Themes in the readings that relate to my research question:

- **Interesting findings, comments on libraries and teaching Information Literacy**
- **Critical Pedagogy perspective – teachers as facilitators, encouraging students' voice**
- **Librarians working with faculty/other academics**
- **Examples of IL sessions and techniques used**
- **Students' research behaviours**
- **Students' evaluating resources behaviours**

1. **Ruthven, L. (2019) 'Facilitating the development of creativity using special collections and archives', *Art Libraries Journal,* 44(1), pp. 9-12. doi: 10.1017/alj.2018.36.**

It was of interest to me as it talks about different kinds of literacies. I may need to look at it when preparing for the workshop (especially digital and visual ones). The article presents a good literature review on this subject. Additionally, it gives a great example of the sessions run at Goldsmith that take Critical Pedagogy into account. Finally, it talks about using special collections items in which I am also interested.

p. 10: As librarians we're familiar with information literacy, as well as digital, visual, and other literacies and know that they often work together. This interdependence is a key component of metaliteracy, which is described by Thomas P. Mackey and Trudi E. Jacobson as 'the ability to critically self-assess different competencies and to recognize one's need for integrated literacies',8 encompassing and identifying associations between digital literacy, visual literacy, media literacy, social literacy and mobile literacy, among others.(9) Metaliteracy also recognizes the role of relevant literacies needed to adapt to new learning environments, allowing for knowledge acquisition in collaboration with others.10 Mackey and Jacobson's focus is on emerging technologies and interaction in a digital environment,(11) but their argument that learners need to be equipped with critical thinking and metacognitive skills to adapt to any environment is applicable here. (...)

Ruth Dineen and Elspeth Collins identify the most effective teaching techniques

Commented [KI1]: important to learn about literacies - in the context of our students it can help them to acclimatise when starting at uni

for promoting creativity as those in which the teacher is a facilitator on equal power footing with learners. This model provides the 'opportunity for active, even playful, engagement by learners, and [. . .] emphasise[s] the process as well as the outcome'.15 As with biases, power imbalances between facilitators and learners must be confronted and minimised to allow for advanced creative thinking.

p.11: Students need to explore and interact with material on their own terms rather than those of SCA staff. At Goldsmiths, wherever possible, we dispense with show-and-tell activities where students are treated as receptacles for an expert's knowledge and allow them to explore a wide range of material themselves. We ask them to discuss something that interests them, or a question related to the theme of the workshop, with a partner. Those pairs feed back to the larger group to give everyone an idea of the variety of ways their peers are approaching the material (known as the think, pair, share model). (...)
To facilitate a meaningful metacognitive experience, we aim to select a wide variety of material, putting dissimilar items in physical proximity to each other to encourage learners to make unconventional links or spark discussion.

Commented [KI2]: this fragment also relates to CP theme

Commented [KI3R2]: this is also something that I want to do in my sessions more. I am exploring our special collections now with critical pedagogy and sustainability in mind, to see what materials could be useful

p.12: Incorporating techniques such as focusing on the learner's voice, encouraging discovery, and using eccentric objects and odd experiences can help learners to cast off biases and the negative effects of hierarchies between teachers and students, freeing them for the more advanced thinking needed to develop their creativity.

2. **Gamtso, Carolyn B., Paterson, Susanne F. 'Guiding Students from Consuming Information to Creating Knowledge: A Freshman English Library Instruction Collaboration. ', *Communications in Information Literacy,* 5(2), pp. 117-126. doi: https://doi.org/10.15760/comminfolit.2012.5.2.107.**

p.118 Faculty need to recognize that students often enter college with little or no knowledge of the university's various disciplines (Simmons, 2005, p. 298). In fact, students need to be taught the skills of critical thinking and evaluation explicitly and systematically, preferably beginning in the gateway course to college—Freshman

English Composition - and these skills need to be reinforced in every subsequent course. It is dangerous for faculty to assume that students will pick up these skills simply because faculty did so during the course of their own education.

p.119 **Moreover, faculty members frequently assume information literacy entails the ability to navigate a specific library's resources, for example, locating the reserve desk or finding a book on the shelves (**Manuel, 2005, p. 150). In asking the students to go on the proverbial library treasure hunt, faculty assume they have now taught the unit on "how to use the library" without understanding that the process of information literacy skills acquisition is ongoing and recursive.

Commented [KI4]: In my experience that often is the case. I think we need to think how to communicate better what we can offer. Very often it is just the fact that there is no time to explore a full potential of cooperation between library and faculty

p.120 Librarians are skilled in the use of multiple retrieval platforms and databases; however, they may lack the subject expertise to delve deeply into critical thinking and knowledge analysis in a specific field. Their library instruction presentations, therefore, might be focused on information—that is, on how to navigate the latest academic databases to retrieve research—instead of on the evaluation and application of this research in different contexts.

p.121: For example, the librarians work with classroom faculty to transform traditional library orientations into active information literacy workshops by tailoring instruction sessions to particular courses or assignments, by incorporating hands-on group work and critical thinking exercises into instruction sessions, and by using specific research questions in class to encourage student interest and inquiry. For example, rather than mentioning or displaying relevant reference materials for a particular assignment, librarians ask students in groups to use a reference source to answer a specific research question, to evaluate the usefulness of the source in answering the question, and to present the source to the class as a whole. Librarians have also collaborated with the college's Center for Academic Enrichment (CAE) to train peer writing tutors in library skills, thus enabling them to serve as "research mentors" who clarify for students the vital link between solid library research and sound academic writing (White & Pobywajlo, 2005).

Commented [KI5]: Running workshop rather than lectures can help in getting students and staff involved with the library more

3. **Currie, L., Devlin, F., Emde, J., Graves, K. (2010), 'Undergraduate search strategies and evaluation criteria: Searching for credible sources', *New Library World*, Vol. 111 No. 3/4, pp. 113-124.**

https://doi-org.arts.idm.oclc.org/10.1108/03074801011027628

p.113 As the availability of online resources has proliferated over the past decade, reference and instruction librarians have found themselves consulting with and teaching undergraduate students who are often satisfied with the "good enough" results they find when exclusively searching Google for research assignments.
p.114 Reference and instruction librarians must understand and address these behaviors if they are to successfully teach undergraduate students to be savvy, successful researchers.
p.114 **Literature review**
Head and Eisenberg (2009, p.3) sought to learn how students resolved issues of credibility, authority, relevance and currency of resources used for course-related research and for "everyday life research". The latter is defined as ongoing information seeking strategies for solving problems that may arise in daily activities. Students reported twice as many frustrations with conducting course-related research as they did with "everyday life research". They also expressed frustration with identifying, accessing, and/or locating resources in the library. Students typically used Google initially, followed by blogs and Wikipedia. Students did not use libraries and did not find library instruction helpful. Burton and Chadwick (2000, pp. 5-6) designed a survey and queried students regarding the criteria used when they evaluated sources on the internet and in the library. Students in this study said that the most desirable source for them was a source that is easy to find, easy to access, easy to understand, and available when it is needed. They also placed a high value on up-to-date information, primary sources, reputation of the publication and the author, but they were not concerned about publisher reputation. Most of the students claimed to understand the definition of "peer-reviewed" or "refereed" but they did not seem to recognize the value of citations in references for finding additional information (Burton and Chadwick, 2000, pp. 10-12). In a study on the source selection criteria identified by 13 undergraduate students, Twait (2005, pp. 569-72) found that students primarily valued the content of the source, but also ranked familiarity and availability as important. Very few students ranked reputation/credibility as important. There was little

Commented [KI6]: It is not the first time I come across this kind of statements in literature on Information Literacy teaching. It is very similar to what I experience in my teaching - how to find things easily :). And many times after a short explanation I heard students saying ohh, actually it is not that difficult :)

difference in the students' rankings based on class status. Twait (2005) concluded that evaluation skills are lacking in and needed by undergraduate students.

Van Scoyoc and Cason (2006, pp. 51-6) examined undergraduate students' research habits in the campus electronic library environment. The authors were intrigued when they discovered that students used WebCT/class web sites almost as frequently as they used the internet when doing research. Are instructors creating mini-libraries through WebCT/class web sites, which directly link students to library databases? If so, students will have even less opportunity to critically select, use, and evaluate information resources on their own.

Hung (2004, pp. 5-11) also investigated how undergraduates evaluated five web pages using five evaluation criteria – coverage, accuracy, authority, objectivity, and currency. The study indicated that students usually employ only one or two criteria and use them repeatedly to evaluate all five web sites. They evaluated web sites superficially, even with the criteria spelled out for them. Grimes and Boening (2001, pp. 3-9) also found that students evaluated web sites superficially, if at all. The study found that students used unauthenticated web sites and none of them took advantage of the library's resources when left to their own devices. The authors also found that p.115 instructors seemed to be unaware that students have had little guidance in evaluating web resources. Martin (2008, p. 7) examined the information seeking skills of undergraduate education majors to discern the types of sources these students used to find information for their research and whether library instruction played a role in their choices. Ninety percent of the students used the Internet for personal research and seventy-five percent chose the Internet for class-related research, even though these students realized that library resources were more credible. The students tended to choose the Internet because it was easier to use. Martin (2008) also found that students who attended a library instruction session were proportionately just as likely to use academic and non-academic sources as those students who had not attended a library instruction session (Martin, 2008, pp. 9-11). Davis (2003, p. 45) conducted a longitudinal study from 1996-2001, which analyzed citations in term papers submitted during those years, and found that book citations dropped dramatically (from 30 per cent in 1996 to 16 per cent of all cited sources in 2001). Journal citations remained constant for the first year, but rose dramatically in 2001 when the professor set minimum requirements for scholarly sources. Magazine use remained relatively constant over the years in the study, but newspaper use increased significantly. The

Commented [KI7]: I totally understand the authors point of view. I always try to enable the student to carry out their own searches. I hardly ever send a ready PDF article - I would explain the process of finding it through our library, and tell them to try different key words to see if they can find anything that answers their question themselves

Commented [KI8]: this part relates to evaluating resources behaviour too

Commented [KI9]: one of the most 'shocking' findings in my readings. Would be interesting to do some research in our UAL libraries. Would be great to know what kind of sessions those students attended. If it was library induction only I can see this happening. i would be surprised if this was the case with the students we see for Info Skills sessions

web citations initially showed a significant increase from 1996-1999, but fell in 2001 as the professor provided guidelines on appropriate research sources. Griffiths and Brophy (2005, pp. 544-50) reported the results of two user studies conducted in the UK show that commercial Internet search engines dominated students' information seeking strategy. Search engines were preferred because of their familiarity and student success in finding information on previous occasions.

p.116-120 This part of the text will be more useful for my lesson planning in the future – example of online searching for resources and how students evaluated their credibility.

Commented [KI10]: good source of information about what kind of questions we can ask to help in evaluating resources

4. **Faix, A. (2014) 'Assisting students to identify sources: an investigation', *Library Review*, 63(8/9), pp. 624-636. doi: 10.1108/LR-07-2013-0100.**

I learnt a lot about the students' research and evaluating information approaches from this article. Yet again I read that students need the information to be found and accessed quickly and easily. This is something that as librarians we really need to keep in mind when introducing databases and scholarly e-journals. What would be the easiest way to find things; what could make it faster and/or easier? At the same time how can we explain the importance of finding good quality resources that can be hidden from the Google search engine. I think part of my research is about finding ways to address this issue of the valued characteristics of resources not matching (academics and librarians vs students 😊)

p.624 However, even as librarians and faculty work together to help students evaluate information, one step that is often overlooked is helping students identify the different types of sources that they are finding, especially where academic or scholarly sources may be less familiar types of sources for these students. This may sound too basic to be important, but if students misidentify the type of source they are using, they will not be able to fully evaluate its usefulness for their assignment, and they will not be able to cite it correctly. Learning how to identify different types of scholarly information is the first step to academic information literacy, which librarian Elmborg (2006, p. 196) has defined as the ability to "read, interpret, and produce information valued in academia".

p.626 One interesting finding in this separate research is that the characteristics that students value about sources they choose usually do not match the characteristics of sources valued by faculty and librarians. In their study, composition researchers Burton and Chadwick (2000) surveyed a large sample of undergraduate students and found that when students were evaluating Internet sites, the three most important qualities

they looked for in choosing Internet sources were that the sources that were easy to find, easy to understand and easy to access. They also pointed out that many composition instructors hesitate to teach source evaluation because they believe that it belongs in discipline-specific courses and that most handbooks used as textbooks in composition courses tend to "gloss over the critical thinking process involved in evaluating research sources on the Internet and assume students will intuitively know how to assess the sources they find" (Burton and Chadwick, 2000, p. 312). This research is similar to the more recent findings of compositionist Purdy (2012, n.p) whose study found that first-year students "favored resources for reasons of ease, quality, and connectivity".

p.627 Composition researchers Helms-Park and Stapleton surveyed both faculty and students, and found that the characteristics faculty valued most in Internet sources, including clear indication of authorship and the author's credentials, were usually the most difficult things for students to determine about a website "because web publishing has yet to regularize such practices, ascertaining who wrote a given web-text is often puzzling" (Helms-Park and Stapleton, 2006, p. 450). They also noted that the "ephemeral" nature of web pages can make identifying and evaluating sources obtained through the Internet difficult even for experienced researchers (Helms-Park and Stapleton, 2006, p. 452).

Other studies have found that students often use only superficial criteria like whether or not the web page includes advertisements or flashy graphics to evaluate Internet sources and do not delve into a deeper analysis of sources. Librarians Currie et al. (2010) found that not only did students tend to use superficial criteria when evaluating websites, they also often could not explain exactly what criteria they were using. Librarians McClure and Clink (2009, p. 123) found that while students said they thought that "flashy" websites were dubious sources, the students in the study did not know what qualities an authoritative source should actually have. Their study, like Burton and Chadwick's, also pointed out that teachers are often uncomfortable teaching source evaluation, and, like Helms-Park and Stapleton, that "determining the authority of a source is difficult even for experienced researchers" (McClure and Clink, 2009, p. 122). Studies have also found that even when students are able to locate appropriate sources, they often struggle to use them effectively. In a collaborative study conducted by two composition instructors and two librarians, Barratt et al. (2009) found that the

sources students chose to use were highly influenced by the specific instructions of their assignments, but that students still chose to cite web sources for over half of all of their citations They also found that students had more difficulty in figuring out how to incorporate scholarly sources into their writing than other types of sources, which helps explain why some students might avoid choosing academic sources. Librarian Rosenblatt's (2010, p. 60) study found that by the time students are upperclassmen they seem to be able to conduct effective keyword searches for information, but they still often appear to have difficulty using the information they have found in a critical way". Studies have also argued that students' difficulties evaluating sources stems from their lack of knowledge of different genres of information, and the differences between traditional print and online sources. Composition researcher Sidler (2002, p. 59) points out that articles reproduced in library databases are taken out of their original context, removing traditional source type cues: "articles […] lose many familiar attributes of popular periodicals, the colorful charts and photographs, the smudgy ink of the newspaper, and the glossy sheen of magazine paper". She also points out that the web has added many new genres of information, which means that today's "successful researchers must understand that various types of documents can be found online, including reproductions of print texts as well as multiple 'web page' genres" (p. 60). Even students with good knowledge of the different types of print sources may experience trouble translating this knowledge to an online environment where everything will be different. In contrast to this, Jenson (2004, p. 107), also a composition researcher, argues that "differences between journals and popular magazines, articles and abstracts, and annotations and advertisements have been lost on those whose education has been largely executed in the information age" because students may not have any knowledge

p.628 of the original print versions of sources to draw upon which might help them identify source types as they conduct online research. (...) One thing that all of these studies, conducted by both librarians and composition researchers, have in common is that they tend to focus on the ways that students find, evaluate and use information. Although at least one recent article by Datig and Ruswick (2013) recommends a flipped classroom activity to help students better identify source types, showing that this is something librarians are concerned with, in general, none of the studies on this topic spends much, if any, time considering whether or not students are able to correctly identify sources of information at all. It is important to note, however, that correctly

Commented [KI11]: this is a recurring theme in texts on this topic. before going into evaluation of resources we need to address what the students know about resources.

Commented [KI12]: something to keep in mind when teaching evaluation of resources. I can start with intro to types of resources - involving students to help with this - asking questions, designing a quick task; nothing too serious, but still indicating level of knowledge of the group I teach

identifying what a source is, while it may seem like a small part of the research process, is an important first step that students must take before they can move on to effectively evaluating, using and citing sources. Incorrectly identifying a source at the beginning of the research process will have an adverse effect on all of the subsequent work that the student does with that source throughout their entire project.

5. Silva, E., Green J., Walker C. (2018). 'Source evaluation behaviours of first year university students' ***Journal of Information Literacy*****, 12(2).** **http://dx.doi.org/10.11645/12.2.2512**

This text provides a good literature review in 3 categories: - defining credibility - students behaviour when evaluating resources and – librarians' approach to teaching about resource evaluation. I will come back to the first two categories when designing my session. The third category was most interesting to me: talking about different approaches in teaching IL is very useful before my focus group in which I will be taking with my team colleagues about our practice as teachers.

Approaches to teaching source evaluation:

1. p.27 Most common, perhaps, is the checklist or acronym approach. The acronyms like CRAP (which stands for **currency, reliability, authority, purpose/point of view**) walk students through evaluation criteria to consider when evaluating a source. Checklists have students look at elements of a source to rate it on a credibility scale. This way of teaching source evaluation has been questioned, however, in its ability to teach critical thinking (Ostenson, 2014).
2. p.27: Other **evaluative teaching methods** include having students elaborate on sets of questions that ask about the genre, bias, purpose, or other aspects in a source (Pickard, Shenton, & Johnson, 2014, p. 6). This is a close cousin to the checklist, though more open-ended. Furthermore, this kind of approach encourages more close reading of a source, and arguably, more critical thinking,
3. p27: Finally, lesser-known models include **assessing a source's cognitive authority** – how the source fits within the wider body of information – and **iterative models of source evaluation** – which walk students through levels of credibility assessment (Metzger, 2007). With this in mind, it is clear that there are several different ways librarians and IL instructors have used to teach students about source evaluation.

Commented [KI13]: I want to learn more about these models. I think I have intuitively used them in some way, however, my knowledge about them is not systematic.

Yet, without a clear understanding of how students are actually approaching sources they consume online, how are library professionals to create solid curricular standards?
The current study hopes to shed light on this quandary
Pp 28-35 – ***The authors describe their study in detail here – it involved presenting students with 5 articles from a variety of sources (newspaper, magazine, and scholarly journal for example). Students were asked to evaluate the reliability of the resources, then to say what qualities/attributes made the source more or less reliable to them, and then*** "to select from a list the attributes that help them determine source reliability. These included the following: publishing date; currency of facts; hyperlinks to outside sources; sources cited at the end of article/website; writer's authority or background; design of website; advertising on/in website or article; domain type; the way the article is written (tone, grammar, etc.); the genre of the source; how they found the source; and their emotional response to the source." (pp. 28-29)
Interesting: ,
p.35 The top three behaviours used five times over the course of the test are sources, previous experience, and bias judgement.

p.37: **5.2 What might explain students' most and least used research behaviours?**
The study's findings corroborate that students rely on surface features to determine reliability. For example, the most used evaluative behaviour in the current study was 'sources', where a participant simply had to mention the article's use (or lack of) source material to be counted as a behaviour. While this is a productive impulse on the part of the subjects, many fewer students actually clicked on sources (the research behaviour coded as 'hyperlinks') or corroborated information (the research behaviour coded as 'fact checking'). This shows that students may recognise the importance of features like sources, but do not expend the effort needed to actually check up on those sources or corroborate whether information is truly viable.
What is meaningful in this finding is that students are recognising the importance and value of sourced material, and even articulating that importance. However, students seem to have more difficulty checking the source material itself for bias, reliability, or value. As information experts understand, cherry picking sources for information is easy, as is hyperlinking to sources that seem to corroborate a point of view, but interpreting sourced material is difficult and time intensive. If the results of this study are

Commented [KI14]: I think it is the second text in my selection that takes about the need to know how students approach, what students know about resources. This particular study is a great example for me hoe this can be done

Commented [KI15]: The part where the authors describe their data analysis looks very useful. I will come back to this study if I think using tables would be useful in my analysis.

Commented [KI16]: this list is great source of information for me. I did not use some of the criteria mentioned here in my sessions before.

Commented [KI17]: I believe we all can experience similar problems. However, being a librarian and working at university I have a responsibility to constantly educate myself about these issues in regard to library material. The big question is, how we can better support students in evaluating resources. This quote shows that I have chosen a very relevant topic for my research

any indication, college students need to engage in more critical thinking about what kinds of sourced material lend authority to the article in which it is cited.