original course design, innovative assignments, class management skills, and creative assessment” (p. 331) but felt they were worth the extra effort. Therefore, choosing a more timeless theme, one that is not heavily indebted to a current popular culture craze, might be sensible.

*Gaps in the literature*

One of the most significant gaps in the literature on the thematic approach to instruction is that the vast majority of published research is about using this style of teaching in primary and secondary classrooms rather than those of higher learning. This gap can be seen in a general search of the terms in both specialized databases and the web.

In researching this topic, the authors conducted a series of keyword searches in major education and library related databases and Google Scholar (See Table 1). The query “thematic
approach,” without a limitation to peer-reviewed journals, returned 25,602 articles. The query (“thematic approach” AND (primary OR middle OR secondary)) returned 17,813 articles. Changing the search phrase to (“thematic approach” AND (college OR university)) the results rose to 21,272 articles. A further search, replacing “college OR university” with “information literacy,” elicited only 177 results. The variation in figures could be based on the queries failing to eliminate book reviews and including all articles with the keywords “theme” and / or “approach” and not necessarily on the topic of the thematic approach to instruction.

TABLE 1

In examining the literature in higher education, only two studies attempt to measure learning in courses taught with a thematic approach (Shultz et al., 2009; Howard et al., 2014). For the most part, the higher education literature consists of case studies that rely on indirect assessments of student learning (e.g., instructor observations, student evaluations, comments and/or surveys) to evaluate the effectiveness of the approach (White, 1996; Lung, 1999; Viti, 2000; Sullivan-Catlin, 2002; Griffiths, 2010; Burns, 2013; Purinton, 2014). This same problem is found in the library instruction literature, which mainly consists of case studies, essays, and blog posts (Greenfield and Frisbie, 1998; Barry, 2011; Piper and Tag, 2011; Tagge, 2012; Stahura and Milanese, 2013; Valentine and Wukovitz, 2013). The lack of peer-reviewed articles is likely because of the emerging nature of the topic, as well as the difficulty in devising tests to measure student learning, or in conducting an approved study with students that compares a traditional course design versus a thematic approach without any other variables.

Further studies could review direct assessment of student learning, such as using rubrics to evaluate student-produced artifacts (e.g., bibliographies, research papers, presentations) submitted in IL courses both taught with a thematic approach and taught without one. This type
of study also might allow instructors to judge whether a thematic approach is superior to a traditional lecture and/or survey approach, as Howard et al. (2014) suggested.

One other area that could be studied is the effectiveness of discipline- or major-specific IL courses, a direction that Badke (2011) endorsed, rather than IL courses taught with the thematic approach that serve as general studies electives.

Conclusion

Librarians pursued standalone IL courses in order to put information literacy into context, but, as Badke (2011) wrote, teaching students “‘here’s how to use this tool; here’s what this thing is for,’ … does not begin to provide genuine information literacy,” (p. 150). Students are adept at skimming sources to put together a bibliography, but rarely seem to read the sources or gain true insight into the topics (Fister, 2013; Stahura and Milanese, 2013; Holliday and Rogers, 2013; Ryan and Stark, 2014). The authors, through their teaching experiences, have learned that teaching students to critically analyze and use reliable information is difficult when students do not have enough background knowledge or genuine interest to undertake a thorough investigation. This difficulty was especially pronounced when using information-related topics such as copyright, hacking, music piracy, patents, etc., in our IL courses. Allowing students to select their own individual topics suggests engagement but does not always yield better results (Piper and Tag, 2011; Stahura and Milanese, 2013; Holliday and Rogers, 2013). In addition, when every student researches a different individually-selected topic, there are fewer opportunities for peer-teaching or social learning (Piper and Tag, 2011; Usher, 2012a). At semester’s end, instructors might feel discouraged and wonder what students truly learned.

Citing research by Holliday and Rogers (2013), Fister described the problem thus: “Stop talking about “finding sources” [and] frame the work as learning about something” (2013, para.
4). Although the context of Fister’s statement was for librarians working with regular classroom instructors for one-shot sessions, librarians need to think about applying it to the structure of their standalone IL courses. A thematic approach might enable students to more thoroughly analyze topics, grasp key concepts, and find value in information literacy skills. Further studies will need to examine whether this hypothesis is true. This type of research is currently underway at the authors’ institution, where they are directly assessing student learning in a three-credit IL course that uses a thematic approach.

References


