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Facilitating the development of creativity using special collections and archives

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How can special collections and archives (SCA) services contribute to the development of creativity in higher education students? An understanding of how creativity is developed can help those who work with special collections and archives to better design sessions that facilitate this development. Creativity is defined, put in context, and discussed as a metacognitive process. SCA as an environment that can contribute to the development of creativity is explored, along with the importance of the learner voice and pedagogical tools that allow for the facilitation of metacognitive experiences.

The development of creativity is at the heart of art and design education. Programmes of study maximise opportunities to develop that creativity and many special collections and archives (SCA) services contribute to the wider experience of learners in higher education (HE). An examination of the pedagogical literature on the development of creativity reveals ways in which we can improve, gives us courage to break away from convention, and equips us with language that can allow us to better communicate our contribution in a competitive HE context.

I will cover definitions of creativity, the historic stages of creativity and how they apply to interactions with special collections and archives, creativity as a metacognitive process and the ways in which SCA services are particularly suited to providing an environment to facilitate the development of creativity. I'll apply these theories to pedagogical tools and to our practice in Special Collections and Archives at Goldsmiths, University of London.

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Creativity: definition and context

Creativity is challenging to define, and many approaches exist. It is described by Ryan A. Hargrove as 'generating novel or useful associations that better solve a problem, produce a plan, or result in a pattern, structure, or product not clearly present before'.[1]

A definition I will refer back to is that of Angela Clarke and Peter Cripps. They describe creative thinking as 'a transformative process of knowing, thinking and doing that embodies elements such as risk taking, envisaging, engaging, persisting, observing, experimenting, attending to relationships, taking a benign attitude to error and critically reflecting'.[2]

Graham Wallas first laid out four stages of creativity in 1926:[3] *preparation* (the initial desire to be creative, selection of the project, initial ideas about solutions), *incubation* (after focused attention, a time away from active work on the problem), *illumination* (ideas come together as 'the brain makes a cognitive leap from one plane or associative context to another') and *verification* (selection from all the ideas generated, involving testing and checking).[4] Since then our understanding of creativity has developed and these stages are not considered to be the linear progression that Wallas originally suggested. Rather, the stages are thought to be 'cyclical and repetitive',[5] with various phases feeding back into others as new ideas are formed, tested, adapted, discarded, or used.

Creative activity surrounding special collections and archives can be roughly identified with Wallas' phases. In *preparation* one might come to explore; to seek out an answer or encounter objects that elicit a creative response. The *incubation*

1. Ryan A. Hargrove, "Assessing the long-term impact of a metacognitive approach to creative skill development," *International Journal of Technology and Design Education* **23**:3 (2013): 492.
2. Angela Clarke, and Peter Cripps, "Fostering creativity: a multiple intelligences approach to designing learning in undergraduate fine art," *International Journal of Art & Design Education* **31**:2 (2012): 114.
3. Graham Wallas, *The Art of Thought* (New York: Harcourt Brace and Company, 1926).
4. Ruth Dineen and Elspeth Collins, "Killing the goose: conflicts between pedagogy and politics in the delivery of a creative education," *International Journal of Art & Design Education* **24**:1 (2005): 44–45.
5. Julia Marshall, "Thinking outside and on the box: creativity and inquiry in art Practice," *Art Education* **63**:2 (2010): 17.

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phase might be in play while a learner attends a hands-on workshop or private view that gives them a conscious break from the problem. Connections made during the *illumination* phase might be helped along by a discussion group or listening party, where the combination of participant voices can inspire different ways of approaching a problem. *Verification* can take on the form of student exhibitions in our spaces, where work and ideas can be shared and fed back on by the wider community.

Metacognition and metaliteracy

An understanding of metacognition helps us to unpack definitions of creativity that depend on multiple competencies, like that of Clarke and Cripps, above. Metacognition is described by Hope J. Hartman as 'thinking about one's own thinking, including both the processes and the products'.[6] According to Joëlle Proust 'metacognition is used to refer to the kinds of processes involved, and the self-knowledge gained, in thinking about, and in *controlling*, one's own thinking' (emphasis added).[7]

Closely related is metaliteracy. 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.

6. Hope J. Hartman, "Introduction," in Metacognition in Learning and Instruction: Theory, Research and Practice (New York: Springer, 2001), xi.
7. Joëlle Proust, "Metacognition," *Philosophy Compass* **5**:11 (2010), 989.
8. Thomas P. Mackey and Trudi E. Jacobson, Metaliteracy: Reinventing Information Literacy to Empower Learners (Chicago: ALA Neal-Schuman, 2014), 2.
9. Ibid., 5.
10. Ibid., 2.
11. Mackey and Jacobson, *Metaliteracy*, 1.

Creativity as a metacognitive process

Creativity can be described as a metacognitive process, with different ways of thinking and the evaluation of that thinking being necessary. Recall Clarke and Cripps' definition of creativity, above, that describes a wide range of interacting competencies. Research by Hargrove shows that successful creativity training programmes have in common the provisions of 'metacognitive experiences', in which learners use and develop their metacognitive abilities.[12] These experiences allow learners to develop their own creative strategies for analysing and solving problems. Developing and strengthening metacognitive skills is essential in the development of creative thinking and practice.[13] Not only does good metacognition allow for links to be made between various literacies, but the act of examining their own thinking makes learners aware of their 'biases and preconceived ideas', that may be invisibly hampering them, 'allowing for an advanced level of creative thinking'.[14]

12. Hargrove, "Assessing the long-term impact," 493.
13. Ibid., 492.
14. Ibid., 493.

Environment and structures

Ruth Dineen and Elspeth Collins identify the most effective teaching techniques 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.

The then Higher Education Academy (now Advance HE) published a 2013 report titled *Flexible pedagogies*.[16] It acknowledges the need for an awareness and deconstruction of existing power structures, namely the need to:

> challenge the authority of the expert educator and make space for an enhanced contribution from the learner, by changing the dynamics of learning interactions as well as confronting the power frames that underpin the academic project as a whole.[17]

15. Dineen and Collins, "Killing the goose," 46.
16. Alex Ryan and Daniella Tilbury, "Flexible pedagogies: new pedagogical ideas," in Flexible Pedagogies: Preparing for the Future (Higher Education Academy, 2013), accessed 27 Sept 2018, https://www.heacademy.ac.uk/sites/default/files/resources/npi_report.pdf
17. Ryan and Tilbury, "Flexible pedagogies," 15.

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The report advocates 'new pedagogical ideas' including learner empowerment (challenging power structures, involving learners in co-creation); transformative capabilities (which move beyond knowledge and understanding to a more holistic focus on metacognitive capabilities); and social learning ('developing cultures and environments for learning that harness the emancipatory power of spaces and interactions outside the formal curriculum').[18]

18. Ibid., 5.

SCA staff typically are not involved directly in assessing work for credit or degree purposes. At Goldsmiths, as elsewhere, we design learning activities in collaboration with module tutors or programme heads to meet their course requirements, but the actual environment in which students find themselves is relatively free from the power-imbalance that can come from the lecturer-student relationship. Students are welcomed into a space of which they may have previously been apprehensive (our collections and spaces being physically separated from the rest of the library and often thought of as being for elite researchers) and given a task designed to encourage personal engagement. We strive to enhance the learning experience of students by giving them space to explore ideas, ask questions and discuss without the pressure of evaluation weighing on them.

Special collections and archive spaces can be wonderfully cross-disciplinary and can help to minimise power structures, making use of the emancipatory power of spaces described in *Flexible pedagogies*. We provide space literally and figuratively outside of students' usual lecture theatres, seminar rooms, computer labs or studios, in which students and lecturers can explore together. It's wonderful when a lecturer is present at a session based in exploration and discovery. Their enthusiasm and excitement when they find something unexpected or surprising helps to break down barriers between them and their students, reducing the sense of the lecturer as all-knowing. Learners can also witness lecturers modelling how one might explore, discover, and apply new ideas to concepts from their course.

Daria Loi and Patrick Dillon delve into this idea of the unexpected when they describe *eccentric objects* and *odd experiences* as designed interventions to encourage creative and collaborative spaces. Eccentric objects are artefacts that are 'unexpected or unanticipated in that context'. Odd experiences 'are memorable and cause people to stop in their tracks'.[19] Both encourage participants (both lecturers and their students) to set aside convention and cliché and puts them on the same novel footing. This start from an equally unfamiliar place encourages collaboration and the formation of new creative links. According to Loi and Dillon, 'responses tend to reflect the unique qualities, interests and experiences of the respondents' rather than convention.[20]

19. Daria Loi and Patrick Dillon, "Adaptive Educational Environments as Creative Spaces," *Cambridge Journal of Education* **36**:3 (2006), 373.

20. Ibid.

We all have in our collections surprising objects, or at least objects that those unfamiliar with archives and special collections wouldn't expect. Depending on the audience these may be things that stand out to learners because they represent an unexpected link to a time, place, person, idea or community. Described by Dineen and Collins as 'educational visits', this type of experience allows all (both students and lecturers) to 'take on the role of learners' in a novel out-of-classroom environment.[21]

21. Dineen and Collins, "Killing the goose," 46.

Exploration and learner voice

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).[22] If there is information we want to pass on to students, rather than a lecture at the start, we listen to their responses and add in our points as they feed back. This allows for a balance between learners' voices and the facilitator's objectives while still making full use of staff expertise.

22. Originally developed by Frank Lyman. F. T. Lyman, "The responsive classroom discussion: the inclusion of all students," *Mainstreaming Digest* (College Park: University of Maryland Press, 1981), 109–113.

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. Written student feedback and informal discussion with students and tutors has also led us

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to experiment with the level of direction we give: we want participants to feel free to play, explore and make novel links while balancing the needs of learners who are accustomed to more structure. Giving more time over to exploration reduces the amount of concentrated information we can pass on, but the improved metacognitive experience contributes more to learners' creative development.

Evaluation

A challenge of the work we do in SCA is that of evaluation. We can monitor how many students return to look at material after a workshop; on feedback forms we can ask how much they enjoyed the session or how well it helped with their studies. When the goal is to contribute to the development of their creativity, devising a way of evaluating success is very difficult. We can use the results of research like that discussed in this paper but evaluating the SCA contribution separately from all the other aspects of a student's course of study isn't easy, or even possible, because of the intricate nature of creative and metacognitive development. Even so, we can continue to monitor research into the development of creativity and use best practice to improve the design of our sessions.

Conclusion

For special collections and archives services that want to participate in the development of the creativity of their students, understanding the pedagogical foundations of creativity is key. Since creativity can be seen as a metacognitive process involving a complex interplay of competencies, it's necessary to design sessions that facilitate metacognitive experiences rather than simply pass on information. Special collections and archives services can be an excellent resource for learners and academic staff wishing to add variety to the metacognitive experiences on offer in their course, given the unique environment outside of the usual classroom. 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.

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