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Thinking Beyond Library and Information Science: Interdisciplinary Inspiration for Children and Youth Services Curricula

There is a growing recognition within the library and information science (LIS) community that libraries have moved beyond a focus on collections to a much broader focus on the people and communities that they serve (Lankes, 2018; Percell, Sarin, Jaeger, & Bertot, 2018). The changing role of information institutions and practitioners in today's society necessitates a corresponding change in the curricula offered by programs that train future information professionals, including ALA-accredited master's programs. This holds true when considering the training and development of information professionals generally, as well as children and youth services (CYS) librarians specifically.

Historically, programs and courses geared towards aspiring CYS librarians have shown an inordinate focus on becoming familiar with literature for children and youth, often at the expense of learning about children and youth themselves. Surveys of instructors of LIS courses in CYS demonstrate that those focused on children's and young adult literature dominate course offerings in this area (Adkins & Higgins, 2006; Welch, 2014). Interestingly, this contrasts with what CYS instructors perceive to be the most important topics conveyed in their teaching, which include topics such as customer service skills, general knowledge about children and youth, and the daily operations of CYS librarianship (Welch, 2014).

Significantly, as Percell et al. (2018) note, "A love of books or libraries is not enough for the next generation of information professionals" (p. 4). In line with calls to "re-envision"

(Percell et al., 2018) or "renew" (Lankes, 2018) LIS practice and education in ways that allow for transformations in conceptualizing the roles and responsibilities of libraries as information institutions, it is vital for LIS curricula centered on CYS to move beyond a focus on children's and young adult literature to a focus on the children and youth themselves (Agosto, 2013; Long, 2018). Such a focus should encompass the needs, interests, and voices of children and youth as well as the unique ways in which libraries are positioned to engage with and serve this population (Agosto, 2013; Barriage, 2018a). As Bernier (2020) states, LIS should turn its attention to "how the library can matter in the life of youth" rather than "how YAs fit within the life of the library" (p. xxv). While there is evidence that some instructors and institutions have started to make this shift in their CYS curricula, there remains room for growth; as shown in a recent review of CYS course descriptions, courses in children's and young adult literature and materials continue to be the most prevalent type of CYS course offerings in ALA-accredited master's programs (Barriage, DiGiacomo, & Li, 2020). Indeed, this emphasis on literature and materials is also the case at our own institution, where three out of four CYS-focused courses concentrate primarily on literature. Thus, we are not ourselves set apart from these trends—rather our present focus represents efforts at local change.

One strategy for moving CYS education forward is to look to other disciplines concerned with youth, information, and learning more broadly to see what aspects of their theories and pedagogy can be incorporated into teaching and learning about CYS in library contexts. LIS has historically been overly dependent on theories and concepts from the fields of developmental psychology and education, which has led to static conceptualizations of children and youth (Bernier, 2019, 2020). As prominent LIS youth services scholars have noted, other disciplines outside of LIS have much to offer in informing the advancement of CYS education, research,

and practice (e.g., Agosto, 2018; Bernier, 2019; Chelton, 2020; Rothbauer, 2020). As Bernier (2019) notes, "Scholarship drawn from more diverse fields and research traditions. . . offers rich opportunities and fresh perspectives" for CYS curricula and praxis (p. 133). Examples of fields of study outside of LIS that have been identified as having the potential to enrich CYS curricula include critical social theories such as critical youth studies (Bernier, 2019; Rothbauer, 2020), critical race theory (Austin, 2020; Kumasi, 2020), and queer theory (Austin, 2020), as well as disciplines such as ethnic studies (Austin, 2020) and the learning sciences (Percell et al., 2018).

Interdisciplinary Inspiration for Children and Youth Services Curricula

In this paper, we explore the opportunities provided by incorporating theoretical approaches and concepts from the fields of childhood studies, learning sciences, and educational technology. In particular, we draw on our experiences in the Spring 2020 semester teaching three special topics courses as part of the online Master of Science in Library Science (MSLS) program at the University of Kentucky: *Information Behavior of Children and Youth*; *Informal Learning in Information Organizations*; and *Games, Literacy, Meaning, and Learning*, respectively. In these courses, we draw on our knowledge and expertise within fields external to LIS in order to encourage our students to think deeply and critically about how they think about, interact with, and provide services for children and youth. While two of the three courses are not solely focused on children and youth, all include content relevant to CYS professionals, including content in alignment with the Association for Library Service to Children's (ALSC, 2015) *Competencies for Librarians Serving Children in Public Libraries* and the Young Adult Library Services Association's (YALSA, 2017) *Teen Services Competencies for Library Staff*. Within each of our sections, we first highlight the ways in which our different disciplinary expertise influences the material we teach in our special topics courses; we then discuss the

potential that incorporating concepts and theories from these and other disciplines has for broadening CYS curricula more generally.

Incorporating Childhood Studies Concepts and Theories into LIS Coursework - Sarah Barriage

Childhood studies. Childhood studies, an interdisciplinary field of study that focuses on children and childhood, grew out of increasing criticism of the ways in which the fields of sociology and psychology traditionally conceptualized and researched children and their lives (Smith & Greene, 2014). Within this field, childhood itself is positioned as socially constructed—much like race and gender (Connolly, 2008)—and, therefore, as a variable of social analysis (Prout & James, 1990). Children are situated as active and competent social actors in their own lives (Melton, Gross-Manos, Ben-Arieh, & Yazykova, 2014; Thomas, 2014) who are worthy of study in their own right, rather than solely as future adults (Prout & James, 1990). Children's voices are privileged within this paradigm through their direct participation in research that is concerned with understanding their experiences and perspectives (James, 2004; Thomson, 2008).

As part of my doctoral training, I completed a minor area of study informed by the childhood studies paradigm focused on research methods with children and youth. This paradigm has greatly influenced my research, which focuses on the information behavior of children and youth, both methodologically (e.g. Barriage, 2018b; Barriage, in press) and theoretically (e.g., Barriage, 2018a). The lessons I've learned from childhood studies have also informed my teaching, in which I aim to be student-centered in much the same way that my research aims to be child-centered.

Special topics course: *Information Behavior of Children and Youth*. In the Spring 2020 semester, I developed a special topics course titled *Information Behavior of Children and Youth* (see Table 1 for course description and learning outcomes). While the focus of this course was on information behavior, an area of research firmly planted within LIS, ideas and approaches from childhood studies influenced both the content of and my approach to teaching this class.

Table 1

Information Behavior of Children and Youth Course Description and Learning Outcomes

Information Behavior of Children and Youth	
Course description	Includes an overview of the current research relating to the information behavior of children and youth in both school and everyday life, an examination of the different approaches to studying children and youth in the research literature, and consideration of the ways in which such research can inform the provision of information services for this population. This course will be of interest to students intending to pursue careers as school library media specialists, children or teen services librarians, or as information professionals in knowledge organizations that provide materials and/or services to children and youth.
Learning outcomes	At the end of the course, students should be able to: • Understand and articulate the different theoretical approaches to researching children & youth • Recognize the ways in which the adoption of such approaches influences research design and interpretation • Analyze, synthesize, and evaluate research findings about the information behavior of children and youth in a variety of contexts/settings • Apply relevant research findings in developing appropriate evidence-based programs and/or information services for children & youth

Childhood studies influence on course content. Childhood studies had a strong influence on the overall spirit of the course, particularly in the ways in which students were encouraged to think about children and youth, as well as library programs and services for this population.

The semester began by reading and discussing Agosto's (2013) vision of teen-centered librarianship. In this chapter, Agosto (2013) articulates the importance of privileging teens' voices in LIS research and practice, which is echoed in the YALSA (2017) and ALSC (2015) competencies and is very much in line with the childhood studies paradigm (Hill, 2006; James 2004, 2007). While Agosto (2013) focuses on teen librarianship specifically, in our class we discussed how such an approach could also be extended to both school and children's librarianship. This piece served as a touchstone for the entire semester, with students returning to the idea of the importance of incorporating the voices of children and youth into their library programs and services as we explored various topics throughout the semester.

Additionally, weeks devoted to understanding theories of child development included readings that outlined sociological and sociocultural approaches to child development (specifically, Corsaro, 2014 and Thomas, 2014), and contrasted them with readings focused on theories from fields such as developmental psychology, with which the students were more familiar and which have been applied within the field of information behavior (specifically, Byrnes & Bernacki, 2013; McKechnie, 1997; Spink & Heinstrom, 2011). Other readings included those that provided an analysis of how children have been positioned within LIS research (Lundh, 2016; Rothbauer & Gooden, 2006).

These readings in the beginning weeks of the semester set the foundation for subsequent weeks that focused on empirical and theoretical readings related to the information behavior of

children and youth, providing a framework for the students to think critically about the claims made in the LIS literature and how both research and practice in this area can move forward. As one student noted in their final reflective journal entry, "The greatest tidbit I'm taking from the course is the idea that youths are experts in their own cultures, and their input, social structure, intellectual curiosities, and social habits should be considered first when forming new programs and services."

Childhood studies influence on course structure & pedagogy. In addition to incorporating concepts and theories from childhood studies into the course content, the childhood studies approach to understanding and interacting with children also influenced the ways in which I taught my class. Several of the central tenets of research with children are mirrored in the ways in which I approached teaching this course.

Within childhood studies, scholars are attentive to the power dynamics at play between child participants and adult researchers within the research setting (Corsaro, 2014; Greene & Hill, 2005; James, 2007). One means of addressing the power imbalance between participants and researchers is to structure the research interaction in such a way that participants are afforded greater ownership and control over the process (O'Kane, 2008; Valentine, 1999; Woodgate, Tennent, & Barriage, 2020). In my special topics class, one way in which students were given more ownership over the class was through the development of guidelines that governed online discussions. During the first week of the semester, students were asked to collectively develop discussion thread participation guidelines. Students described enjoyable and unenjoyable experiences they had had in online courses in the past, and used these experiences to suggest guidelines for their classmates to follow when participating in discussion threads. Guidelines developed by the students included those related to post length and timing, addressing classmates

by name in responses to make it clear to whom a particular post was directed, including in-text citations to course material and other sources, and incorporating work and life experiences in responses when relevant. These guidelines shaped the students' discussions throughout the semester.

Another means of affording students greater control within the virtual classroom was through student-led discussions. After we completed the first few weeks of the course that provided students with an introduction to foundational concepts in information behavior and child development, students were asked to sign up for a week in which they were expected to select an article relevant to that week's topic, develop a discussion question to pose to a subset of their classmates, and lead and moderate a small group discussion. Through this process, students took on some of the responsibilities typically borne by the instructor and shaped the class discussions during their assigned week. In the end of semester reflective journal entry, one student stated:

> No other course that I have taken has done that, and I think it's a really valuable opportunity for students to have more ownership over their learning. It also just demonstrates your respect for us as students because you have trusted us to make a contribution and share it (the same way we shared our project).

Additionally, scholars in childhood studies have emphasized the importance of giving children choice in their means of participation and communication (Fargas-Malet, McSherry, Larkin, & Robinson, 2010; Hill, 2006). In the three major assignments in this course (an analysis of empirical literature, student-led discussions, and the culminating project involving the design and presentation of an evidence-based program/service for children and youth), students had choice related to the topics of focus and, for the culminating project, the format. For example, in

the culminating project students chose which age group to focus on, what type of program or service to develop, and the format and hypothetical audience of their presentation. By allowing students some degree of choice in their final projects, they were able to draw on and make use of their various interests and strengths. Examples of formats of presentations included PowerPoint presentations with audio voiceovers, brochures that could be distributed to parents, social media posts advertising programs, and a program guide for developing a teen community council.

As illustrated above, the childhood studies approach to understanding and interacting with children can influence the ways in which we teach our adult students. By paying attention to the power dynamics at play within our classrooms, be they virtual or face-to-face, and making conscious decisions to structure our interactions with students in ways that respect their agency and draw on their existing interests and strengths, instructors can foster a student-centered approach to teaching and learning. This approach also serves to model for students how they can incorporate a user-centered approach in their professional practice. Such an approach to teaching is not limited to courses specific to CYS, but rather could be incorporated into virtually any course within LIS programs.

A Learning Sciences Approach to LIS Course Design – Daniela DiGiacomo

The learning sciences. As a contemporary design science with roots in educational and cultural psychology, the learning sciences is, at its core, the study of how people learn. "Relevance to practice" is a criterion of rigor in the learning sciences (Gutiérrez & Penuel, 2014), and learning sciences scholars aim to conduct investigations and design interventions in "ecologically valid" ways in a range of learning environments (Cole, Hood & McDermott, 1982). Long concerned with the social dimensions of learning, the learning sciences has taken a

recent turn to take more seriously the political, economic, and racial dimensions of learning (The Politics of Learning Writing Collective, 2017).

As an emerging LIS professor who was trained in the sociocultural learning sciences tradition, I identify with the aforementioned turn. My program of research, including my teaching, aims to extend and build upon the growing body of scholarship that investigates how educational environments can be organized to support more humanizing, equitable, and justice-conferring learning experiences, especially for students from marginalized or minoritized communities (see, for example, DiGiacomo & Gutiérrez, 2016; Espinoza & Vossoughi, 2014; Vakil, McKinney de Royston, Suad Nasir, & Kirshner, 2016). A sociocultural learning sciences approach to LIS teaching and pedagogy, then, focuses on how to equip students with the theoretical and practical tools to be able to understand, transform, and design information settings in ways that build on, rather than against, the richness that characterizes our human diversity.

Special topics course: *Informal Learning in Information Organizations*. Understanding learning and its social organization is a primary need for LIS educators and professionals, especially (but not exclusively) for those who work with children and youth. Responsive to this need, in my first year as an LIS Assistant Professor, I proposed a special topics course to the University of Kentucky's MSLS program called *Informal Learning in Information Organizations*. The course was an exploration of theories of learning as they relate to issues of culture, child and youth development as well as the design of space and place.

I designed the course to align with several of YALSA's (2017) core youth competencies, including "Interactions with Teens," "Learning Environments," "Learning Experiences," and "Cultural Competency and Responsiveness." By the end of the course, I expected that students

would be able to demonstrate the learning outcomes (included in Table 2 below), each of which are critical for their own ability to design equity-centered learning environments in their own settings.

Table 2

Informal Learning in Information Organizations Course Description and Learning Outcomes

Informal Learning in Information Organizations	
Course description	How people learn has implications for how learning environments should be designed. This course examines theories of informal learning— primarily drawing upon research from the sociocultural tradition of learning and human development—and considers how they can be practically implemented into information organization contexts. Being grounded in a sociocultural tradition means that this class will center issues of equity, diversity, and justice as they relate to the organization and design of information organization contexts and settings (e.g. libraries, museums, youth programs, new media centers, non-profit organizations). By gaining a deep understanding of how people learn across their lifespan, students will be able to consider how to create a community of learners in a range of settings in which people from various backgrounds participate. Topics covered include issues related to culture and cognition, identity development, adult-youth partnerships, access to/relationships with new digital media, and design thinking.
Learning outcomes	• Reflect on one's own lifelong learning trajectories and how this has shaped one's understanding of how people learn in various settings. • Articulate one's own theory of learning and identify the necessary conditions for learning in a range of information organizations. • Design spaces and activities within information organizations in ways that leverage the multiplicity and fluidity of people's identities. • Appreciate and attend to the relationship between culture, learning, and issues related to diversity and equity in information organizations.

Influence of learning theory on course content. In this course, I aimed to make explicit the link between informal learning research and best pedagogical and design practice for library

and information organizations. To do so, the first few weeks of course content were focused on diving into foundational cultural psychology literature that still serves as inspiration for much of the contemporary learning sciences field. That literature includes readings from Lev Vygotsky (known for his theorization of the "zone of proximal development;" see Vygotsky, 1934/1978), Sylvia Scribner, Jean Lave, Michael Cole (whose early studies of "cognition in the wild" laid the groundwork for the field of informal learning; see Scribner & Cole, 1973; Lave & Wenger, 1991), and Barbara Rogoff (known for advancing the theory of learning as shifting participation in meaningful sociocultural activity, see Rogoff, 1990). As they engaged in these readings, I asked the students to consider their own learning trajectories (in and outside of formal schooling) as they made connections to the theories. In so doing, I aimed for them to learn about and through *mediated praxis*—a central design principle of a constellation of empirically tested and robustly designed afterschool, library based learning programs (Cole & The Distributed Literacy Consortium, 2006; Gutiérrez & Vossoughi, 2010; Vásquez, 2013)

At the center of my design lens for course content was the reality that my LIS students were being and becoming LIS professionals in their respective communities. Attuned to this, I made real-world application a central feature of readings, discussions, *and* assignments. Throughout their engagement with the material and each other, I asked students to consider questions such as how conceptions of culture and learning might inform the development of afterschool literacy programs in public libraries or makerspaces in school libraries, especially those that serve predominantly minoritized communities.

As its capstone project, the course required students to submit a "design proposal" that outlined authentic plans for an innovative program/activity/space within an information organization that built upon and explicated one or more of the central theories of learning

covered throughout the semester. This project required students not only to synthesize within and across the readings, but to take seriously the issue of what learning theory was driving the organization of their LIS program/activity/space. By asking the students to consider, for example, the ways in which their maker activity encouraged more symmetrical participation structures between experts and novices, or how their reading circle encouraged a sense of social belonging, I aimed to build upon their expertise and sense of agency as designers of robust, equitable learning opportunities in whatever LIS context they would eventually come to support.

Influence of learning theory on course pedagogy. As a learning scientist, it is difficult for me to think about teaching without first thinking about learning. Accordingly, for the design of this special topics course, my goal was two-fold: 1) to organize a learning environment where all students' lived experiences and sense-making repertoires were valued and leveraged; and 2) to encourage students to design for and organize equity-centered learning environments in their own professional, educational, and information-based settings. As a pedagogue, this means that my focus whilst teaching is on the *social organization of the learning ecology* of which I am a part, including a constant attention to making visible the various dimensions of that organization in practice. I attempted early on and throughout the course to model what I meant by learning, including stating norms and aims in the syllabus such as:

> it will be my goal in this class to create a 'community of learners' (Rogoff, 1994) amongst us—a generative space in which each of our 'cultural repertoires of practice' (Gutiérrez & Rogoff, 2003)— is leveraged and integrated in equitable ways. Valuing each other's contributions and multiple ways of meaning-making and reflecting on one's own assumptions about what it means to learn and be a community member, are central aspects of creating a successful community of learners.

Of note, my guiding sociocultural theory of learning also informed the norms I set for the course and the ways in which I organized for student participation, which included a gradual transfer of responsibility for leading discussions and suggesting guided reading questions to the students themselves. At the end of the course, for example, it was the students themselves that were leading the group discussions, with me acting as a supportive guide and providing feedback.

A focus on the social organization of learning—in both content and pedagogy—directs attention to the shape and malleability of in-situ participation structures and activities, as well as the necessary social conditions of learning. These conditions include: room for repair, an opportunity to personally contribute to the practice, a sense of social belonging, and multiple roles for learners to try on (Nasir, 2012). For this special topics course, I worked to instantiate these necessary social conditions for learning by privileging discussion over lecture, emphasizing meaning-making in real-world situations or vis-à-vis practicum experiences over rote memorization, and attending to early asymmetrical power dynamics among participating students. In this way, I understood my role as more of an "organizer" of robust and engaging interactional opportunities in which all involved participants can learn, reflect, share, and grow (see O'Connor & Allen, 2010; Penuel & DiGiacomo, 2018).

Inequitable learning experiences happen by design. Designed learning within information spaces and places are no exception. By focusing on how to equip students with the theoretical and practical tools to be able to understand, transform, and design information settings in ways that build on human diversity, we need to think carefully as LIS educators about the types of mediational tools, including innovative technologies, that best support *consequential* learning and identity development—that is, learning in which one's relationship to the material shifts

within and throughout engagement in the learning process (Beach, 1999). Cognizant of the challenges in constructing learning environments that leverage the multiplicity of students' cultural repertoires of practice (Gutiérrez & Rogoff, 2003), and attuned to the power relations that shape typical student-teacher relations (Matias, 2016), we also need to recognize our own need to continually reflect on our practices and identities as teachers, because it is precisely through the social interactions that constitute our teacher-student relationships that LIS students learn to become educators themselves.

Educational Technology and Multiple Literacies in an LIS Course on Games - Spencer Greenhalgh

Literacies as an educational technology phenomenon. Educational technology is a diverse field united by an interest in the role of technology in learning and teaching. As a phenomenon, educational technology has a long history. For example, Nickerson (2005) argues that the first cognitive technologies include alphabet and number systems, and Molenda (2008) suggests that even modern research in this area has roots "stretching back to the 5th century" before the Common Era (p. 5). The *Association for Educational Communications & Technology* (AECT), my disciplinary organization of choice, began in 1923 as a *Division of Visual Instruction* interested in the educational potential of slideshows and filmstrips (AECT, n.d.). The evolution of AECT over time has mirrored broader evolutions in how educational technologies are thought of, used, and researched. Not only does a modern AECT convention feature research focused on more modern technologies, but it also shows the diversity of perspectives that have emerged on the relationship between technologies and education. AECT researchers may focus on cultural influences, online and distance learning, designing instructional materials and

experiences, teachers' effective integration of technologies, or even corporate use of technologies for training purposes.

My own perspective is centered on a broad view of *literacy* adopted by educational technology—and other education—researchers. Beginning in the 1970s (e.g., Scribner and Cole, 1978), education research began treating literacy as a social phenomenon rather than a cognitive one. That is, literacy is "not just *what* you say, but *how* you say it… not just *how* you say it, but what you *are* and *do* when you say it" (Gee, 1989, p. 6, emphasis in original). Those who see literacy as a social phenomenon therefore acknowledge multiple *literacies*: "socially recognized ways of generating, communicating and negotiating meaningful content through the medium of encoded texts within contexts of participation" (Lankshear & Knobel, 2006, p. 64).

This expansive view of literacy is not yet universally accepted (even among education researchers) but nonetheless remains helpful. The field of educational technology has increasingly emphasized the contexts—rather than just the outcomes—of educational technologies (Romero-Hall, 2021); many researchers who have followed these developments work to uncover the hidden meaning in new "texts" situated in new social contexts—texts and contexts that many would dismiss as meaningless. For example, Greenhow and Gleason (2012) have argued for the existence of *Twitteracy*, a foundational concept for my research on informal learning with social media (e.g., Greenhalgh, Rosenberg, Staudt Willet, Koehler, & Akcaoglu, 2020). Likewise, after spending decades arguing for a broader definition of literacy, Gee (2003) used that definition to suggest that what happens when youth play video (and other) games is more meaningful than many parents and teachers think. For example, in recent work (Greenhalgh, 2020), I have described how players' decisions to engage with ethical issues in an analog educational game is dependent on several factors related to game design and context.

Special topics course: *Games, Literacy, Meaning, and Learning*. My LIS class on *Games, Literacy, Meaning, and Learning* is centered on the first two terms in its title. The content of the course focuses on tabletop and digital games as the sites of literacy activities (i.e., gaming equivalents of "reading" and "writing"), and its pedagogy guides students in becoming literate as that term relates to games (i.e., by practicing that "reading" and "writing"). That public, school, and academic libraries throughout Kentucky now have gaming collections suggests some specific value of these subjects for LIS students; however, the course content and pedagogy are heavily influenced by my own disciplinary training and interdisciplinary influences.

Table 3

Games, Literacy, Meaning, and Learning Course Description and Learning Outcomes

Games, Literacy, Meaning, and Learning	
Course description	This course examines video, board, and roleplaying games as activities that involve literacy practices. You will learn how to think about literacy practices beyond just reading and writing and how to evaluate the design of a game. Building on these skills, you will then learn how to identify the literacy practices associated with meaningful games, meaningful game contexts, and game design activities for youth and/or adults. Practical considerations for using games in libraries and other contexts will also be addressed.

Learning outcomes	The following "I can" statements will guide all of the learning and assessment activities throughout this course. Although all of the statements build on each other, each module of the course will focus on one statement in particular. By the end of that module, you should feel comfortable making that statement about yourself and will demonstrate your ability to meet that objective through a module project. • I can describe how the design of a game connects with particular literacies. • I can explore and describe the contexts within and surrounding games. • I can design a meaningful game by applying and reinforcing relevant literacies. • I can explain how the design of a game produces meaning. • • I can develop a plan for fitting games into my professional context.

Literacies and course content. Although the librarians and other information professionals in this class have a professional interest in literacy and, often, a personal interest in games, they are typically unaccustomed to thinking of them together. The phenomenon of games in libraries is hardly new; indeed, Mayer and Harris's (2010) guide to tabletop games in school libraries is now old enough that many of its game recommendations are out of print. And yet, games are not yet everywhere, and some libraries (or their communities) may be resistant to adding a game collection or starting game-related programming. Framing games as another kind of meaningful text with their own literacies can help my students justify games' presence in libraries. However, it also requires drawing from the education and educational technology literature that has long been making these arguments in relation to both formal and informal learning settings (e.g., Gee, 2003; Kafai & Burke, 2016)

Educational technology researchers are far from the only group making a case for the value of games. Indeed, my educational technology approach to games and literacies has long

been influenced by other disciplines and contexts, which thereby also introduce themselves into my LIS course. For example, Feminist Frequency's (n.d.) *Tropes vs. Women in Video Games* YouTube videos and associated curriculum provide opportunities to discuss representation of women in games. Marshall's (2020) *Ancestry & Culture: An Alternative to Race in 5e* is marketed as a supplement for the latest edition of Dungeons and Dragons and offers an accessible-but-thorough challenge to racist ideas implicit in tabletop roleplaying games' treatment of "fantasy races." In a more traditionally academic vein, Bogost (2007), Sicart (2009), and Flanagan and Nissenbaum (2014) provide thorough guides for how to respectively identify and critique the rhetoric, ethics, and values embedded in games.

Literacies and course pedagogy. To treat playing and designing games as literacy practices is not merely a rhetorical effort to justify their inclusion in library settings. To accept that one can "read" games is to accept that one can read them *closely*—and that some will hold up better than others. It is also to accept that one must be attentive to these messages if one is "writing" a game. Above all, it is to suggest that "learning is the strengthening of those [literacy] practices" (Greeno, Collins, & Resnick, 1996, p. 23) and that my role as course instructor is to give students opportunities that will allow for that strengthening.

Many course assignments therefore involve practicing "close readings" of games. For example, the popular board game Scrabble seems like an obvious choice for developing traditional literacies (i.e., reading and writing). However, in the second week of my class, students read about Nigel Richards, a New Zealander who won the Francophone World Scrabble Championships despite not speaking French (see Willsher, 2015). This story invites a deeper look at what literacies Scrabble actually promotes and suggests that the game is more about mathematics and memorization than it is about meaningful language. My goal is not to establish

that Scrabble has *no* value but rather to invite students to think critically about *what* value it has. In the light of the North American Scrabble Players Association's decision to remove several slurs from its list of tournament-approved words (see Orland, 2020), my next offering of the class will likely involve even deeper consideration of what implicit messages Scrabble sends about acceptable language. To take this approach to games can be as difficult, unpleasant, and challenging as a close read of a beloved-but-imperfect children's book. However, it is a necessary part of accepting games as spaces for literacies—and libraries as sites for games.

Just as writing can be held to demonstrate greater mastery of traditional literacies than reading, designing a meaningful game takes more effort and application of course concepts than critiquing an existing game. The final project for this course is therefore for students to design a simple-but-functional meaningful game of some kind and to write a brief essay describing how the game design process reflects the literacy practices discussed throughout the semester. There are also practical benefits to asking my students to design a game (rather than simply critique an existing one). In the educational technology literature, Kafai and Burke (2016)—among others—have advocated for greater attention to the learning and literacies that youth and adults can acquire through game design. Yet, just as many more people read books than write them, it may be easier for my students—and their patrons—to think of themselves as players of games than designers. Requiring my students to design their own games shows them they are capable of doing so and therefore empowers them to offer game design programming at the institutions where they are employed—and to then empathize with children, youth, and adults who are trying game design for the first time.

Discussion

Given the current role that libraries play for children and youth, there is a need for LIS programs to expand CYS-focused classes beyond a focus on books (Agosto, 2013; Long, 2018). As a team of interdisciplinary scholars, we have sought to demonstrate through our special topics courses how leveraging insights from other disciplines can be helpful in expanding what remains the contemporary focus in CYS course content. In this section, we identify some of the cross-cutting themes that have emerged from our descriptions. By highlighting common insights—independent of our individual classes and disciplines—we identify some starting points that may be particularly helpful for those revisiting their own CYS curricula.

Each of the disciplines we draw from emphasizes the value of learning from children and youth. Indeed, this is the stated goal of the field of childhood studies, which intentionally privileges children's voice and experiences and views them as worthy of study in their own right. Similarly, the sister disciplines of the learning sciences and educational technology both draw from researchers such as Sylvia Scribner and Michael Cole (1973) in arguing that there is cognitive and developmental value in everyday phenomena that have traditionally been dismissed as unimportant. Inspired by these influences, we argue that LIS programs should encourage their students how to learn what is important *from* children and youth rather than only determining what is important *for* them.

This expanded perspective may be even more helpful when it is accompanied with a situated examination of power and privilege, another common analytical lens across our fields. Indeed, we all draw from disciplines whose very names suggest an attention to—and challenging of—power. For example, the learning sciences' championing of "informal learning" is an argument that schools and other institutions of formal learning do not have the last say on what is valuable to learn. Similarly, to speak in terms of "literacies" rather than "literacy" implicitly

rejects the idea that dominant populations' meaning-making practices are the only valid ones. Finally, to define a field as "childhood studies" calls attention to questions of whose voices are privileged—questions that can be easily applied to other dynamics beyond those between children and adults. In the same vein, CYS curricula will benefit not only from learning from and with children and youth, but also from asking necessary questions related to culture, identity, power, privilege, and relationships.

These adjustments in approach to CYS curriculum naturally lead to an expansion beyond the resources and materials that have long dominated courses in this area. Spencer's focus on games as sites for literacy is an example of considering the value of materials beyond books—yet, it remains focused on materials. While materials are not unimportant, childhood studies and learning sciences propose even more radical departures from CYS courses' traditional focus. Sarah's emphasis on children's information practices and Daniela's on learning environments underline the importance of teaching LIS professionals how to look beyond artifacts to the contexts in which children and youth participate.

In keeping with our dual focus on content and pedagogy, each of these themes has implications not only for CYS course content but also for how instructors teach that content. The power relations examined in our disciplines exist along multiple dimensions, including between professors and their students; if we are teaching our students to be attentive to these relations, it is up to us to name and model them as they exist in our classes. Accordingly, we each find ways of honoring our students' agency, interests, and voices—such as inviting them to lead discussions, shape class norms, and pursue their own priorities with final projects. Similarly, our collective recognition that information practices extend beyond reading and writing has inspired creativity in our teaching and assessment methods. Our students consume—and produce—a

range of different media during our courses, with the hope that this range of experiences will support authentic connections with the current and future practices of our students in their roles as information professionals.

While our primary focus in this paper has been on classes focused on CYS, we expect that the lessons we have drawn from other disciplinary connections have relevance across LIS curricula. Indeed, interest in games and media beyond books is hardly limited to children and youth, and much of the foundational work in informal learning and literacies takes a life-long, life-wide perspective on the study and design of learning (Bell, Tzou, Bricker, & Baines, 2012). While childhood studies may seem to have less obvious application outside of CYS courses, it has many parallels with feminist theory (Thomson, 2008) and other disciplines that focus on marginalized populations—and therefore can be applied in a number of different contexts.

Conclusion

In this article, we drew on our experiences teaching three special topics courses in the MSLS program at the University of Kentucky. In doing so, we set out to explore the potential benefits to CYS courses of incorporating theoretical approaches and concepts from the fields of childhood studies, learning sciences, and educational technology. As a team of junior faculty, we take seriously the ways in which our course content and pedagogy informs the next generation of LIS researchers and practitioners. In particular, we are concerned that CYS courses focused on the lived experiences and diverse realities of children and youth remain the exception—rather than the norm—across LIS curricula and programs (see Barriage et al., 2020). It is for this reason that we decided to pursue a collective reflection of our LIS special topics course design. While our disciplinary training is distinct, it is our shared commitment to equity and social justice in

LIS scholarship that brought us together; and with an awareness that these values should not only inform our research, but also our teaching. We hope that in reading this article, our fellow LIS scholars might be inspired to pursue additional interdisciplinary collaborations and seek out opportunities to learn from others whose training and perspectives are different from their own. This is, from our vantage point, how we grow and improve, together.

References

Adkins, D., & Higgins, S. (2006). Education for library service to youth in five countries. *New Review of Children's Literature and Librarianship, 12*(1), 33-48. doi:10.1080/13614540600563734

Agosto, D. (2013). Envisaging young adult librarianship from a teen-centered perspective. In A. Bernier (Ed.), *Transforming young adult services* (pp. 33-51). Chicago, IL: Neal-Schuman.

Agosto, D. (2018). Thoughts about the past, present and future of research in youth information behaviors and practices. *Information and Learning Sciences, 120*(1/2), 108-118. doi:10.1108/ILS-09-2018-0096

Association for Educational Communications & Technology. (n.d.). *AECT in the 20th century: A brief history.* Retrieved from https://aect.org/aect_in_the_20th_century_a_br.php

Association for Library Service to Children (2015). *Competencies for librarians serving children in public libraries.* Chicago, IL: American Library Association. Retrieved from http://www.ala.org/alsc/edcareeers/alsccorecomps

Austin, J. (2020). Situating youth voice: Moving from understanding to action through critical theory. In A. Bernier (Ed.), *Transforming young adult services* (2nd ed., pp. 61-73). Chicago, IL: ALA-Neal Schuman.

Barriage, S. (2018a). *Examining the red thread of information in young children's interests: A child-centered approach to understanding information practices* (Unpublished doctoral dissertation). Rutgers, The State University of New Jersey, New Brunswick, NJ.

Barriage, S. (2018b). Task-centered activities as an approach to data collection in research with children and youth. *Library & Information Science Research, 40*(1), 1-8. doi:10.1016/j.lisr.2018.01.001

Barriage, S. (in press). Young children's information seeking practices in center-based child care. *Journal of Librarianship & Information Science*.

Barriage, S., DiGiacomo, D., & Li, X. (2020, October). Development, learning, and equity in child- and youth-focused courses in ALA-accredited master's programs. Poster presented at the ALISE 2020 Annual Conference, Pittsburgh, PA.

Beach, K. (1999). Consequential transitions: A sociocultural expedition beyond transfer in education. *Review of Research in Education*, *24*(1), 101-139. doi:10.3102/0091732X024001101

Bell, P., Tzou, C., Bricker, L., & Baines, A. D. (2012). Learning in diversities of structures of social practice: Accounting for how, why and where people learn science. *Human Development*, *55*(5-6), 269-284. doi:10.1159/000345315

Bernier, A. (2019). Isn't it time for youth services instruction to grow up? From superstition to scholarship. *Journal of Education for Library & Information Science, 60*(2), 118-138. doi:10.3138/jelis.2018-0055

Bernier, A. (2020). Making the case for transforming. In A. Bernier (Ed.), *Transforming young adult services* (2nd ed., pp. xxv-xlviii). Chicago, IL: ALA-Neal Schuman.

Bogost, I. (2007). *Persuasive games: The expressive power of videogames*. Cambridge, MA: The MIT Press.

Byrnes, J. P., & Bernacki, M. L. (2013). Cognitive development and information behavior. In J. Beheshti & A. Large (Eds.), *The information behavior of a new generation: Children and teens in the 21st century* (pp. 23-43). Lanham, MD: Scarecrow Press.

Chelton, M. K. (2020). LIS's vision of young adults: Some historical roots for current theories and practice. In A. Bernier (Ed.), *Transforming young adult services* (2nd ed., pp. 129-136). Chicago, IL: ALA-Neal Schuman.

Cole, M., & Distributive Literacy Consortium. (2006). *The fifth dimension: An after-school program built on diversity*. New York, NY: Russell Sage Foundation.

Cole, M., Hood, L. & McDermott, R.P. (1982). Ecological niche picking. In U. Neisser (Ed.), *Memory observed: Remembering in natural contexts* (pp. 366-373). San Francisco, CA: W.H. Freeman and Company.

Connolly, P. (2008). Race, gender and critical reflexivity in research with young children. In P. Christensen & A. James (Eds.), *Research with children: Perspectives and practices* (2nd ed., pp. 173-188). New York, NY: Routledge.

Corsaro, W. A. (2014). *The sociology of childhood* (4th ed.). Los Angeles, CA: Sage.

DiGiacomo, D. K., & Gutiérrez, K. D. (2016). Relational equity as a design tool within making and tinkering activities. *Mind, Culture, and Activity, 23*(2), 141-153. doi:10.1080/10749039.2015.1058398

Espinoza, M. L., & Vossoughi, S. (2014). Perceiving learning anew: Social interaction, dignity, and educational rights. *Harvard Educational Review*, *84*(3), 285-313. doi:10.17763/haer.84.3.y4011442g71250q2

Fargas-Malet, M., McSherry, D., Larkin, E., & Robinson, C. (2010). Research with children: Methodological issues and innovative techniques. *Journal of Early Childhood Research, 8*(2), 175-192. doi:10.1177/1476718X09345412

Feminist Frequency (n.d.) *Tropes vs. women in video games: Curriculum*. https://feministfrequency.com/tropes-vs-women-in-video-games-curriculum/

Flanagan, M. & Nissenbaum, H. (2014). *Values at play in digital games*. Cambridge, MA: MIT Press.

Gee, J. P. (1989). Literacy, discourse, and linguistics: Introduction. *Journal of Education, 171*, 5–16. doi:10.1177/002205748917100101.

Gee, J. P. (2003). *What video games have to teach us about learning and literacy* (Rev. and updated ed.). New York, NY: St. Martin's Press.

Greene, S., & Hill, M. (2005). Researching children's experience: Methods and methodological issues. In S. Greene & D. Hogan (Eds.), *Researching children's experience: Methods and approaches* (pp. 1-21). Thousand Oaks, CA: Sage.

Greenhalgh, S. P. (2020). Influences of game design and context on learners' trying on moral identities. *The Journal of Experimental Education*. Advance online publication. doi:10.1080/00220973.2020.1712312

Greenhalgh, S. P., Rosenberg, J. M., Staudt Willet, K. B., Koehler, M. J., & Akcaoglu, M. (2020). Identifying multiple learning spaces within a single teacher-focused Twitter hashtag. *Computers & Education, 148*, 1-12. doi:10.1016/j.compedu.2020.103809

Greenhow, C. & Gleason, B. (2012). Twitteracy: Tweeting as a new literacy practice. *The Educational Forum*, *76*, 463-477. doi:10.1080/00131725.2012.709032

Greeno, J., Collins, A., & Resnick, L. (1996). Cognition and learning. In D. Berliner & R. Calfee (Eds.), *Handbook of educational psychology* (pp. 15-46). New York, NY: Macmillan.

Gutiérrez, K. D., & Rogoff, B. (2003). Cultural ways of learning: Individual traits or repertoires of practice. *Educational Researcher*, *32*(5), 19-25. doi:10.3102/0013189X032005019

Gutiérrez, K. D., & Penuel, W. R. (2014). Relevance to practice as a criterion for rigor. *Educational Researcher*, *43*(1), 19-23. doi:10.3102/0013189X13520289

Gutiérrez, K.D., & Vossoughi, S. (2010). Lifting off the ground to return anew: Mediated praxis, transformative learning, and social design experiments. *Journal of Teacher Education*, *61*(1-2), 100-117. doi:10.1177/0022487109347877

Hill, M. (2006). Children's voices on ways of having a voice: Children's and young people's perspectives on methods used in research and consultation. *Childhood, 13*(1), 69-89. doi:10.1177/0907568206059972

James, A. (2004). Understanding childhood from an interdisciplinary perspective: Problems and potentials. In P. B. Puffal & R. P. Unsworth (Eds.), *Rethinking childhood* (pp. 25-37). New Brunswick, NJ: Rutgers University Press.

James, A. (2007). Giving voice to children's voices: Practices and problems, pitfalls and potentials. *American Anthropologist, 109*(2), 261–272. doi:10.1525/AA.2007.109.2.261

Kafai, Y. B., & Burke, Q. (2016). *Connected gaming: What making video games can teach us about learning and literacy*. Cambridge, MA: The MIT Press.

Kumasi, K. D. (2020). "The library is like her house": Reimagining youth of color in LIS discourses. In A. Bernier (Ed.), *Transforming young adult services* (2nd ed., pp. 111-117). Chicago, IL: ALA-Neal Schuman.

Lankes, R. D. (2018). Why do we need a new library science. *Bibliothek - Forschung und Praxis, 42*(2), 338-343. doi:10.1515/bfp-2018-0036

Lankshear, C., & Knobel, M. (2006). *New literacies: Everyday practices & classroom learning*. New York, NY: Open University Press.

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

Long, A. K. (2018). Youth services in public libraries: History, core services, challenges, and opportunities. In K. de la P. McCook & J. S. Bossaller, I*ntroduction to public librarianship* (3rd ed.; pp. 229–256). Chicago, IL: American Library Association.

Lundh, A. H. (2016). Subject positions of children in information behaviour research. *Information Research, 21*(3), paper 717. Retrieved from http://InformationR.net/ir/21-3/paper717.html

Marshall, E. (2020). *Ancestry & culture: An alternative to race in 5e*. [Miami, FL]: Arcanist Press.

Matias, C. E. (2016). *Feeling white: Whiteness, emotionality, and education*. Rotterdam, The Netherlands: Sense Publishers.

Mayer, B., & Harris, C. (2010). *Libraries got game: Aligned learning through modern board games*. Chicago, IL: American Library Association.

McKechnie, L. (1997). Vygotsky's zone of proximal development – A useful theoretical approach for research concerning children, libraries, and information. *Journal of Youth Services in Libraries, 11*(1), 66-70.

Melton, G. B., Ben-Arieh, A., Cashmore, J., Goodman, G. S., & Worley, N. K. (2014). *The SAGE handbook of child research.* Los Angeles, CA: Sage.

Molenda, M. (2008). Historical foundations. In J. M. Spector, M. D. Merrill, J. van Merriënboer, & M. P. Driscoll (Eds.), *Handbook of research on educational communications and technology* (3rd ed., pp. 3-20). New York, NY: Lawrence Erlbaum Associates.

Nasir, N. (2012). *Racialized identities: Race and achievement among African American youth*. Stanford, CA: Stanford University Press.

Nickerson, R. S. (2005). Technology and cognition amplification. In R. J. Sternberg & D. D. Preiss (Eds.), *Intelligence and technology: The impact of tools on the nature and development of human abilities* (pp. 3–27). Mahwah, NJ: Lawrence Erlbaum Associates.

O'Connor, K. & Allen, A. (2010). Learning as the organizing of social futures. *Yearbook of the National Society for the Study of Education*, *108*(1), 160-175.

O'Kane, C. (2008). The development of participatory techniques: Facilitating children's views about decisions which affect them. In P. Christensen & A. James (Eds.), *Research with children: Perspectives and practices* (2nd ed., pp. 125 - 155). New York, NY: Routledge.

Orland, K. (2020, July 8). Scrabble players move toward banning 200+ slurs from tournament play. *Ars Technica*. Retrieved from https://arstechnica.com/gaming/2020/07/scrabble-players-move-toward-banning-200-slurs-from-tournament-play/

Penuel, W. R., DiGiacomo, D. K. (2018). Organizing learning environments for relational equity in new digital media. In J. Voogt, G. Knezek, R. Christensen, & K.-W. Lai (Eds.), *Second handbook of information technology in primary and secondary education* (pp. 1-15). Cham, Switzerland: Springer International Handbooks of Education. doi:10.1007/978-3-319-53803-7_75-1

Percell, J., Sarin, L. C., Jaeger, P. T., & Bertot, J. C. (2018). Introduction: Re-envisioning the MLS. In J. Percell, L. C. Sarin, P. T. Jaeger, & J. C. Bertot (Eds.), *Re-envisioning the*

MLS: Perspectives on the future of library and information science education (Vol. 44B, pp. 1-6). Bingley, England: Emerald.

The Politics of Learning Writing Collective. (2017). The learning sciences in a new era of US nationalism. *Cognition and Instruction*, *35*(2), 91-102. doi:10.1080/07370008.2017.1282486

Prout, A., & James, A. (1990). *Constructing and reconstructing childhood: New directions in the sociological study of childhood*. New York, NY: Falmer Press.

Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social context*. New York, NY: Oxford University Press.

Rogoff, B. (1994). Developing understanding of the idea of communities of learners. *Mind, Culture, and Activity, 1*(4), 209-230. doi:10.1080/10749039409524673

Romero-Hall, E. J. (2021). Research methods in Learning Design and Technology: A historical perspective of the last 40 years. In E. J. Romero-Hall (Ed.), *Research methods in learning design and technology*. New York, NY: Routledge.

Rothbauer, P. (2020). Imagining today's young adults in LIS: Moving forward with critical youth studies. In A. Bernier (Ed.), *Transforming young adult services* (2nd ed., pp. 151-162). Chicago, IL: ALA-Neal Schuman.

Rothbauer, P. M., & Gooden, R. (2006). Representations of young people in information science: The case of the Journal of the American Society for Information Science (and Technology), 1985-2005. *Proceedings of the Annual Conference of CAIS / Actes Du congrès Annuel De l'ACSI*. doi:10.29173/cais187

Scribner, S., & Cole, M. (1973). Cognitive consequences of formal and informal education. *Science, 182*(4112), 553-559. doi:10.1126/science.182.4112.553

Scribner, S. & Cole, M. (1978). Literacy without schooling: Testing for intellectual effects. *Harvard Educational Review*, *48*, 448-461. doi:10.17763/haer.48.4.f44403u05l72x375

Sicart, M. (2009). *The ethics of computer games*. Cambridge, MA: MIT Press

Smith, C., & Greene, S. (2014). *Key thinkers in childhood studies*. Chicago, IL: Policy Press.

Spink, A., & Heinström, J. (2011). Information behavior development in early childhood. In A. Spink & J. Heinström (Eds.), *New directions in information behavior* (pp. 245-256). Bingley, England: Emerald Group.

Thomas, N. (2014). Sociology of childhood. In T. Maynard & S. Powell (Eds.), *An introduction to early childhood studies* (3rd ed., pp. 34-47). Thousand Oaks, CA: Sage.

Thomson, P. (2008). Children and young people: Voices in visual research. In P. Thomson (Ed.), *Doing visual research with children and young people* (pp. 1-19). New York, NY: Routledge.

Vakil, S., McKinney de Royston, M., Suad Nasir, N. I., & Kirshner, B. (2016). Rethinking race and power in design-based research: Reflections from the field. *Cognition and Instruction*, *34*(3), 194-209. doi:10.1080/07370008.2016.1169817

Valentine, G. (1999). Being seen and heard? The ethical complexities of working with children and young people at home and at school. *Ethics, Place and Environment, 2*(2), 141-155. doi:10.1080/13668799908573667

Vásquez, O. A. (2013). *La clase mágica*. New York, NY: Routledge.

Vygotsky, L. (1934/1978). *Mind in society*. Cambridge, MA: Harvard University Press.

Welch, C. C. (2014). What, and how, we teach now: Educating youth librarians in the twenty-first century. *Children & Libraries, 12*(2), 3-8. doi:10.5860/cal.12n2.03

Willsher, K. (2015, July 21). The French Scrabble champion who doesn't speak French. *The Guardian*. Retrieved from https://www.theguardian.com/lifeandstyle/2015/jul/21/new-french-scrabble-champion-nigel-richards-doesnt-speak-french

Woodgate, R. L., Tennent, P., & Barriage, S. (2020). Creating space for youth voice: Implications of youth disclosure experiences for youth-centered research. *International Journal of Qualitative Methods, 19*, 1-13. doi:10.1177/1609406920958974

Young Adult Library Services Association. (2017). T*een services competencies for library staff.* Chicago, IL: Author. Retrieved from http://www.ala.org/yalsa/guidelines/yacompetencies