Laura K Dimmit. Building a Community of Practice Around Information Literacy by Design: A Case Study at UNC-Chapel Hill's Undergraduate Library. A Master's Paper for the M.S. in Library Science degree. April, 2016. 62 pages. Advisor: Jonathan McMichael

A gap currently exists between the level of instructional training needed for public service librarians to succeed, and the level being provided by employers and LIS programs. Communities of practice (CoPs), as described by Lave and Wenger, provide a sustainable, practice-centered model for instructors of all experience and skill levels to grow individually while supporting each other. This paper documents the analysis of redesigned instructional training for the instruction team at UNC-Chapel Hill's Undergraduate Library (UL), centered around Information Literacy by Design (ILbD). Interviews with instruction team members are coded to track indicators of CoPs, which reveal key trends involving peer relationships, self-efficacy, and ways of learning. The redesigned training is revealed to have influenced the development of a community of practice among the UL instruction team.

Headings:

Academic libraries

Librarians – in-service training

Communities of practice

Communities of practice – case studies

Social learning

Information services – user education

BUILDING A COMMUNITY OF PRACTICE AROUND INFORMATION

LITERACY BY DESIGN: A CASE STUDY AT UNC-CHAPEL HILL'S

UNDERGRADUATE LIBRARY

by
Laura K Dimmit

A Master's paper submitted to the faculty
of the School of Information and Library Science
of the University of North Carolina at Chapel Hill
in partial fulfillment of the requirements
for the degree of Master of Science in Library Science.
Chapel Hill, North Carolina

April 2016

Approved by

_____

Jonathan McMichael

Table of Contents

Introduction

Information literacy (IL) instruction continues to be a key function of academic libraries, and new professionals working in public service will often be asked not only to teach, but to innovate in classroom settings (Brecher & Klipfel, 2014). Studies done more than a decade apart (2001 and 2013) suggest that nearly all reference job postings require some element of instruction (Davies-Hoffman, Alvarez, Costello, & Emerson; Hall). While librarians possess the research skills that comprise much of the information literacy instruction that occurs, not all have received the same level of core educational training as would classroom teachers. For example, the MSLS curriculum at the University of North Carolina at Chapel Hill contains a single instructional course: INLS 502—User Education. However, it is not offered every semester, and it is not a required or core course for any degree.

ACRL has previously recognized the need for strong instructional skills, and the gap that currently exists between what jobs demand and how the workforce is trained. In 2007, they released a "Standards for Proficiencies for Instruction Librarians and Coordinators" with a stated goal of "help[ing] instruction librarians define and gain the skills needed to be excellent teachers in library instruction programs" (ACRL, 2007). These standards categorize recommended proficiencies into 12 groups; particularly relevant are information literacy integration skills, curriculum design skills, and teaching skills. Each individual proficiency is complex. Under Teaching Skills, proficiency 12.2

states that the effective instruction librarian "Modifies teaching methods and delivery to address different learning styles, language abilities, developmental skills, age groups, and the diverse needs of student learners" (ACRL, 2007). Each of the variables listed— learning styles, language, age groups--encompasses a hefty background of educational literature and strategy. Providing a new generation of public service librarians with these proficiencies will require increased attention to pedagogical training by LIS programs, and continued focus on training and professional development opportunities for those already working in an instructional capacity.

This document also recognizes the importance of collaboration in librarianship, and that gaining skill and expertise as a professional is a social, not solitary, endeavor. These observations about social learning are best described by Lave and Wegner's theory of communities of practice (often abbreviated as CoPs). These CoPs, defined by a shared goal and common purpose, should promote learning and the opportunity to continue developing one's expertise (Lave & Wegner, 1991). For Lave and Wegner, learning is always an activity influenced by context and culture. The concept of communities of practice is particularly useful to librarians because it is beneficial for both beginners and
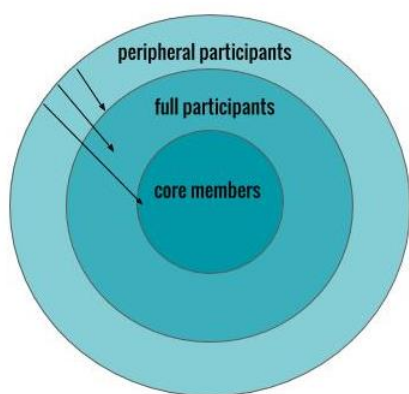

Figure 1: Communities of practice include members of varying skill levels. This figure represents how peripheral members move progressively closer to the core of the community.

those with more experience. Beginners can gain increasing membership in a community of practice through *legitimate peripheral participation*.

Legitimate peripheral participation suggests that engaging new members of a community immediately with authentic tasks and responsibilities will allow them to learn necessary vocabulary, norms, and behaviors more quickly than they would by just observing from the fringes. Becoming participants also enables new members to gradually increase their responsibilities, and to learn from current experts who are fully immersed in the work of the community. For those with more experience, participation in a CoP represents an opportunity for continuous learning, and to sharpen and refine one's practice through mentorship and the exchange of ideas.

Communities of practice, as an avenue for social learning and continued development, represent a solution for our field's need for increased pedagogical training. They accommodate members of all skill levels, and can be self-sustaining. To quote Wenger (1998), communities of practice become "the social fabric" of an organization's learning structures. They provide an opportunity to create pedagogical practice that is not only taught once, but internalized.

Institutional Context

The Undergraduate Library (UL) is the main source of library instruction for early undergraduates at UNC-Chapel Hill. This instruction is primarily tied to a mandatory first-year writing course that exposes new college students to writing "across the disciplines." By collaborating with first-year writing instructors to develop learning goals for their courses, UNC Libraries help ensure that information literacy becomes a foundational component of a student's academic career.

In 2014, a UNC MSLS student, Liz McGlynn, along with the Undergraduate Experience Librarian, Jonathan McMichael, developed a new information literacy program, Information Literacy by Design (ILbD). This program is based on Understanding by Design (UbD), the curriculum design strategy authored by Grant Wiggins and Jay McTighe (McGlynn, 2015). This new ILbD template embraces the same backwards design principles as UbD, while adding information literacy concepts embodied in the ACRL Framework. Backwards design suggests that, rather than starting lesson or unit planning with ideas for specific classroom activities, educators should start by outlining the desired results that will be achieved through authentic classroom performance. This strategy enables all instructors to develop lessons that focus on big-picture understandings and threshold concepts that will be transferable beyond the boundaries of any specific course (Wiggins & McTighe, 1998).

The ILbD template encouraged the Research and Design staff at the Undergraduate Library to embark on a redesign of the training and support structures for library instructors. Two full-time staff teach many of the requested information literacy sessions, but graduate students from the UNC School of Information and Library Science (SILS) working at the Undergraduate Library also serve on the instruction team, and teach 40% of the more than 250 sessions that are requested each academic year. Hiring and training graduate students allows the UL to meet growing institutional demand for instruction while also providing valuable experience and training for LIS students. However, for this to be a sustainable program, it has to work well for all the stakeholders. First-year writing instructors don't just need instruction, but instruction provided by

engaged and well-trained librarians. Likewise, LIS students don't just need experience, but experience that is paired with the support to learn and develop in an authentic setting.

Prior to the Fall 2015 semester, newly-hired graduate students went through a two-step training process. Prior to the start of the semester, there was an 'instruction bootcamp' designed to introduce both institutionally-specific instruction practices as well as high-level information literacy concepts. Over the course of a four-hour session, new instructors were introduced to three major sets of information:

- Details about UNC's first-year writing program: who it serves, what the courses are like, and what the goals are.

- What is information literacy: concepts, terms, the ACRL Framework and Standards.

- Institutional approach: how do the libraries work with the first-year writing program? What are we teaching? What are the logistics of teaching here?

None of this training was designed with the assumption that students had any previous teaching experience, in libraries or otherwise.

This bootcamp was followed by an observational period, where new students would attend three instruction sessions taught by either a second-year student or a full-time librarian. New students would fill out an observation form, and after completing the observations, would meet with a full-time librarian assigned as their 'instruction mentor.' Some new students would choose to co-plan and execute their first lesson with a partner, which would supply additional hands-on discussion and guided practice. After executing the co-designed lessons, students would be finished with the formal training process.

Given the opportunity to develop a new training that would have the ILbD template at its core, UL staff looked to communities of practice as an implementation model. Previous studies have documented the benefit of conscious mentoring in academic libraries (Bosch, 2010; Henrich & Attebury 2010; Hallam & Newton-Smith, 2006). While most current literature focuses on programs for full-time professionals, the reported positive results suggest that pre-professionals would benefit from similar programs. The new training model that emerged retains elements of the previous process—both a 'bootcamp' and an observational period remain. However, these elements are contained within a five-step process (see Appendix 6) that sets students on the path from being "initiates" to "experts" (though it is not expected that anyone can become an expert in two years). The training process is also supported by a cohesive set of documents modeled from the ILbD template, and an Omeka website for sharing lesson plans and other useful resources. By situating new instructors immediately within a framework, their progress can consciously mirror the stages of moving from the fringes to the core of a CoP (refer to Figure 1, p. 4).

The Fall 2015 semester was the first time the UL's new training process was used. Observing the first group of students to receive this training, and soliciting feedback from them as part of the implementation process, was a valuable way to gauge the impact of a more immersive introduction to library instruction. It also allows for revision of processes and supporting documents, both of which will benefit future classes of incoming graduate assistants. The ultimate goal is to create a training program that is both scalable and adaptable, one that will be useful for instructional programs involving both full-time staff and pre-professional staff. While the primary audience for this

training at the Undergraduate Library is new LIS students, a similar training program should be beneficial for libraries that are adding new instructional staff or expanding the scope of information literacy programming. Implementing additional opportunities to come together and focus on instruction can also be beneficial for experienced librarians who want to explore new possibilities and push back against possible stagnation.

Preview of Results

Through one-on-one interviews with members of the UL instruction team, I was able to create a fuller picture of individuals' experiences with the training program, and of working within this specific community. Coded interview transcripts, when combined with secondary research, strongly suggest that the instruction team is also a community of practice with a shared purpose and goals. The interviews also reveal several directions for future improvement, and suggestions for additional changes to the training program.

Literature Review

Mentorship in Academic Libraries

There is a long tradition of mentorship programs in the workplace, and academic libraries are no exception. Mentorship, described by Lorenzetti and Powelson as "facilitating both emotional and behavioral resiliency, and academic and career advancement," has been implemented in a variety of ways by academic library teams, and thus far, no dominant strategy or set of best practices have emerged (2015, p. 186). Formal mentoring, informal mentoring, and peer mentoring are three variations represented in the literature.

Formal mentoring generally implies a structured program with mentor/mentee pairings that are consciously assigned. In a 2010 case study at California State University, Bosch et al. describe a formal "resource team model": newly hired librarians are paired with three established librarians who provide support and guidance in different professional areas. Moving away from the traditional one-to-one relationships, the resource team model at CSU was designed to provide a "broader, dynamic network…of support" (p. 58). For formal mentoring to succeed, the activities and conversations that surround it must be viewed as professional service, both by individuals and by the departments they work within.

Additionally, mentoring programs of any kind require dedicated time and space within the work day to enact what Mavrinac calls "transformational change" (2005, p. 400). She also situates mentorship—specifically, peer mentorship—as one way to build learning cultures within libraries. To build a learning culture, learning should be at the center of all new developments. Peer mentorship, where relationships are forged between those on a similar level within organizations (rather than relationships that straddle different levels of a work hierarchy) can also be more 'learner-driven,' as both or all parties of the relationship are focused on similar problems in their professional lives. Fyn also discusses the benefit of peer mentorship, especially group peer mentoring. For new librarians, the narrative element of group discussions can be a powerful way to share not only formal knowledge about work but cultural and organizational knowledge about their specific institution (2013).

Broadly, mentorship has a variety of professional and psychosocial benefits for mentors and mentees. A survey of Canadian library science graduates, librarians, and library administrators demonstrated a relationship between mentorship and increased worker satisfaction, worker engagement, and a decrease in institutional turnover (Harrington & Marshall, 2014). Lacy and Copeland (2013) surveyed current library science students and their professional mentors after a semester-long program at Indiana University-Purdue University Indianapolis and found positive results for both parties. For the students, a formal relationship gave them knowledge about job-seeking and workplace expectations that were not otherwise included in their LIS degree experience. For the professionals, mentoring a student was an opportunity for self-reflection about

practice, as well as a way to stay apprised of current trends and developments that were being discussed in LIS courses.

Not all student/librarian mentorship relationships are formalized; indeed, sometimes 'accidental mentorship,' as described by Burke and Lawrence, can provide guidance and feedback at the point of need for student library workers. Accidental mentorship, like informal mentorship, is not managed by a structured program. However, unlike informal mentorship, accidental mentors may not even realize they are serving in a mentorship role until the student has matriculated and/or no longer works for the library (2011). While Burke and Lawrence's article specifically describes relationships between undergraduate library workers and their supervisors, similar opportunities for point-of-need mentorship should be reasonably expected with graduate student workers and their supervisors in libraries.

The training program for instruction at the Undergraduate Library provides opportunities to incorporate both formal and peer mentor relationships. Mentorship demonstrates the value of a community of practice in action, and strong mentorship can be evidence of an existing CoP. Because the number of new instructors and graduate students will always outnumber the number of currently trained instructors, the concept of peer mentorship is especially important. One of the goals of the UL's redesign is to provide a dedicated space for discussion and idea-sharing that is separate from formal aspects of the training program—to create an environment where organic or 'accidental' mentorship is likely. However, being paired with an experienced librarian for discussions about teaching style, lesson planning, and classroom strategies is also useful—those

pairings allow mentors to act as resource conduits, and provide a check that new instructors have access to all the information they need to succeed (Bosch et al., 2010).

Information Literacy Programs & Training in Academic Libraries

To provide effective instructional training for both pre-professionals and current librarians, we need a vision for what successful information literacy programs look like, and which skills we should be focused on developing. The ACRL Information Literacy Best Practices Committee curates the guidelines for "Characteristics of programs of information literacy that illustrate best practices," which provide precisely this type of guidance. The guidelines, last revised in 2012, provide a valuable check for both the practice of information literacy instruction, and the types of training and development that should accompany a successful program. Of the 10 guideline categories, category 7 (pedagogy) and category 8 (staffing) are most relevant to the redesign of the training program at the UL. From category 7, pedagogy for an information literacy program should:

- support diverse approaches to teaching and learning
- build on existing knowledge, course assignments, and career goals
- prepare students to be lifelong critical thinkers and learners

From category 8, staff of an information literacy program should:

- have the opportunity to receive regular feedback and evaluation
- continue training and professional development
- have the opportunity to develop, coordinate, implement, and revise
- work collaboratively

These guidelines help create the vision for what the content of information literacy sessions should be, and also how graduate students and librarians should prepare and be prepared to teach these sessions. In many ways, the training for instructors should mirror the content students receive—training should be supportive of various teaching styles; it should build on what new instructors know, and should support their current or future careers in librarianship, and it should emphasize fundamental skills.

Key to understanding the current landscape of instructional librarianship is the discussion surrounding instructional training in LIS education, and how well LIS students and new librarians are prepared to take on the instructional duties that continue to be a major component of academic public service careers. Julien (2005) reports that not all LIS programs offer courses that will provide training in instructional skills or theory. When these courses are offered, they are overwhelmingly likely to be electives, rather than a core requirement. Julien concludes the study by asking, "If instruction is now truly core to the work of academic librarianship, and increasingly important for the work of librarians in other sectors, why do our LIS school curricula not reflect this reality?" (p. 215). A recent survey by Hall illustrates the relative importance of instructional skills in new academic library job postings. Supervisors for job postings with instructional duties were surveyed, and 87% of those rated instruction as being 'very important' to their libraries (p. 28). If instructional skills are increasingly valued, where will the additional training and development come from: LIS programs? Employers? or somewhere else?

A 2008 content analysis by Sproles, Johnson, and Farison compared the syllabi of reference and information literacy courses to the 12 ACRL Competencies for Library Instructors. While two-thirds of the reference syllabi surveyed included some exposure to

information literacy concepts, the number and depth of proficiencies were limited. Their conclusion was that, while some instructional exposure was possible through coursework, as it stands, complete instructional training cannot be provided 'solely in a classroom setting' (p. 207).

More recently, Brecher and Klipfel (2014) examined a slightly different 'disconnect' between LIS education and the importance of instructional skills in academic librarianship. As librarians are increasingly asked to collaborate on curricular issues with faculty as equals, rather than as support staff, pedagogical training is necessary. It is difficult to help students learn without an understanding of how learning works (p. 44). Historically, some librarians have supplemented their LIS training with another advanced degree in education or educational technology, but, the authors asked, should it be necessary to get a second master's degree to work in a primarily instructional position?

For LIS graduate students involved in instruction at the Undergraduate Library, working while being in school is an opportunity to complement the theory of coursework with practical application. As the literature suggests that a gap remains between the instructional training needed for academic public services and the training that librarians actually receive during their education, both groups can benefit from additional theoretical and practical instructional training. Communities of practice represent a practical way to create space for this additional training, while respecting any other infrastructure that already exists.

Understanding by Design in Libraries

Searches for "understanding by design" as a keyword in Library and Information Science Abstracts (LISA), Library & Information Science Source, and ERIC reveal no articles dealing with Wiggins and McTighe's curricular design strategies in the context of academic libraries. Similarly, a search in those same databases for "backwards design" (a key principle of Understanding by Design) reveals nothing. The core text in this area, and one with a great deal of significance for this case study in particular, is Elizabeth McGlynn's master's paper from 2015. In this paper, written at UNC while also working at the Undergraduate Library, she outlines a new vision for the classic Understanding by Design template, one tailored for information literacy education. This new idea, termed "Information Literacy by Design" by McGlynn, was the catalyst for a complete reconceptualization of the UL's instruction training program. The ILbD template, and other documents modeled after it, directly support both the training and the larger instructional program.

Information Literacy by Design is adapted from the same curricular design principles that form the foundation of Understanding by Design. At the core is backwards design, the idea that teachers and other educators should reject both "coverage orientation" and "activity orientation" when designing units or individual lessons. Coverage orientation speaks to the practice of designing learning plans around how much material there is to cover—10 chapters in a textbook, for example. Activity orientation speaks to basing a learning plan around being "hands-on without being minds-on" (Wiggins & McTighe, 2005, p. 17).

In contrast, backwards design asks educators to start with establishing desired results. What are the big ideas and understandings that a student should have when they leave the classroom that day/week/semester? After choosing results, educators can then decide what kind of evidence is necessary to prove that students have achieved the desired results. What kind of authentic performance tasks can you develop to let them demonstrate their understanding? Finally, after choosing both desired results and acceptable evidence, planning of individual lessons and learning experiences can take place. The goal of backwards design is to let learning motivate classroom strategies, not the other way around.

McGlynn's adaptation of the Understanding by Design template tailors the guiding questions to a specifically library setting, and removes some of the structure that is designed more to guide unit planning than individual lesson planning (p. 24). The Information Literacy by Design template also includes some guiding questions that are tailored for the UNC library instructors teaching sessions for first-year writing courses. Generally, these library sessions are focused on a particular part of a particular assignment. To reflect this, and to assist library instructors in breaking down the requirements of the assignment, the template includes a "Pre-Planning" stage that helps them establish where students are in the research process, and what the goals of the lesson should be (McGlynn, p. 25).

Communities of Practice in Libraries

The concept of a 'community of practice' shares significant overlap with the broad concept of mentorship. Like mentorship, communities of practice are centered around the idea of improvement and growth within a specific field. However,

communities of practice depend on a larger network of individuals, unlike the traditional

conception of mentorship that is based on a one-to-one or one-to-few relationship. The

idea of a community of practice comes from social learning theory, and was developed in

cognitive anthropologists Lave and Wenger's 1991 book *Situated Learning: Legitimate*

Peripheral Participation. Communities of practice represent learning as a social process.

Individuals perform tasks or engage in practices as they are also connected to a larger

'joint enterprise.' For the purposes of this study, that joint enterprise is taken to be

'teaching library instruction for first-year composition students at UNC-Chapel Hill.' In

this same vein, members of a community of practice share ideas and collaborate, even if

this shared discussion is not formalized. Ultimately, a community of practice becomes a

living resource for each of its members, and the resources will grow as individual

members become more fully participatory (Swieringa, 2009).

Generally, communities of practice provide an alternative to the idea that learning

is a solitary process based on the internalization of knowledge. Instead, Lave and Wegner

present a definition of learning "as increasing participation in communities of practice

concern[ing] the whole person acting in the world" (p. 49). Thinking about learning as

participation rather than as internalization also allows it to be both a mental and physical

activity; learning becomes grounded in specific circumstances.

"Legitimate peripheral participation" (refer to Figure 1, p. 4) is the action

accompanying all communities of practice. While Lave and Wegner are quick to point

out that legitimate peripheral participation as a phrase is meant to be taken as a whole

rather than dissected into its component words, understanding *peripheral* participation is

key to understanding the choices made during this study. The most important aspect of

Lave and Wegner's use of peripheral is that it does not stand in opposition to some idea of 'central' participation (p. 36). Peripheral participation in a community means that an individual has the capacity and opportunity to move and develop in practice, and to gain a richer understanding of the actions and knowledge at hand.

The concept of legitimate peripheral participation is particularly important to the "Stages of Instructor Development" that are included in the UL's training redesign. A chart with each stage is included below, and a full chart with actions and performance indicator is included as an appendix (Appendix 6). Envisioning new instructor development as movement through stages is an attempt to create an outline of what legitimate peripheral participation looks and feels like, and to provide 'checks' that allow new instructors to confirm that they are moving closer to what Lave and Wegner call 'full participation' (p. 37).

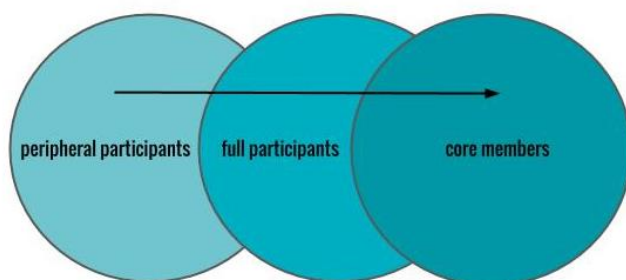| Stages of Instructor Development					
	Initiate	Observant	Apprentice	Guided Practice	Expert
Description	A new instructor becomes familiar with expectations, the support network, and the pedagogical approach of the first-year writing program.	Instructors should observe first had how the design and execution are linked. Noting what is being taught and how.	Working with an instruction mentor, a new instructor will begin using all they have observe so far to begin developing the skills necessary for successful instructional design and practice.	With assistance from instruction mentor, a new instructor will design and execute a lesson.	Through repeated instances of guided and independent practice, an instructors skills are continually honed to a point that pedagogical approach and motivation is internalized.

Figure 2: The stages of instructor development are designed to move individuals from peripheral to full participation in a community of practice.

Communities of practice are not new in the literature of academic libraries, though the principles that underpin these communities are often described using different names. Hensley, for instance, describes a 'peer learning program' for new instructional librarians. In this peer learning model, instructors take progressive levels of responsibility in the classroom, moving from shadowing to team teaching to solo teaching (p. 182-183). This progression is accompanied by discussion and reflective questioning. Hensley also beautifully articulates the mission of such programs and networks of support: "The question is not, 'How do you convince a librarian to be a better teacher?' Rather the question is 'How can you spark the motivation of librarians to pursue a medley of activities surrounding teaching and learning?'" (p. 187).

Regardless of how they are named, libraries as a workplace seem to be a natural fit for a community of practice. As noted by Henrich and Attebury (2010), the shared-learning aspect of CoPs blends well with the interpretation of libraries as learning organizations. The authors also provide a useful summary of the best practices for communities of practice (while pointing out that so much diversity exists among CoPs that best practices must be examined on a case-by-case basis). Some successful practices they identify include identifying a facilitator or some kind of internal leader, using tools to encourage frequent communication and idea sharing, and the more abstract development of a "sense of community."

Wastawy, Uth, and Stewart (2004) discuss communities of practice and other learner-centered models of learning emerging as a result of the interactive allowances of technology. Their focus is primarily on libraries adapting to support these learning communities among students, but the overarching concept—that librarians should focus

more on investigating the needs of emerging types of communities—rings just as true when the community members are librarians as it does when they are our patrons.

Klein, Connell, and Meyer (2005) propose a classification scheme for communities of practice that considers both structure and knowledge activities. The classification categories they propose are: stratified-sharing, egalitarian-sharing, stratified-nurturing, and egalitarian-nurturing. Stratified CoPs are defined by different levels of knowledge held by different members, and the fact that members with more knowledge are sharing what they know with the less advanced members. Egalitarian CoPs have two-way knowledge sharing, going from those with more knowledge to those with less knowledge, and vice versa. Knowledge-sharing CoPs, as the name suggests, are defined by the ways in which knowledge is shared between members. Knowledge-nurturing CoPs emphasize opportunities for individual members to develop their own knowledge within the supportive structure of the community (p. 108-109).

At the Undergraduate Library, the goal was to create a training program that would foster an egalitarian-nurturing community of practice. Though the pool of instructors is made up of individuals with varying levels of experience, collaboration between individuals can be more easily fostered if new instructors believe they have just as much to contribute as someone who has more experience. Since one of the goals expressed in the Stages of Instructor Development is for new instructors to develop their own teaching voice, it made sense to emphasize the aspect of nurturing ideas over sharing, though of course knowledge-sharing should also happen, and arguably must always happen for a CoP to function.

Together, ILbD and communities of practice provide a sustainable solution to the challenge of providing more, and more thorough, instructional training. ILbD provides the language for developing and understanding good library pedagogy, while a CoP provides the support and space for that pedagogy to become internalized.

Methods

Communities of practice are grounded in interpersonal relationships, not governed by strict rules or boundaries, and may not even be intentionally developed. How can something like this even be studied—if you think a CoP might be developing, how can you measure it?

In this case study, the primary mode of data collection was one-on-one interviews with current members of the Undergraduate Library instruction team about their experiences as developing instructors, including their usage of the new ILbD documents. The purpose of this study is evaluate the impacts of the redesigned instructional training on new instructors, and to report on the choices made in the redesign so that they might be built on and incorporated by other libraries. This does mean that the data collection will be focused on internal stakeholders—the new instructors and instructors who have already been teaching—using metrics that will indicate the existence of a community of practice, or conditions favorable for the development of a CoP. Future research should also include the impact of training on student learning, but that is beyond the scope of the current study.

Document Analysis

The UL's previous training program was dependent on a set of documents, and, while the documents have been redesigned to support the new training program, they remain important. New instructors first use an instruction observation form, which helps guide their observations and allows them to reflect not only on what is being presented in a class, but how it is being presented, and what impact it is having on students. Later in their first semester of teaching, instructors use a self-assessment form to reflect on their own teaching. Instruction mentors use a feedback form to structure their comments and constructive criticism. Of special importance are the templates used by instructors to plan lessons. These lesson planning templates are included in the appendices (4 and 5) as a reference, so that readers can better understand the instruction team's experiences.

Interviews

Individual interviews were conducted with current members of the instruction team, including new and returning team members. These interviews were designed to collect more detailed information and opinions about the impact of the new instructional training. Because this study is interested in the concept of communities of practice, and examining how one might develop, it was important to have exact phrasing from instructors about how they *felt* moving through the training process, and if those feelings were indicative of a community of practice moving them towards full participation.

Interviews were conducted in February 2016, after the first-unit 'bump' in instruction requests. Scheduling interviews after this bump meant that instructors were more available for discussion, and instructors who began teaching in the Fall had an

entire semester of training and teaching to draw from. Depending on which year

participants started working at the UL, individuals either had 1 ½ years or ½ a year of

experience at the time of their interview.

The researcher interviewed five members of the instruction team, which is

roughly 1/3 of the total group. To protect the privacy of individual team members, all

interviews were anonymized. The questions used in each interview, which focus

primarily on training experiences, support and help-seeking, and self-efficacy, can be

found in Appendix 1.

Developing Interview Questions

The goal for interviews with members of the instruction team was to gather

individual, experiential narratives. That meant that the interview questions being used

needed to guide a conversation while capturing as much information about their time

with the team as possible. These questions were developed after consulting literature on

communities of practice, as well as other library case studies that collected data through

interviews.

Interview Question Sections (see Appendix 1 for complete list of individual questions)
1   History/Background
2   Training Experiences
3   Support
4   Self-efficacy

Since some of these questions are tailored to a specific organizational context, they might need to be adapted by those interested in embarking on a similar study in a different setting. This is especially true of the second section of questions, which focus on experiences with the instructional training program used at the UL.

Other sections, about support and self-efficacy, are more broadly applicable. These sections are more focused on assessing organizational and interpersonal factors that might indicate a developing community of practice, and developing a fuller picture of how the team functions.

Ethical Considerations

When interview participants in a research study are both one's coworkers and personal acquaintances, the benefits and ethical challenges are wrapped up together. The advantage of knowing your participants is that you can tap into previously established knowledge, terminology, and experiences, and the interview questions were developed with this in mind. It would certainly be possible to use a similar or adapted set of interview questions to study an outside group of teaching librarians—or librarians with another type of shared function or goal. In that case, it might be necessary to add some additional fact-finding questions, to be sure to end up with an accurate and well-developed picture of the history and development of that group.

However, extra care must also be taken when working with a known population. This is especially true because many of the interview questions directly involve participants' work history, and attitudes about work. It was crucial that interview participants felt comfortable discussing their experiences without fear of anything they

said affecting their employment. This made it especially important for all interview data to be collected and discussed anonymously.

Interview Analysis

The five interviews were analyzed using nine markers that highlight major indicators of communities of practice. Using these markers as guides, the next sections will discuss major themes: relationships among the members of the instruction team, ways of learning, efficacy, and challenges encountered by the team.

Table 1: Interview coding markers and their original source.

Marker Title	Marker Source
1. Open communication (with peers)	CoP-S Scale
2. Sense of belonging (with peers)	CoP-S Scale
3. Support for development (from supervisors)	CoP-S Scale
4. Validation (from supervisors)	CoP-S Scale
5. Logistical challenges	Developed through interview coding.
6. Situational challenges	Developed through interview coding.
7. Self-efficacy	Developed through interview coding.
8. Observation and guided practice	Developed through interview coding.
9. Navigating the support network	Developed through interview coding.

A primary tool in this analysis is the Community of Practice Scale for Schools, or CoP-S, developed by scholars at George Mason University and Wayne State University (Gorrell, Kitsantas, and Matthews 2013). This scale, while originally designed for use in evaluating groups of primary and secondary school teachers, has great utility in evaluating library instructors. The factors it evaluates—common goals, leadership, bonding, and discourse—reflect primary identifiers of a community of practice across institutional settings.

The original scale includes 26 statements to be rated using 5-point Likert statements (Appendix 2). However, this original scale was adapted for use in coding the instruction team interviews (Appendix 3). The original 26 statements were compressed by the researcher into 4 markers: open communication (with peers), sense of belonging (with peers), support for development (from supervisors), and validation (from supervisors). This compression makes it easier to track some of the major hallmarks of developing communities of practice, and the degree to which interviewees feel supported in their progression towards being full participants in the instruction team.

Supplementing the compressed CoP-S are five other markers that emerged from the interviews. Two of these, in the "Challenges" section of the adapted scale, enable the researcher to track both logistical and situational issues that prevented individuals from participation in the instruction team, or that impacted their pedagogical development. The three other markers track:

- Discussions of self-efficacy: belief in one's ability and performance; increasing self-efficacy can be a result of involvement in a community of practice.

- The impact of observation and guided practice: the training received by the instruction team relies heavily on both observation of other instructors and the opportunity for guided practice. Tracking the impact (if any) that these activities had on the experience of individual team members is useful, especially as they relate to the markers drawn from the CoP-S scale.

- Navigating the support network: Tracking the decisions involved in team members' help-seeking behaviors helps create a fuller picture of the existing community. What peer-to-peer relationships exist? What peer-to-supervisor relationships exist?

All markers in the adapted scale were coded onto all five interview transcripts, and counts for each marker are tallied below:

Table 2: Total (across all interviews) count of each coded marker, and average of each marker per interview.

Marker Name	Total	Average per Transcript
1. Open communication (with peers)	26	5.2
2. Sense of belonging (with peers)	20	4
3. Support for development (from supervisors)	5	1
4. Validation (from supervisors)	6	1.2
5. Logistical challenges	6	1.2
6. Situational challenges	15	3
7. Self-efficacy	7	1.4
8. Observation and guided practice	12	2.4

9. Navigating the support network	6	1.2

Team Relationships

Perhaps the most important indicator of a flourishing community of practice is strong relationships between community members. These relationships enable both professional communication and emotional support. Without this support, especially among members on the periphery of the group, the 'shared purpose and goals' captured by the CoP-S scale cannot develop, and forward momentum will wither away. As noted by Cuddapah and Clayton (2011), a cohort of instructors supports not only professional development, but the process of meaning-making and identity construction (p. 68-69). These same processes seemed to occur within the instruction team, especially among team members with similar amounts of experience.

The counts captured in the table above suggest that the primary relationships within the instruction team are peer-to-peer, rather than peer-to-supervisor. Both peer relationship markers (1 and 2) appear nearly 5 times as frequently as both supervisor relationship markers (3 and 4).

Open communication between peers also seemed to be of equal importance to both new and returning instructors. For returning instructors, training sessions in their second semester and beyond represented an opportunity to both increase their knowledge of teaching strategies and resources and to reaffirm their prior knowledge. Recalling a group training activity, one participant described that:

> "It was also very helpful…it was just happenstance that there were some experienced students and also some fresh, fresh newbies…as an older student, reaffirming that you do know things and you know more than you did [is helpful],

and they [the new students] will get here too, and you can connect with them about that."

Here also, there is a direct intersection between instances of peer-to-peer information sharing and a growing sense of belonging. While this overlap was not present in every case, the interviews did make apparent that a "common purpose and goals," as it is defined in the original CoP-S scale, is not just one thing but a combination of factors that enable a community of practice to develop. This particular example, where a returning instructor experiences that 'reaffirmation' of prior knowledge in the context of working with newer instructors, also represents the remaking of identity that happens when peripheral participants are transitioning to full participation in their community.

Though they are represented to a lesser degree by the interviews, peer-to-supervisor relationships are not unimportant to instruction team members. Interview participants placed similar weight on formalized (i.e. training sessions) and informal (dropping by the office to chat) interactions, and in both cases emphasized the feeling of investment. One participant described feeling not just like an employee but also a 'learner,' and that "I [got] the sense that they [the supervisors] care about where we're going and what we're doing." That these supervisory relationships are functional helps enable the development of an instructional community of practice on multiple levels. Practically, employees that feel supported by their superiors are more likely to be invested in the work they do—the instruction team is part of a workplace that works. On a theoretical level, the supervisors of the instruction team represent those community members who are full participants—if a community of practice can be sketched out as a circle with members at varying distances from the center, then the supervisors are going to be those closest to the center. (Refer to Figure 1, p. 4.) Both through observation and

engagement, they have an almost gravitational ability to bring in more peripheral

members of the group.

Ways of Learning

In a community of practice, learning and practice are both inherently social

activities. The strategies developed by team members for learning more about teaching,

for gathering classroom activities and strategies, and for seeking help with lesson

planning enhance the understanding of the overarching relationships, and our

understanding of how a CoP functions on a daily basis.

For Wenger, social learning has several distinct processes. One of these he

describes as "developing…repertoire, styles, and discourses" (1998, p. 95). This process

involves exploring and revising strategies and routines, creating objects, documents, and

other tools, and determining meaning. Basically, it describes the act of figuring things

out, and creating personalized workflows that fit into an existing community. What

became apparent during the coding process was that instruction team members were each

developing their own nuanced strategies for shared activities, like lesson planning.

Especially when seeking advice about planning a particular lesson, several team

members talked about looking for someone else on the team who had taught a similar

lesson. On its own, this is not a remarkable strategy—it makes sense to seek out someone

with the most specific experience. However, this type of information-seeking requires an

extra step. Generally, a team member will have to consult either the "instruction" channel

on the Undergraduate Library Slack[1], or look for similar lessons listed on the previous

instruction requests. It comes down to judgments about time investment. To do this—

realize a specific information need about an upcoming instruction session, figure out who

to ask, and seek them out—implies that the effort is going to be *worth* the effort. One of

the interview questions indeed asks, "Is it generally worth your time or worth the effort to

seek out help?" (see Appendix 1). In all five interviews, participants answered that

question affirmatively.

      In addition to incentivizing help-seeking, it is also important to minimize the

effort needed to actually get that help. By creating a framework of training and activities,

team members had access to a set of organizational norms that guided their help-seeking

and resource-sharing behaviors. These norms make it easier for team members to

navigate the workplace. Early shared experiences, like the required observations, also

expose individuals to different types of instructional feedback that they can rely on later.

Essentially, the instruction team isn't designed to let people starting teaching in a

vacuum. One participant explained:

> "I don't know how it would be without it…I think if I didn't have the people to
> rely on, I would feel must more lost in the dark, like I could be doing something,
> but who knows if its effective or accurate? Without the feedback, it's hard to
> know if you're on the right track."

This awareness cannot provide us with a point of comparison for what the team might be

like without this support. However, that any awareness exists does indicate that team

members see value in the communication and feedback structures that exist. If the

support network created by the instruction team was more challenging to navigate, people

would develop external help-seeking strategies that didn't contribute back into the

resources and development of the CoP.

Efficacy

Efficacy is a concept that, while not explicitly represented in the original CoP-S scale, seems to be an important marker of communities of practice overall. As it became a recurring theme in interviews, it developed into a marker that needed to be tracked. Self-efficacy, explained by Albert Bandura in 1977, can impact an individual's likelihood to attempt otherwise challenging activities, and their levels of perseverance. If an individual believes that they can succeed, it is more likely that they will—and when they do, their self-efficacy only increases. It is clear why this concept relates to communities of practice, especially in the context of integrating novice instructors. Support and positive teaching experiences should increase an instructor's self-efficacy, which means that they will be more likely to move towards full participation in the community.

Most of the notions of efficacy raised by the interviews were in the context of team members' willingness to take risks. When talking about their future goals, one participant said that they hoped to challenge themselves by teaching as many lessons as they could, "[to] make myself uncomfortable…[and] eventually feel comfortable with the uncomfortableness." This is noteworthy because it not only showcases a willingness to take risks, but also a confidence in the outcome—that the challenge of teaching as much as possible will be worthwhile, and that temporary discomfort will eventually give way to something better. This comfort with risk-taking also enables the instruction team to develop diverse approaches to teaching and learning, which is one of the goals established by the ACRL guidelines for information literacy programs.

Similarly, another participant talked about the desire to be 'further along' as an instructor by the time she graduated from the library science program: "I think that can

happen, but it requires work. And to be really honest, [it's] not punitive, just that you can be better than you are now." This, again, showcases a reasoned balance between investment and expectations.

In some ways, a feeling of self-efficacy is one of the most important markers of a community of practice. It indicates that the activities of the community have the potential to be sustainable, and that members will not be completely derailed by failure. Self-efficacy doesn't eliminate challenges, but it makes members more likely to be able to cope with challenges.

Challenges to Community

While many of the experiences recalled by team members were positive, the process of joining a new workplace while simultaneously developing several new skill sets is by no means a smooth and easy process. Tracking challenges in addition to positive community markers not only provides a fuller and more accurate portrait of team members' experiences, it also makes it easier to plan revisions and adjustments to current training and support processes.

Acclimation and Information Overload

Each interview reflected a similarly challenging experience with that initial period—basically, the challenge of joining the instruction team, and learning the norms, necessary information, and expectations. One participant described feeling "completely overwhelmed" on their first day of training, and went on to say that "I don't even know if I could tell you what I learned that day." New instructors are entering what is in some ways a pre-established framework, one with a lot of shared knowledge, vocabulary, and

structure. Trying to get acclimated to all this at once, while also (in many cases) getting acclimated to a new graduate program, creates a situation ripe for information overload. These factors also make it easy for new members of the team to get lost in smaller details—seeing the trees rather than the forest.

All five interview participants, in fact, reported a similar arc—initial feelings of confusion or frustration, followed by a period of discomfort that (at varying speeds) gave way to understanding. Each participant developed their own strategies for coping with the adjustment period. Some strategies appeared to move individuals farther into the team's orbit, while others prevented any engagement with the rest of the team. What emerged in these strategies was a tension between insecurity and curiosity. For the interviewees, moving toward full participation in the instruction team was not a completely comfortable act, but one that was perceived as necessary. To join a new workplace and get up-to-speed, there may simply have to be a period of discomforting information overload. However, it is important that this overload never push past the limits of an individual's voluntary participation in the workplace community. CoPs can be so impactful precisely because they are voluntary groups—it is challenging, and perhaps impossible, to force a sense of belonging.

Generally, participants felt that their challenges could be, or had been, overcome. "If something goes wrong," one noted, "it's not the end of the world because there are people to talk about it with and figure out why, and learn from it." This awareness of available support, especially when faced with a problem, is a key feature that enables the instruction team to function as a community of practice.

Scheduling

It is notable that none of the "challenge" markers were in reference to challenges posed by peers or peer relationships. Rather, one participant referenced the logistical challenge of busy schedules that prevented the further development of those relationships: "[I] wish that it was more visible to see what other people were doing in the classroom." Some of these challenges, especially time and availability-based challenges, are especially present in the instruction team because it is primarily composed of graduate assistants who teach as their work and class schedules allow. This is not to suggest that full-time librarians do not face scheduling challenges, only to note that teams primarily composed of full-time librarians may notice an emphasis on different types of challenges. Many of the session times requested by faculty conflict with team members' own class schedules. In several interviews, participants expressed frustration at not always being able to teach as often as they wished. One explained that the uneven scheduling impacted their feeling of preparedness: "I feel like every time I take a break from doing it [teaching], I have to start over." This scheduling challenge also reflects the natural ebb and flow of instruction requests, which peak during the first few weeks of the semester, and then drop off sharply. This drop-off may cause team members to drift farther away from the center of the community, undoing some of the progress they have made towards full participation. It is possible that extra, maybe voluntary training sessions could be added during these instructional lulls, to continue creating frequent opportunities for members to engage with pedagogy and practice.

Training Documents

Somewhat unexpectedly, the ILbD documents that were designed to aid new instructors were also a source of confusion, and represented a roadblock to understanding. The initial ILbD lesson plan template (Appendix 4) was confusing for its design, for its language, and for a lack of guided practice opportunities. That template retained much of the formatting of its predecessor, the Understanding by Design template. So, for someone versed in UbD, this adaptation would be reasonably easy to follow through the stages (desired results, evidence, and learning plan). However, for individuals who were not only new to teaching but also new to the vocabulary of information literacy, this template was complex and more of a distraction than a useful tool. Several interview participants recalled just bypassing that version of the form and instead devising their own strategies for organizing lesson ideas and materials.

In response to instructor feedback on this version of the lesson plan template, it also went through revisions during the Fall 2015 semester. This process (which could easily be documented in detail in a later study) resulted in an ILbD 2.0 template (Appendix 5), which sheds some of the complex language and adapts a more streamlined format. This version, while still may undergo revisions in the future, seems anecdotally to be more useful for instructors. A prime example of the revisions can be found in the "Acquisition" section of both templates. In the original template, instructors are asked to

distinguish between "facts and concepts" and "skills and processes" that students should use in a session:

ACQUISITION	
Students will know··· *What facts and basic concepts should students know and be able to recall?* ●	Students will develop skills in··· *What discrete skills and processes should students be able to use?* ●

This distinction was challenging, especially when combined with a lack of opportunity to work through the form with others.

Comparatively, the new form asks similar questions about acquisition, but with more scaffolding about what things instructors should be considering:

Acquisition:
What research concepts will students need to understand to successfully complete this assignment?
What types of resources should students be introduced to? What skills will students practice?

Now, rather than "facts and basic concepts," instructors are being asked to think about "research concepts," which is more explanatory and also corresponds to language used institutionally. Functionally, the redesigned form also leaves ample room (in a printed

form) for instructors to fill it out by hand. The original form, while fine for digital use,

was not as user-friendly when printed out.

---

[1] Slack is a web-based workplace communication and productivity tool. Members of Slack "teams" create topic-based channels that can be used to update all members on news and developments. In addition to group communication, Slack also supports private direct messaging for individuals and groups.

Conclusion and Recommendations

The interviews conducted with the instruction team strongly indicate the presence of a developing community of practice. Relationships among peers, as well as with supervisors, feature prominently in each interview, and those human sources appear to be a key source of learning more about teaching. This suggests that the group does share a purpose and goals, as well as an overarching sense of belonging. Members of the instruction team recognize their peers as valuable, both when seeking information and when navigating the emotional and social aspects of growing as an instructor.

It is encouraging to see this development, especially among a group of instructors with varying backgrounds and levels of experience. However, this data collection only captures the feelings and opinions of instructors at a single point in time. Future research should focus on longitudinal data collection from the same team, to see if trends established in these interviews will continue or change. This type of instruction team, with major yearly turnover from student graduation, provides a unique opportunity to study not a community of specific individuals, but a culture of community that is passed down to new members.

As the instructional training for this team continues to evolve, there are opportunities to create an environment even more conducive to community-building. The following sections summarize the progress that has already been made, and the ideas and new strategies that have yet to be implemented

Current Progress

1. **Revised ILbD forms:** As mentioned in the Interview Analysis section, the original set of ILbD forms were complicated and confusing for some new instructors to use. This type of feedback led to a revision of the lesson plan template, which is the form that is used most frequently and can have the most impact on an instructor's success. The redesign process was focused on removing as much jargon as possible—rather than relying on the language introduced by the original UbD template, the underlying concepts needed to be explained in a way that someone new to libraries, and new to teaching, could begin to internalize.

2. **"Instructor Support Group":** A new, informal addition to teaching support opportunities in Fall 2015, 'instructor support group' was designed as a space for student instructors to get together and talk without supervisory oversight. This peer-only space allows for a different type of discussion, with instructors free to express frustration and confusion without fear of repercussions. Of equal importance, the support group is a space for sharing successes, risks that paid off, and moments of growth and improvement. Instructor Support Group is also a unique addition because it's completely voluntary, student-driven, and scheduled based on demand. The existence of this extra space for peer-to-peer development reinforces the value of CoPs in action, and how they can be self-sustaining.

Future Directions

3. **Re-envisioning instruction bootcamp:** Based on these interviews, instruction bootcamp is the single most challenging and stressful moment of a new

instructor's experiences. As it stands, bootcamp is extremely information-dense, with a dual focus on the big picture of information literacy and the institutionally-specific logistics of teaching for UNC's first-year writing course. New employees feel the need to absorb all this knowledge at one time, which seems to result in individuals not being able to properly understand either aspect. Some level of confusion, and perhaps even some degree of information overload will be inevitable for new employees. However, if bootcamp could be reimagined as two separate sessions, with one focused on information literacy and one focused on 'how things work at UNC,' it might reduce the distress that instructors seem to experience. It might also be possible, perhaps in conjunction with this division of sessions, to provide more information to new employees prior to meeting in-person. For some instructors, the ability to read through things ahead of time and come with questions might be beneficial. It may also be possible to depend more on the networks within the CoP to distribute knowledge over time. Does all the information currently introduced by instruction bootcamp have to come in a one-to-many, formalized setting?

4. **More time and space for informal discussion:** In every interview, participants expressed the desire for more unstructured community time. Most formal trainings are fully scheduled, often months in advance. This does not leave a much time for instructors to focus on issues that arise unexpectedly, or to share and collaborate on the spot. The major challenge here is that the instruction team is a group that is responsible for more than just teaching. While it would be

beneficial from an instructional CoP perspective to set aside more training time, it may not be logistically feasible

5. **More automatic resource-sharing:** Instructors also expressed a desire for more access to each other's lesson plans, activities, and classroom handouts. Collecting these documents has been an ongoing challenge for the Undergraduate Library. Every instructor, though they may use standardized documents like the lesson plan template, develops an individual strategy for planning lessons and creating other instructional materials. Some people write everything down; some people write only an outline; some type everything while others prefer to write by hand. This variety represents one challenge. The other, perhaps larger challenge, is to incorporate sharing or depositing these materials as part of the normal instruction workflow. In the last two years, efforts have been made to collect lesson plans using the same instruction booking system that instructors use to schedule sessions. While this has helped, it is still a challenge to collect materials. Some instructors are also uncomfortable sharing their lesson materials, especially during their first semesters—this indicates that the community still has room to grow, and that members of the instruction team may eventually choose to share more of their materials.

Broader Use

Looking forward, there will be great value in continuing to develop the atmosphere of community within the UL instruction team. However, this focus on community, and the relationship between community and instructor development, is much more broadly applicable. Libraries of almost any size that are focused on developing a strong

instructional program can benefit from a renewed focus on reflective practice. Though

this particular organizational setting is heavy on new, part-time instructors, experienced

instructors can also benefit from the CoP structure. Regardless of the group's makeup,

maintaining opportunities for legitimate participation is key:

> Granting the newcomers legitimacy is important because they are likely to come
> short of what the community regards as competent engagement. Only with
> enough legitimacy can all their inevitable stumblings and violations become
> opportunities for learning rather than cause for dismissal, neglect, or exclusion
> (Wenger 1998, p. 101).

Through legitimate participation, all instructors can develop and refine their own

pedagogy while contributing to the growth of their peers. Enduring community support

will enable instructors to withstand temporary setbacks and the constantly changing

landscape of librarianship. Pedagogical training alone, even when thoughtfully designed,

will not enable librarians to meet the demand of increased instructional programs and

services Only training that is internalized, and that can be practiced within a community

devoted to improvement and self-reflection, can provide the long-term solution we need.

Bibliography

ACRL Instruction Session Proficiencies for Instruction Librarians Task Force. (2007). *Standards for Proficiencies for Instruction Librarians and Coordinators.* Retrieved from http://www.ala.org/acrl/sites/ala.org.acrl/files/content/ standards/profstandards.pdf

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191-215. doi:10.1037/0033-295X.84.2.191

Bosch, E. K., Ramachandran, H., Luévano, S., & Wakiji, E. (2010). The resource team model: An innovative mentoring program for academic librarians. *New Review of Academic Librarianship, 16*(1), 57-74. doi:10.1080/13614530903584305

Brecher, D., & Klipfel, K. M. (2014). Education training for instruction librarians: A shared perspective. *Communications in Information Literacy, 8*(1), 43--49. doi: 10.1080/136145

Burke, K., & Lawrence, B. (2011). The accidental mentorship: Library managers' roles in student employees' academic professional lives. *College & Research Libraries News 72*(2), 99-103. Retrieved from http://crln.acrl.org/content/72/2/99.full

Characteristics of programs of information literacy that illustrate best practices: A guideline. (2012). Retrieved from http://www.ala.org/acrl/standards/characteristics

Cuddapah, J.L., & Clayton, C.D. (2011). Using Wenger's Communities of Practice to Explore a New Teacher Cohort. *Journal of Teacher Education 62*(1), 62-75. 10.1177/0022487110377507

Davies-Hoffman, K., Alvarez, B., Costello, M., & Emerson, D. (2013). Keeping Pace with Information Literacy Instruction for the Real World. *Communications in Information Literacy, 7*(1), 9-23. Retrieved from http://libproxy.lib.unc.edu/login?url=http://search.proquest.com/docview/144545689 6?accountid=14244

Fyn, A. F. (2013). Peer group mentoring relationships and the role of narrative. *Journal of Academic Librarianship 39*(4), 330-334. doi:10.1016/j.acalib.2012.11.016

Gorrell, J., Kitsantas, A., & Matthews, W.K. (2013). Validation of a Community of Practice Scale for Schools (CoP-S). *The International Journal of Educational and Psychological Assessment 13*(1), 1-16. Retrieved from https://www.researchgate.net/publication/276987492_Validation_of_a_Community_ of_Practice_Scale_for_Schools_CoP-S

Hall, R. A. (2013). Beyond the job ad: Employers and library instruction. *College & Research Libraries, 74*(1), 24-38. doi:10.5860/crl-236

Hallam, G., & Newton-Smith, C. (2006). Evaluation of transitional mentoring for new library and information professionals: What are the professional and personal outcomes for the participants? *Library Management, 27*(3), 154-167. Retrieved from http://libproxy.lib.unc.edu/login?url=http://search.proquest.com/docview/198859793?accountid=14244

Harrington, M. R. & Marshall, E. (2014). Analyses of mentoring expectations, activities, and support in Canadian academic libraries. *College & Research Libraries 75*(6), 763-790. doi:10.5860/crl.75.6.763

Henrich, K. J., & Attebury, R. (2010). Communities of practice at an academic library: A new approach to mentoring at the University of Idaho. *The Journal of Academic Librarianship, 36*(2), 158-165. http://dx.doi.org.libproxy.lib.unc.edu/10.1016/j.acalib.2010.01.007

Hensley, M. K. (2010). Teaching New Librarians How to Teach: A Model for Building a Peer Learning Program. In E. Pankl, D. Theiss-White, & M.C. Bushing (Eds.), *Recruitment, Development, and Retention of Information Professionals: Trends in Human Resources and Knowledge Management* (pp. 179-190). Hershey, PA: Business Science Reference.

Julien, H. (2005). Education for information literacy instruction: A global perspective. *Journal of Education for Library & Information Science (46)*3, 210-216. doi:10.2307/40323845

Klein, J.H., Connell, NAD, & Meyer, E. (2005). Knowledge characteristics of communities of practice. *Knowledge Management Research & Practice, 3*(2), 106-114. doi: 10.1057/palgrav.kmrp.8500055

Lacy, M. & Copeland, A. J. (2013). The role of mentorship programs in LIS education and in professional development. *Journal of Education for Library & Information Science 54*(1), 135-146. Retrieved from http://libproxy.lib.unc.edu/login?url=http://search.proquest.com/docview/1399142295?accountid=14244

Lave, J., & Wenger, E. (1991). *Situated Learning: legitimate peripheral participation.* Cambridge, England: Cambridge University Press.

Lorenzetti, D. L., & Powelson, S. E. (2015). A scoping review of mentoring programs for academic librarians. *The Journal of Academic Librarianship, 41*(2), 186-196. http://dx.doi.org.libproxy.lib.unc.edu/10.1016/j.acalib.2014.12.001

Mavrinac, M. A. (2005). Transformational leadership: Peer mentoring as a values-based learning process. *Portal: Libraries and the Academy, 5*(3), 391-404. doi:10.1353/pla.2005.0037

McGlynn, E. (2015). *Information Literacy by Design: Creating aa Teaching & Training Template for Library Instructors.* Retrieved from https://cdr.lib.unc.edu/record/uuid:165e5af2-5555-449c-83bc-60243bf16f77

Sproles, C., Johnson, A. M., & Farison, L. (2008). What the teachers are teaching: How MLIS programs are preparing academic librarians for instructional roles. *Journal of*

Education for Library & Information Science 49(3), 195-209. Retrieved from http://www.jstor.org/stable/40323773

Swieringa, R. (2009). Community of practice. In S. Littlejohn, & K. Foss (Eds.), Encyclopedia of communication theory. (pp. 148-149). Thousand Oaks, CA: SAGE Publications, Inc. http://dx.doi.org.libproxy.lib.unc.edu/10.4135/9781412959384.n58

Wastawy, S.F. & Uth, C.W. (2004). Learning Communities: An Investigative Study into their Impact on Library Services. *Science and Technology Libraries 24*(3-4), 327-374. doi: 10.1300/J122v24n03_07

Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity.* Cambridge: Cambridge University Press.

Wiggins, G. & McTighe J. (1998). *Understanding by design*. Alexandria, VA: Association for Supervision and Curriculum Development.

Wiggins, G. & McTighe J. (2005). *Understanding by design*. Alexandria, VA: Association for Supervision and Curriculum Development.

Appendix 1: Interview Questions

History/Background
- Tell me about what you did before starting the program here at SILS (School of Information and Library Science).
    - Have you had any previous educational training?
    - If so, can you compare that training with the training you have received at the UL?
    - Have you had any previous teaching experience, even if it was volunteer?
- Tell me about your interest in working in libraries.
- Where do you see yourself in 5 years?
- Can you recall any teachers from your past who had a major impact on you? If so, can you describe them?

Training Experiences
- Which semester did you start working in the UL (Undergraduate Library) instruction program?
- What do you remember about training during your first semester?
- Were you aware that teaching would be included with your job duties?
- How did you feel about that?
- What kind(s) of preparation did you receive before you taught your first individual class?
- (If applicable) Did you gain any new knowledge or appreciation from your second year of training?
- How applicable is this type of training to your future? Do you see anything you have learned as being transferable?
- Is instructional training important for librarians?

Support
- Do you feel comfortable asking questions at work? Why or why not?
- Is it generally worth your time or worth the effort to seek out help, when you know where to go or who you would ask?
- When you are preparing to teach a new class, what do you do? Can you walk me through your preparation process?
- Does your preparation process ever involve other people?
- If you have questions about teaching, what do you do?
- Do you ever have conversations about teaching with co-workers? If so, what are some of the issues you have discussed?
- Does the knowledge of the support you have make you feel more confident in the classroom?
    -

Self efficacy
- How prepared did you feel to teach before you started working?
- How prepared did you feel to teach before your first class?
- How prepared do you feel to teach now?
- What do you perceive to be your strengths and weaknesses as an instructor?
  - Do you feel like any of these, either strengths or weaknesses, are a result of training or job experiences?
- Do you feel you have improved as an instructor since starting your job? If so, can you identify some specific areas of improvement?
- What advice would you give (or have you given) to newer instructors?
- How prepared do you feel to meet instructional demands at your first job?

Appendix 2: Original CoP-S Scale

Table 1

Factor Loading and Reliability Coefficients for Community of Practice Scales for School Teachers

Items	FL	r
Section 1: General community perceptions		
Subscale 1: Common purposes and goals		.94
1. Teachers work well together	.79	
2. Teachers trust each other	.81	
3. Teachers communicate about things that matter	.80	
4. Teachers are reluctant to help each other	.74	
5. There is a spirit of camaraderie among the teachers	.81	
6. Teachers stick together	.80	
7. Teachers are willing to share knowledge with each other	.84	
8. There is a sense of belonging among the teachers	.83	
9. Teachers trust each other with giving credit where credit is due	.86	
10. It is easy to collaborate on projects	.75	
Subscale 2: Leadership		.94
1. Our principal finds ways to help teachers improve professionally	.75	
2. Teachers and administrators agree on the important issues facing our school	.78	
3. Our principal cares about the teachers in the school	.88	
4. Our principal deals fairly with teachers	.88	
5. Teachers feel that they are an important part of achieving the goals of the school	.77	
6. Our principal sets the right expectations	.91	
7. Our principal supports the teachers in their daily work	.91	
8. Our principal allocates resources fairly	.82	
9. Our principal encourages the faculty to teach to the best of our abilities	.78	
Section 2: Personal experiences in the community		
Subscale 1: Bonding		.71
1. I enjoy working with other teachers	.86	
2. I can work with most teachers	.82	
3. My ideas are valued by my colleagues	.67	
Subscale 2: Discourse		.70
1. The lines of communication are open between my principal and me	.85	
2. I feel free to voice my opinions in faculty meetings	.80	
3. Resources are readily available to me	.68	

Appendix 3: Adapted CoP-S Scale

Section 1: Common Purpose and Goals

1. Open communication: Combines "work well together," "communicate about things that matter," "willing to share knowledge," "easy to collaborate," "resources are readily available to me."

2. Sense of belonging: Combines "trust each other," "spirit of camaraderie," "stick together," "sense of belonging," "my ideas are valued by my colleagues."

Section 2: Supervisory Support

1. Support for development: Combines: "finds ways to help teachers improve professionally," "supports the teachers in their daily work."

2. Validation: Combines "cares about the teachers in the school," "teachers feel that they are an important part of achieving the goals of the school," "encourages faculty to teach to the best of our abilities."

Section 3: Challenges

1. Logistical

2. Situational

Section 4: Other Codes

1. Efficacy: belief in one's ability and performance; increasing self-efficacy can be a result of involvement in a community of practice.

2. Observation and Practice: the training recieved by the instruction team relies heavily on both observation of other instructors and the opportunity for guided practice. Tracking the impact (if any) that these activities had on the experience of individual team members is useful, especially as they relate to the markers drawn from the CoP-S scale.

3. Strategic or "triaged" help-seeking: Tracking the decisions involved in team members' help-seeking behaviors helps create a fuller picture of the existing community. What peer-to-peer relationships exist? What peer-to-supervisor relationships exist?

Appendix 4: Original ILbD Lesson Plan Template

Information Literacy by Design: Lesson Planning Template

Pre-planning

Assignment Considerations
What is the assignment?

Goals
What are the major goals of the upcoming feeder(s)?
-

Learning Needs
- *Where are students in their unit?*

- *What, if any, understanding of the research process do students already possess?*

Stage 1: Desired Results

ESTABLISHED GOALS	MEANING AND TRANSFER	
What course- and/or assignment-related goal(s) will this lesson address? - (Optional) *What ACRL-endorsed concepts of information literacy will students need to reach goals?* -	Students will understand that··· *What do you want students to understand about research?* -	Students will be able to independently apply their understanding to··· *What kinds of long-term understandings, beyond this assignment, are desired?* -
	ACQUISITION	
	Students will know··· *What facts and basic concepts should students know and be able to recall?* -	Students will develop skills in··· *What discrete skills and processes should students be able to use?* -

Stage 2: Evidence

Performance Tasks
Students will show that they really understand/have achieved session goals by···

How will students demonstrate their process of acquiring understanding, skills, and knowledge through authentic performance?

-

Stage 3: Learning Plan

Pre-Assessment
What pre-assessments will you use to check students' prior knowledge, skill levels, and potential misconceptions?

-

Learning Events
Student success at meaning, transfer, and acquisition depends on···

What learning events can ensure meaning, transfer, and acquisition? How will these events facilitate desired results?

-

Progress Monitoring

What are potential rough spots for misunderstanding?

-

How will students get feedback on their performance?

Appendix 5: Revised ILbD Lesson Plan Template

Lesson Planning Template

#1 Assignment Considerations	
What is the unit assignment?	Where are the students in their unit? What aspects of the research process has the 105 instructor covered (if any)?
What are the goals of the upcoming feeder(s)?	

#2 What Should Students Learn?
What assignment goals will this lesson address?
What information literacy concepts (Framework or Standards) will students need to reach goals?

Acquisition:

What research concepts will students need to understand to successfully complete this assignment?

What types of resources should students be introduced to? What skills will students practice?

Transfer:

How else and how often will students use these skills and/or concepts?

#3	Evidence

How will students show they really understand/ have achieved lesson goals?

#4   Learning Plan

What are possible rough spots for misunderstanding?

How will you check student's prior knowledge and skill levels?

What evidence will students have that they have understood the lesson?

Create your step-by-step process for how you will teach your lesson!

Appendix 6: Undergraduate Library Stages of Instruction

	Initiate	Observant	Apprentice	Guided Practice	Expert
Description	A new instructor becomes familiar with expectations, the support network, and the pedagogical approach of the first-year writing program.	Instructors should observe first-hand how the design and execution of teaching are inked—note what is being taught and how.	Working with a mentor, instructors should begin using all they have observed so far to begin developing the skills for successful instructional design and practice.	With assistance from a mentor, a new instructor will design and execute a lesson.	Through repeated instances of guided and independent practice, instructors continually hone skills to the point that pedagogical approach and motivation are internalized.

	Initiate	Observant	Apprentice	Guided Practice	Expert
Actions	Attend instruction bootcamp. Read and consider recources on IlLbD website. Arrange observations.	Observe 3 instruction sessions. Analyze using the observation form.	Meet with mentor soon after last observation. Reflect on observation in a way that allows the development of an individual teaching voice. Begin dissecting assignments to identify learning objectives for a lesson.	Use lesson plan template to draft a plan, and meet with mentor for feedback. Execute lesson in classroom with mentor observation or coteatching. Reflect on experience with mentor.	Seek feedback on instructional approach. Develop efficient and effective lesson planning process. Develop new instructional techniques and practices. Engage in instruction empathetically.
Performance Indicators	Awareness of strategic instructional approach. Awareness of information literacy concepts and standards. Arrange 3 observations.	Familiar with range of 'teaching voices' along with commonalities of instructional approaches. Begin to see how design of instruction sets up successful learning experiences in the classroom.	Articulate variations of observed instructional approaches. Begin identifying 'big ideas' of information literacy in assignments. Hypothesize what might serve as evidence for student understanding of a particular concept.	Develop lesson plan geared toward enhancing student understanding. Accept and integrate mentor feedback into plan drafts. Begin feeling ownership of instructional approach.	Develop internal feedback loop about instructional practice. Integrate educational, library, and developmental psychology principles. Embrace teaching as a creative and adaptive process.