

Literature Review Matrix

Define the Information Community and explain the significance of studying the information behaviors of this group (e.g. why is this research important).

The maker community is an exceptionally vibrant information community centered around DIY and STEAM. It is a community built on sharing information (skills, tools, techniques, ideas) as well as products (Sheridan et al., 2014). Makers may actively seek inspiration for projects, but they may also have serendipitous encounters that give inspiration (Harlan et al., 2012). Additionally, they actively seek information about skills and tools that are either already available to them or that might help with a project they have in mind (Sheridan et al., 2014). Makers value information coming from other makers, whether in their geographic communities and makerspaces or in online maker communities. They also place a high value on sharing the information they have learned (and the products they have created), which creates a rich culture of exchange and respect among community members.

Statement of Research:

The paper based on these articles will explore how makers fit into the information behavior domain of serious leisure and how the maker community enables its members to fulfill their information needs.

THEY SAY*	I SAY*
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Author/ Date	Main Idea(s)	Theoretical/ Conceptual Framework	Methods	Results & Analysis	Conclusions	Comments (Your Analysis)	Future Research Implications	Information Professional Practices Implications
Sheridan et al (2014)	Explores how makerspaces function as learning environments ; discusses iterative design and participatory culture	Constructionism: extends constructivist theory (knowledge is actively constructed through experience, learning is iterative: “ongoing construction and revision of mental representations” (p. 507); communities of practice: working in common domain share knowledge and experiences; studio thinking framework: 4 key studio structures (demonstration, students-at-work, critique, and exhibition)	Comparative case study: data gathered for 1 year from 3 diverse makerspaces (selected through purposive sampling); data collection via field observations, interviews, and artifact reviews; data analyzed via transcription, summaries, memos, feedback from external advisory board	<ul style="list-style-type: none"> ● Constantly evolving to meet needs ● Personal and collaborative projects ● tinkering/play ● Informal help and formal workshops <ul style="list-style-type: none"> ○ Learners become experts and informal teachers ● Inclusive <ul style="list-style-type: none"> ○ No prior experience needed <p>Analysis</p> <ul style="list-style-type: none"> ● Iterative design for learning and creation ● Sharing techniques and products ● Brings together disciplines otherwise kept distinct - multiple entry points to participation, innovative collaboration and creation (p. 526-7) ○ No disciplinary boundaries to authentic learning ● Spontaneity from serendipity alongside planned or sustained projects ● Making process is important: tinkering, figuring things out, playing leads to new project ideas (p. 528) ● Making also for products with “tangible utility” (p. 528) 	Participation with diverse tools, materials, and processes; finding problems and projects to work on; iterative design; community participation; informal leadership and teaching roles; sharing creations and skills (p. 529)	Based on this study, the making process aligns with the information seeking process by which initial curiosity leads to discovery and exploration (through play, trial and error, tinkering). This leads to design and creation of a product, then often to an elaboration or extension of knowledge beyond the project’s original scope. The study also suggests that serendipity is a major part of the making process, as it can alter the trajectory of a project or give rise to a new project idea. Thus, information seeking among makers is a combination of active seeking, active browsing, and serendipitous encounters with information. This leads to product creation in multiple iterations to then share with the maker community or wider world. When makers become familiar with a particular skill or tool, it becomes their responsibility to share that skill and teach others, hence the inclusivity of the community. Their skills and products become information from which other makers learn.	This is not a study on information seeking behavior or information needs. Rather, it studies learning and the use of makerspace environments, and so is parallel to information needs. This leaves room for further study of information seeking among makers, especially insofar as the type of services libraries and schools can offer for makers in their communities.	Libraries can utilize the environmental and community-based information discovered in this study to create designated spaces and programs that support making alongside other makers, whether digitally or in-person.

<p>Mason and Robinson (2010)</p>	<p>Examines what kinds of information emerging artists and designers tend to seek, where they tend to look, and what other info behaviors they exhibit</p>	<p>4 purposes for artist seeking information: inspiration, identification of visual elements, materials and techniques, and marketing and career guidance Fifth purpose: current trends in art world 4 general issues from the literature: an idiosyncratic pattern of need, need for “non-art” info, preference for browsing, preference for social networks as info sources Wide-ranging needs Unpredictable needs: serendipity, info comes from life</p>	<p>Online survey: data gathered from 78 random respondents (who were formally trained, are no longer in education, still create art, and are “new practitioners”) in the UK after it was publicized in a variety of resources; qualitative and quantitative data investigating use of print resources, use of internet, boundaries of art info, info behavior, and career development</p>	<ul style="list-style-type: none"> • Most respondents from “Net Generation” with formal info skills training; did not earn majority of income from art • Most used libraries for art: searching catalogue as well as browsing • Most used books for inspiration, specific reference, and info on other artists; some used books for techniques and materials • Most used journals or magazines for news on art world, inspiration, and info on other artists; some used them for job and exhibition info • All used internet for all information needs (usually first option) in conjunction with other sources • Variety of sources of info used - categories noted: books and writers, films/TV, magazines, places, people, objects, music, artists, natural world, social world/movements, and abstracts • Beyond library and database search, other info skills (specialized search, career development, etc.) were inconsistent <p>There were no boundaries to what counts as art info, which makes it impossible for libraries to satisfy all needs. Trends were noticed among types of artists (eg: painters and sculptors were more likely to cite inspiration from nature, anatomy, and natural history). All disciplines noted human interaction, conversation, and contemplation as inspirational sources.</p>	<p>Emerging artists (or new practitioners) displayed essentially the same info behaviors as artists as a whole. They use active search in both library resources and internet resources for information, and virtually anything can be considered art information as inspiration. Browsing is important not just in libraries and the internet, but in the wider world as well. Community is important for emerging artists especially as they do not have an established presence as an artist and they generally lack formally acquired knowledge on career development.</p>	<p>Emerging artists and designers exhibit information behaviors stemming from needs for inspiration, specific reference, and techniques. They rely on a variety of sources, including libraries, internet, and communities of artists, which the study describes as “invisible colleges.” Artists and designers are all makers, so these behaviors and needs apply to the maker community as well. The study found that artists search for specific information, actively browse for inspiration, and rely on serendipitous inspiration in the wider world. Makers seek information in the same ways to fulfill needs for technical education, project development (especially in regards to the iterative design process), and project inspiration. The community is of utmost importance to artists just as it is for makers: it is how they learn and share, as well as how they improve themselves as designers and market themselves and their products.</p>	<p>This study focuses on formally trained artists and designers, and does not address crafting, design and creation of products for specific use, or self-made artists and designers. This leaves room for further study of information seeking among a larger, more inclusive community of designers (including youth and participants in “cottage industries”).</p>	<p>Since the information artists and designers need could be virtually anything, libraries are hard pressed to meet all needs. The study suggests a need for better education on career development, especially in regards to self-marketing. Libraries could embed this service for artists and designers in their existing career and business development services. They should also ensure a variety of resources are available for diverse reference and art and design techniques.</p>
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<p>Koh (2013)</p>	<p>Youth info-creating behavior is enabled by digital environments and resources. It goes beyond info seeking and individual use to share, remix, and create new info.</p>	<p>Paradigm shift for info behavior research: web 2.0 and participatory culture have enabled people to share and create info in addition to the typical seeking and individual use Youth info behavior: Beyond curriculum-related needs, especially everyday life concerns like relationships and identity Interpersonal info behavior: youth seek info through other people Youth info creation in digital environment: hanging out, messing around, geeking out (Ito et al, 2009); info activities are wide-ranging: info seeking, social networking, creative endeavors</p>	<p>Qualitative content analysis of literature</p> <p>Sense-making methodology group and individual interviews with youth ages 12-15 who actively use Scratch</p> <p>Data gathered from pre-questionnaires, journaling sheets, and group interview transcriptions as well as individual interview transcriptions</p>	<p>Key characteristics of youth info behavior in digital age</p> <ul style="list-style-type: none"> ● Info creation processes <ul style="list-style-type: none"> ○ Content development, organization, and presentation ○ Seeking info on how to share ○ Presentation includes info retrieval for their audience - wiki example: search box is sometimes too specific, so they created a category tree ● Visual display of info is more creative, preferable, accessible: show instead of tell ● Remixing (building on and making creative change to original info) is a frequent use of Scratch <ul style="list-style-type: none"> ○ Feel honored when others use their info, resources, or projects for remixing ○ Some projects are specifically designed to be remixed ○ Ask people how they did things - collaborative learning ● Exploratory learning - tinkering ● Feel productive, empowered to create and innovate <p>Info is sought to determine accuracy through manuals, tips, and examples to build on their existing knowledge. Info creation involves identifying relationships and linking info. Presentation includes interactivity and visually engaging formats. Remixing is the creative reuse of info to produce new info, and it demonstrates sophisticated synthesis skills. It is also a learning process through processing examples. Empowerment is an affective result of this experience, building confidence, comfort, and familiarity with digital content creation.</p>	<p>Info creating behaviors are under-studied in favor of info seeking and use. The study illuminates info creating behavior in youth growing up with digital environments . Info seeking and use play a critical role in info production and often function simultaneously, creating an iterative process</p>	<p>Participatory culture highly values the sharing of info, resources, and knowledge. Info creation presupposes info seeking—for content, skills, and sharing guidance. The synthesis of that new information demonstrates learning as users process info, reorganize it, and present it in a new way for their own audience. Remixing acts as a way for content creators to demonstrate and share knowledge through models, which sparks creativity in a safe, exploratory virtual environment. Info creation empowers users to produce and innovate, which means they are more connected to their learning environment and community; a connected learner is an engaged learner. Creators have a sense of ownership over what they produce, but there is also a drive to share that product or knowledge with a wider audience.</p>	<p>This study focuses on content creation. It leaves room for further research on information seeking behaviors of content creators as spends most of its analysis describing presentation of info (and the cyclical process of search and production) rather than the search process alone.</p>	<p>Information professionals should enable access to digital environments and resources for youth. Especially in school environments, it is important to remember that YouTube, forums, TikTok, and other online communities are not the enemy when it comes to the youth in our charge. These are important resources for students to learn and create.</p>
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<p>Robinson and Yerbury (2015)</p>	<p>Reenactors seek information for primary and period-appropriate secondary sources to create artifacts and impressions of historical periods. They carefully document this learning and practice so they can add to the collective store of knowledge. Info-gathering and info sharing are equally important in this community.</p>	<p>Serious leisure: activities involving special knowledge, training, experience, or skill without being related to work or formal training (Stebbins, 2009) - hobbyists, enthusiasts, and “geeks.” Stebbins (1992) identified 5 categories: makers/tinkerers, collectors, liberal arts hobbyists, activity participants, and players of sports and games Authenticity: “a reference for perceived proximity to an original” (Gapps, 2003). Materials, behaviors, etc. should match the expected level of authenticity decided by the group</p>	<p>Ethnographic study with participant observation at 5 reenactment events in Australia; organizational website analysis; participant document analysis; data also gathered from forums, social media, recorded accounts of practices, and casual conversations with reenactors during immersion events</p>	<ul style="list-style-type: none"> • Info practices and creating authenticity <ul style="list-style-type: none"> ◦ Research - preference for physical artifacts to model, or secondary descriptions and depictions from the period ◦ Documentation - own processes for future reference ◦ Sharing - learn techniques from community members as first stop, then conduct more formal research; “show and tell” and workshops at events; share with general public at events as education ◦ Flexibility and iteration • Lack of research (or disregard for it) is considered sloppy and detracts from the ambience <p>Reenactors are makers, and to participate in the community they must meet the authenticity and impression standards set out ahead of time. Research includes the necessary materials or parts of the impression as well as the development of skills that turn that knowledge into something practical. Reenactors document their making practices and expect to share that (expert amateurs add to a collective store of knowledge). Even the performative side of the hobby requires research to develop authentic reenactment of behaviors and personalities. Research is motivated by desire for authenticity. Revision and rethinking are a constant process to improve the impressions.</p>	<p>Authenticity is achieved through exercise of careful information practices - that desire motivates info-seeking, community connection, and shared knowledge in reenactors.</p>	<p>The info-seeking behavior of reenactors reflects that of other makers and tinkerers in the serious leisure domain. There is a preference for strong sources of information, usually primary sources or secondary sources from the appropriate historical period. As with other info communities, maker hobbyists like reenactors combine searching among peers with searching more formal sources like museums, libraries, and the internet. The use of info is critical for this community. Users document their process for future reference and for sharing, and there is a high regard for authenticity and effective research in recreating artifacts and impressions. The process is flexible and iterative - as the user learns, they create, and as they create, they learn more. The learning informs the creating, which sparks new learning. The community upholds high standards of participation, but is happy to share and teach as they contribute to the collective store of knowledge for the community.</p>	<p>This study focuses on a highly specific community within the serious leisure domain of makers and tinkerers. I have yet to find research on the information needs and behaviors of makers and tinkerers at large. This community works as a representative group, but it is likely that they have somewhat different needs than makers in other areas like 3D printing, programming, and electronics.</p>	<p>Info professionals should be prepared to direct community members to resources outside of libraries, whether online or in other physical spaces. The reenactor community uses museum sources perhaps more than some other groups of makers, and their preference for primary and secondary sources may be somewhat more challenging to fulfill than users whose needs only require information that can be accessed in reference texts or simpler searches.</p>
<p>Savolainen (2019)</p>	<p>Info sharing and seeking are related, and this may not always be sequential, but rather cyclical or otherwise simultaneous practices.</p>	<p>Information seeking: has subsets like information searching, which involves a search system Info sharing: one way communication like transferring or disseminating knowledge vs. two way mutual exchange in community</p>	<p>Searched 4 major databases to find 27 studies examining interplay of info seeking and sharing. Conceptual analysis conducted for the studies</p>	<ul style="list-style-type: none"> • Studies approach information seeking and info sharing in 3 main ways: <ul style="list-style-type: none"> ◦ Indirect relationship (discrete activities connected by info use; info sharing is info transfer) ◦ Sequential relationship (seeking — > sharing; info sharing is info transfer or exchange) ◦ Interactive relationship (mutually affect each other; iteration/cyclical info seeking and sharing) • Info seeking is often a necessary precondition of info sharing, but process may not end with sharing - may cycle back to more seeking • Some info needs arose after info sharing took place 	<p>Prior research falls into one of these 3 categories. The most sophisticated analyses draw on the interactive approach, although it is hard to conceptualize clearly. Further research is needed in areas of info use in social media, forums, discussion groups, etc.</p>	<p>Info seeking and sharing are best seen as linked info behaviors, not discrete ones. The cyclical nature of information use demonstrates that sharing can inspire search, and search facilitates creation and sharing. Thus, information use is iterative just like the design process: the user learns, applies the knowledge, and shares the product, but they cycle back to further learning, sharing again, applying the knowledge in a new way, etc. The challenge is to know when the final product is actually done.</p>	<p>This literature review analysis examines the interplay between info seeking and info sharing. It leaves room for experimental study of this relationship in actual info use.</p>	<p>Info professionals should keep in mind that info seeking is not always sequential, and perhaps it is more often a cyclical or iterative process that develops and expands as it cycles back on itself. Info users may need more support beyond the original search for info as their research develops and their project</p>

<p>Liang, Lu, Liu, and Su (2019)</p>	<p>Library makerspaces need to ensure makers have access to multiple levels of knowledge: principle (why, subject), empirical (how, skill), and situation (space for knowledge creation).</p>	<p>Makerspaces in libraries: core competency is to “secure info communication.” Libraries are knowledge centers, so makerspaces in libraries should be knowledge creation centers. There is room for digital literacy services in makerspaces. Knowledge space and knowledge management: personal knowledge and values in digital world. This enables the exchange of knowledge. Knowledge management is “the process that helps orgs find, select, organize, disseminate, and transfer important info and expertise necessary for activities such as problem solving, dynamic learning, strategic planning, and decision making” (Iyer, 2000). Maker knowledge demands have thus far been ignored in the research.</p>	<p>Researchers visited a university makerspace in China, attended a lecture by the founders, and investigated makerspaces and innovation labs associated with other universities. The y interviewed 7 student participants in maker competitions, as well as some advisors and executives.</p>	<ul style="list-style-type: none"> ● Motivation: common interest or competition with rewards ● Characteristics: <ul style="list-style-type: none"> ○ Active knowledge needs: makers are more apt to be internally motivated to learn, enjoy learning ○ Informal learning preferences: discussion, workshops, salons, brainstorming, inspiration seeking are preferred over formal learning ○ Divergent thinking: apply new technologies, innovation, interdisciplinary communication, first to try new apps and tools ○ Close community ties: maker projects often aim to solve community issues ○ Interdisciplinary knowledge integration: intersection of computer science, mechanical engineering, electronics, etc. Some noted it was difficult to complete projects due to single-discipline knowledge - need multidisciplinary knowledge ● Principle knowledge (knowing why, principles and rules, STEAM philosophy—basic knowledge, interdisciplinary knowledge, info and digital literacy) <ul style="list-style-type: none"> ○ Preliminary investigation ○ Knowledge acquisition ○ Subject knowledge from traditional sources ● Empirical knowledge (knowing how, skills—hands-on, practical, discussion, cooperation, guidance) <ul style="list-style-type: none"> ○ Tech and tools ○ Data mining ○ Knowledge discovery and association —> knowledge structure presented to share and inspire other makers ● Knowledge situation (social communication groups, physical or virtual space for knowledge creation—environment, innovation platform, community) <ul style="list-style-type: none"> ○ Maker and librarian network to facilitate generation, sharing, and transformation of knowledge 	<p>Makers need more than the empirical knowledge gathered through practice; they also need principle knowledge and a knowledge situation. Makerspaces are only impactful if the users have access to the necessary knowledge and are empowered to use the space.</p>	<p>Makers work better in communities than in isolation. Tinkering is part of the process, but learning through discussion and workshops are a major part of the informal information gathering process. Makers seek inspiration from a variety of sources, including from others’ projects and from their community needs. The study breaks down they types of information typically sought by makers; this sets makers apart from some other communities because not only are they seeking content-based info, but also skill-based info so they can learn what they can create and how to make it. Additionally, the environment in which makers work facilitates knowledge generation, sharing, and transformation. This networking is fundamental to a community of makers since many of the skills and content they are learning and sharing are not found in other sources; they are an amalgamation of many makers’ ideas and inspirations.</p>	<p>This study focuses on how the makerspace facilitates learning and knowledge dissemination. Further research could examine makers understanding of their info needs and info use, as other studies of designers and content creators have done.</p>	<p>Makerspace users often need multidisciplinary information, not subject specific info. Their needs lie at the intersection of many subjects depending on the particular project. This need requires a more practical, hands-on approach than book reference. Libraries can create makerspaces that give users access to tools, but developing a community of makers is essential to the effectiveness of that space.</p>
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<p>Li and Todd (2019)</p>	<p>Young people use makerspaces to make meaningful products, learn informally or at more depth than classroom learning, socialize with like-minded peers, and develop their interests in STEM fields.</p>	<p>Makerspaces in libraries: collaboration opportunity with like-minded people. They pose a challenge for staff despite the marked benefits for LIS professionals and communities—personnel lack technical skills, and there is little formal training in this area. Stakeholders may not understand the value of makerspaces. Youth voices: teen library use and perception of online privacy has been studied. They have unique needs.</p>	<p>Public library and public middle school makerspaces were studied through observation. Users between grades 6-10 were interviewed. Focus groups and photovoice were also used.</p>	<ul style="list-style-type: none"> ● Four major themes: make, learn, social, and interests ● Make: opportunity to freely create and build; autonomy; access to tools <ul style="list-style-type: none"> ○ Enjoyment despite problems ○ Construction of physical products (personal needs or entertainment) ● Learn: technology, autonomy, depth of knowledge <ul style="list-style-type: none"> ○ STEM knowledge, math, science ○ Life skills, career readiness, informal learning ● Social: peer interaction <ul style="list-style-type: none"> ○ Fun, productive hang out, working through struggle ○ Teamwork, shared goals, fair play, leadership, delegation, negotiation ○ Friendship, new relationships ● Interests: technology, engineering, building things, curiosity <ul style="list-style-type: none"> ○ New interests triggered, 3D printing, coding, science ● Exploratory space ● Autonomy → engagement ● Lifelong learning and intellectual development 	<p>Info professionals should design makerspaces that are relevant to young people's lives. A major facet is moving beyond digital creation to providing the means for youth to create physical products that are meaningful.</p>	<p>Makerspaces facilitate learning through practice and focus on STEAM subjects like engineering and science. Users are likely to seek information within those content areas, but they will likely search for very specific practical knowledge explaining how things work or how to make something. In making, the theory behind the project is built into making the project; it is not typically an information pursuit of its own. Makerspaces also facilitate community as users struggle together with peers, teach and learn from peers, and develop leadership skills through collaboration. The key is that users have the autonomy to build and make and create in ways that they think are important. When people are engaged in what they learn—especially when they can make something useful to their community or something fun for themselves—it helps them develop a lifelong learning attitude that we don't always get from formal classroom learning.</p>	<p>This study offers perspectives on the value of makerspaces for young people but does not elaborate on information behaviors. There is room for further study on how makerspaces enable information seeking and creation.</p>	<p>This study's conclusion calls on information professionals to design relevant makerspaces that act as exploratory spaces for young people to make meaningful products. This means makerspaces users need autonomy to explore and create what they think is important, not just based on specific programming.</p>
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<p>Makri, Hsueh, and Jones (2019)</p>	<p>Game designers rely on info encounters for inspiration that drives creativity and innovation. Info acquisition and use are connected by an intellectual purpose, giving rise to info designers rather than just info seekers or users.</p>	<p>HIB research: gradual shift from isolated info behavior in work, everyday life, etc. to more holistic and contextual view Info-based ideation (IBI): generating and developing new ideas to encourage creativity by finding and making use of info (Kerne, 2008); ideation is the generation and development of ideas based on synthesis and evaluation of existing ideas. It focuses on the creative processes as people engage with info, especially how people generate and develop new ideas as they work with info. Designer info behavior: info interaction is fundamental to creative design—designers examine relationships between info. Designers seek inspiration more often than specific info—exploratory search and anomalous states of knowledge. Info encounters are unexpected and often happen during browsing; they catalyze ideation. Use includes annotation, incorporation into existing knowledge base, curation into personal info collections to look back on (Pinterest?), and knowledge creation.</p>	<p>Researchers conducted interviews with 10 video game designers in London. They screen-casted designers using the web to help explain an example of finding info on the web.</p>	<ul style="list-style-type: none"> ● Design briefs (docs explaining project purpose, scope, type of product) demonstrated IBI ● Framework: what designers do when interaction with info; how they undertake each behavior, and why they do them ● Info acquisition vs info use (some overlap) ● Acquisition: seeking, encountering, monitoring, examining, immersing, unblocking <ul style="list-style-type: none"> ○ Serendipitous encounters spur idea generation and development ○ Encountered info not sought during active search for other info; active browsing; not looking for info, but encountering something anyway ○ Stay up to date on design trends and industry knowledge ○ Seek as much info as possible on a subject ○ Strategies to avoid design fixation—refocus by taking a walk, listening to music, looking for irrelevant info, etc. ● Use: interpreting, collecting, externalizing, communicating <ul style="list-style-type: none"> ○ Construct meaning based on background, previous, work, interests - meaning is not intrinsic to info ○ Text and visual info collections - catalog for future reference, inspiration (especially Pinterest) ○ Create notes, sketches, and artifacts to process thoughts ○ Mood boards, style frames, sketches, etc. to share ideas with colleagues and clients ● Use of info is dictated by its intellectual purpose - intellectual purpose is a type of acquisition and a type of use context → info designers, not just seekers or users, who “find connections between, sculpt, and flexibly wield acquired info to identify and fill their knowledge gaps” (16) ● Info acquisition and use are connected by intellectual purpose → info behavior loop 	<p>Info-based ideation and the framework provided can inform development of digital info environments . This can nurture creativity during the design process and spur innovation. Intellectual purpose is part of info acquisition and info use.</p>	<p>The study breaks down info behavior into acquisition and use. Acquisition involves direct search, active browsing, and serendipitous encounters with information. Game designers, like other designers, seek inspiration for their work in places not necessarily directly related to video games. They gather as much info as possible when searching specific subjects. They collect the info they find into textual and visual collections, in which the info is cataloged for future reference. Designers browse their collections regularly when seeking inspiration, and these collections can be shared with others. Like many other maker groups, game designers practice iterative info behavior in which the search and use of info is connected by a particular purpose. The search informs the use and the use informs further search. The researchers use the term info designers to describe this process since they are simultaneously info seekers and users.</p>	<p>This study focuses on game designers as a profession, not as a hobby, so it is not the same as other research on hobbyist makers, although it does suggest similar themes in information seeking behavior. Further study could be done on hobby design to determine what differences exist when the context switches from profession to serious leisure.</p>	<p>Information professionals should bear in mind that active browsing is key to designers’ info seeking. In the study, it was suggested that inspiration may come from nature and unrelated product design, so it may be that when a designer asks for reference help they are looking for something more specific than inspirational material.</p>
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List of Resources included in the Literature Review Matrix in APA Format:

Harlan, M. A., Bruce, C., & Lupton, M. (2012). Teen content creators: Experiences of using information to learn. *Library Trends* 60(3), 569-587.

Retrieved from http://muse.jhu.edu.libaccess.sjlibrary.org/journals/library_trends/v060/60.3.harlan.html

Koh, K. (2013). Adolescents' information-creating behavior embedded in digital media practice using Scratch. *Journal for the American society for information science and technology*, 64(9), 1826-1849. doi: 10.1002/asi.22878

Li, X., and Todd, R. J. (2019). Makerspace opportunities and desired outcomes: Voices from young people. *Library quarterly: Information, community, policy*, 89(4), 316-332. doi: 10.1086/704964

Liang, W., Lu, Z., Liu, G., and Su, W. (2019). Research on makers' knowledge space construction by libraries. *Library hi tech*, 37(4), 699-712. doi: 10.1108/LHT-02-2019-0055

Makri, S., Hsueh, T., and Jones, S. (2019). Ideation as an intellectual information acquisition and use context: Investigating game designers' information-based ideation behavior. *Journal of the association for information science and technology*, 70(8), 775-787. doi: 10.1002/asi.24169

Mason, H. & Robinson, L. (2010). The information-related behaviour of emerging artists and designers: Inspiration and guidance for new practitioners. *Journal of documentation*, 67(1), 159-180. doi: 10.1108/00220411111105498

Robinson, J., and Yerbury, H. (2015). Re-enactment and its information practices; tensions between the individual and the collective. *Journal of documentation*, 71(3), 591-608. doi: 10.1108/JD-03-2014-0051

Savolainen, R. (2019). Modeling the interplay of information seeking and information sharing: A conceptual analysis. *Aslib journal of information*

management, 71(4), 518-534. doi: 10.1108/AJIM-10-2018-0266

Sheridan, K., Halverson, E., Litts, B., Brahms, L., Jacobs-Priebe, L., & Owens, T. (2014). Learning in the making: A comparative case study of three makerspaces. *Harvard educational review*, 84(4), 505-531. doi: 10.17763/haer.84.4.brr34733723j648u

*Birkenstein, C., & Graff, G. (2018). *"They say / I say": The moves that matter in academic writing*. Vancouver, B.C.: Langara College.

This matrix inspired by the Literature Review Matrix as shown by Walden University (<https://academicguides.waldenu.edu/writingcenter/assignments/literaturereview/matrix>) and Re-envisioning the Annotated Bibliography Assignment by Marilyn Sharif at George Mason University (<https://drive.google.com/drive/u/0/recent>)