High Impact Creative Pedagogy Using a Maker Model of Composition

By Stephanie Bell

This article recommends that faculty developers promote online writing assignments—from blogs to podcasts—that make use of the interactive tools of the "social Web." Unlike traditional essays, which are typically private documents exchanged between student and instructor, online writing tasks can become sites of engagement and community. The place-making potential is possible because this writing is networked, tooled-up, aesthetic, and disruptive. This article proposes that these characteristics form the tenets of an incipient "maker model" of composition, a model with the power to inform the design of writing tasks that empower students and motivate deep learning and project ownership.

THIS ARTICLE PROPOSES a shift in the conversation faculty developers are having with faculty about the design and purpose of writing assignments. It recommends that writing intensification, a high-impact practice proposed by the Association of American Colleges and Universities (Kuh, 2008), be achieved using a creative approach to writing that positions students as digital authors contributing to (and generating) learning communities beyond the classroom. This creative approach to student writing as digital authoring takes advantage of the interactive tools of the "social Web" (Rheingold, 2000), and has the potential to enhance learning outcomes for content comprehension and literacy skills. While this creative approach to writing has not yet been fully theorized or named, it is evident to some degree in tasks that involve blogging, podcasting, participating in wikis, even posting to social media. In these tasks, "digital authoring" may be understood as processes of generating, gathering, linking, structuring, and presenting information online where it is accessible, exposed, and interactive. Unlike traditional essays, which are typically private documents exchanged between student and instructor, these writing tasks have what might be called "place-making" potential in that they can become sites of engagement and community.

The place-making potential of non-traditional, digital-authoring assignments characterizes an incipient "maker model" of composition. This article endeavours to theorize this model of composition and its potential benefits, to which faculty developers can appeal when advocating for these non-traditional writing tasks in content courses. The model is constructed through a synthesis of Hatch's (2014) description of an empowering and rebellious tooled-up maker culture; Dobrin's (2011) description of a world made by writing, which is both material and ephemeral, object and process; and Ulmer's (2003) understanding of electrate media's online sociality. The maker model of composition that emerges posits place-making as a goal and identifies four characteristics of writing with powerful place-making potential. Writing with place-making potential is

- networked, connected with or "plugged into" active community spaces;
- tooled-up in ways that make use of technologies of distribution and communication;
- aesthetic, designed to produce affective experiences; and
- disruptive in ways that invite engagement and response.

The maker model of composition recasts writing as a means of (re)making knowledge, self, community, and place through forms of digital authoring. Maker writing projects tend to draw on digital authoring tools in ways that empower student writers by amplifying their voices and mobilizing their learning beyond confines of the classroom. Faculty developers may speak to the potential for non-traditional, digital-authoring assignments informed by the

maker model of composition to prompt students to move beyond "all-about" expository writing toward issues of significance and greater engagement with content.

Writing for the Creative Class

Traditional academic essays are assigned as a matter of routine, and students and instructors alike complain about them nearly as regularly. These assignments have persisted in undergraduate course design despite dramatic changes to the social context of higher education. Open admissions, shifts to a knowledge economy with a powerful creative class, and economic downturns have increased the level of responsibility postsecondary institutions have to broader society and the professionalization and workforce readiness of students.

Florida's (2002) description of 21st century creative capitalism suggests that any workforce readiness programming need now foster creativity driven by systems-thinking and problem solving. The growing sector of creative professionals who drive the economy with creative capital, Florida (2003) argues, engage in innovative problem solving. Elements of what Florida calls the "super creative core" of the creative class in Silicon Valley have reshaped the world in their image with online social platforms and software and hardware for do-it-yourself publishing and fabrication. van Dijck (2013) demonstrates that these platforms co-evolve with sociality. He describes "online sociality" as the "coproduction of humans and machines" (p. 33) as well as a fabric woven by technology, user agency, and content. In this space, people and online platforms are "techno-cultural actors" shaping each other. Postsecondary institutions should expect students with online lives to be inclined towards creative connectivity and participation.

Both Dobrin (2011) and Ulmer (2003; 2012) contend that this online sociality requires different approaches to understanding writing. Traditional academic essay assignments are disconnected from online sociality and the professionalization demands of the creative economy because they treat writing as stable, occurring in refined forms that are often reduced to templates; solitary, done outside the classroom without unsanctioned aid; private, read only by a select few; inert, unable to move or be moved; masterful, a performance of skill, knowledge, and rhetorical outdoing; and internal, largely uninfluenced by the materials, tools, and environments and technologies involved in its production. Many of the most common faculty complaints about student writers—from a lack engagement to a reluctance to take ownership—as well as about student writing—its imperfections, slapdash nature, and rhetorical obliviousness—might be traced to the disconnect between traditional essays and an online sociality.

Remaking Writing

Many educators in the STEM disciplines have adopted "making," the act of using tools to construct and craft material objects, as pedagogy in order to tap into online sociality creative competencies (See Honey & Kanter, 2013; Schön, Ebner, & Kumar, 2014). Halverson and Sheridan (2014) contend that making has value in the classroom because it develops core competencies, albeit through non-traditional assignments that invite "the emergence, creativity, innovation, and entrepreneurial spirit that are the hallmarks of the maker revolution" (p. 500). Blikstein (2013) points out that the educational change promised by making is based on familiar pedagogies, including experiential education, constructionism, and critical pedagogy.

In their attempt to describe maker culture, Halverson and Sheridan (2014) find that while the landscape of maker spaces is diverse, each works with multidisciplinary approaches, a blend of formal and informal learning, and a view of learning "as production rather than as mastery of a composite set of skills" (p. 526). Others contend that making is also characterized by rebellious independence marked by its escape from "the hegemonic structures of mass production" (Tanenbaum, Williams, Desjardins, & Tanenbaum, 2013, p. 2609). In *The Maker Movement Manifesto*, Hatch (2014) explains that maker culture involves making, playing, and tinkering using the right tools (tooling up), sharing skills and knowledge with other makers, and being changed by the personal journey of making.

STEM disciplines are natural contexts for maker pedagogy oriented towards DIY construction of material or digital objects. Extending the maker movement to writing is a stretch. After all, Hatch (2014) stipulates that "A great sentence or well-written blog is creative and makes you feel

good about what you have accomplished, but it is not the same as the satisfaction that comes from the physical labor involved in making something physical" (p. 12). Writing scholars, however, may be dissatisfied with this dismissal of the physicality of writing. Dobrin (2011), for instance, describes writing in physical terms characterized by its "viscosity" and the structural integrity it lends to human communities. The concrete effects of writing—on the design of economies, homes, and neural networks—may also lend credence to its physicality. The act of writing, too, is embodied and physical, often painful as it leaves us dry-eyed and hunched.

Nevertheless, writing seems to be fundamentally different from the material objects around which maker culture arose—DIY furniture and 3D-printed spigots. Writing is process and product, fluid and ephemeral. As Dobrin (2011) describes it, writing is "Like a river that carves its path over time while engulfing all within its path, flowing over, in, around, and through that which it encounters…" (p. 183). Dobrin's description of writing, though, does not help us draw a clear distinction between writing and more characteristically material objects. While he describes writing as spatial in the sense that it organizes and forges space and experience, he casts this spatiality in material terms. He calls written spaces "territories" to account for the politics and ideologies of written space (p. 36). Of course, more distinctly material objects are similarly spatial. They, too, organize and forge space, shaping it in ways that reflect ideological beliefs about modes of existence and cultural participation. Neither writing nor 3D-printed spigot is purely material or immaterial. In fact, Dobrin's description of writing as ecological and "inseparable from, well, everything" (p. 136) within cultural ecosystems makes it difficult not to see material objects like 3D-printed spigots as written texts in their own right.

The maker approach might actually help students understand the complexity of writing that Dobrin reveals, as connected to environments, tools, materials of their production and functioning to organize, inscribe, and make space. It is possible to cast Dobrin's understanding of writing in Hatch's terms, as (sometimes playful) constructions that disrupt space and forge communities; as products of people, environments, materials, and tools; as made in the moment of sharing in society. Dobrin's theory of writing suggests that a maker model of composition should acknowledge the way writing has the power to disrupt and forge social territories.

Twenty-first century writing might also be said to be different from the material objects constructed in maker spaces because it is so often digital—made of light rather than ink. The materiality of written text in online spaces, therefore, seems even more theoretical. In digital spaces, words and letters are mere images of themselves. Embossment, for example, is a visual effect created through a trick of light and shading. However, online spaces have come to be inhabited territories through the emergence of the social Web, envisioned by Rheingold (2000) as a complex of participatory, interactive, community spaces. In these spaces, writing performs a great deal of social work, and digital-authoring tools have enabled more people to participate in generating, gathering, linking, structuring, and presenting information in accessible and interactive ways. In these "electrate" (Ulmer, 2003) spaces with the digital tools of electronic media, writing seems to have more power than ever for disrupting space and creating territory.

For writing to achieve this potential power in digital spaces, however, it must appeal to the aesthetic of online cultures. In his theory of electracy, Ulmer (2003) describes a culture of communication driven primarily by entertainment. Electracy, according to Ulmer, is the practice of entertainment because the Internet has an aesthetic, pathos-driven orientation. In order to be "place making," electrate writing needs to be consciously aesthetic, attuned to the culture of intended readers. Arroyo (2013) describes electracy in similar terms to van Dijck's (2013) concept of online sociality, as "buzzing all around us" in "cultural transformations, inspired by changes in technologies" that "reach us regardless of the presence of actual machines" (p. 5).

The theory of electrate writing seems to support a maker approach to composition because both give precedence to play as a means of invention, embracing multiplicity and encouraging creativity. In addition, both making and electracy conceptualize learning as production rather than skill mastery. Electracy, explains Arroyo (2005), creates "space for the *potentiality* of writing" by rejecting "the discourse of mastery" and instead valuing "the aspect of chance" in a process of forging connections rather than erecting a bulwark of proofs (p. 695). Ar-

royo describes meanings in the electrate apparatus in maker terms, constructed through imaginative, creative invention (p. 684).

A Maker Model of Composition

In Hatch's (2014) maker movement, the product of labour is material object. In the case of maker writing, the forged object is both written text and the social territory or place that it creates. Combining the themes of Hatch (2014), Dobrin (2011), and Ulmer (2003), we can identify four characteristics of writing with the potential to be both object text and social place: networked, tooled-up, aesthetic, and disruptive (see Figure 1).

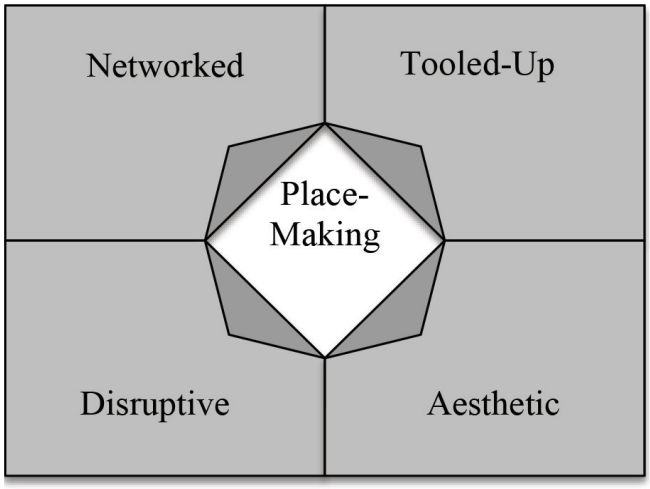

Figure 1. A Maker Model of Composition

Maker writing needs to be networked, both connected to and actively connecting ideas, things, people, and places. Dobrin's (2011) conceptualization of writing reveals its connective properties. He uses a river metaphor to propose that writing, like water, will flow where it can. However, writing must be free to flow in order to be connective. While traditional essay assignments are damned up in the classroom as private documents exchanged between student and instructor, maker assignments have place-making potential because they can flow through the network of tributaries of the electrate apparatus that Ulmer (2003; 2012) theorizes.

It is in this way that maker writing is also consciously "tooled-up," to use Hatch's (2014) term. It relies on he "right" tools to achieve its purposes. Hatch explains that the process of gaining access to the tools of production and mastering their use empowers makers, transforming them from passive receivers of objects to active producers. Processes of empowerment and transformation also occur when writing is tooled-up in the electrate apparatus and writers can use (and create) digital authoring software to become authors. The tools in these spaces provide for playful making that might be freer than traditional print-based genres. Ulmer (2003) describes an electrate media that is inventive and playful but not completely unregulated; it has its own "online sociality," to borrow from van Dijck (2013). The aesthetic experience of the Internet, according to Ulmer, is pathos-driven—focused on emotional engagement.

Maker writing with place-making potential engages with the aesthetics of online culture. However, the entertaining aesthetic that Ulmer identifies is not placating but rather stimulating—infuriating, energizing, inspiring. Response defines the aesthetic of online sociality, which marks disruption as another key characteristic of maker writing with place-making potential. Disruption figures large not only in Ulmer's depiction of online creativity, but also in Dobrin's (2011) description of the power writing has to (re)create places and things and in Hatch's (2014) maker movement with its rebellious escape from the hegemony of mass production. The disruption of maker writing has implications for the position of students in the classroom; moving from student writer seeking instructor approval to author forging social territories can work to counter the demoralizing impact of classroom power dynamics.

A Composition Makerspace

Faculty developers can engage faculty in brainstorming maker writing projects that suit their courses by offering examples like blogging, writing wikis, producing videos for YouTube or Vimeo, even assignments that task students with generating conversation on Twitter or Instagram. I offer here an example of the maker writing project I use, which involves student podcasting with *From Scratch Media*, a podcasting platform I have developed and branded with the goals of amplifying and lending legitimacy to student voices. This project transforms my class into a maker community working together to create an entertaining podcast show that invents and creates place through disruptive, aesthetic, tooled-up, and networked writing.

Networked

The podcast project mounts student work, both process and product, in online connective spaces. The *From Scratch Media* website, social media accounts, and iTunes feed serve to publish, distribute, and invite connection with student podcasts. By virtue of being digitally published, school writing is activated and potentially impactful. Student work cannot disrupt, organize space and be place-making unless it is shared. Hatch (2014) places such importance on the principle of sharing that he questions the very realness of things not shared—"If you make something and don't share it, was it made?" (p. 17). Some students express discomfort with the idea that their podcast will be published online and choose to use a pseudonym. Faculty developers might emphasize this opportunity to recognize the vulnerability and responsibility of public writing in ways that foster student commitment to integrity practices.

Tooled-up

Like the physical objects made in maker spaces, writing projects are tooled. Considerations of recording and editing software as well as the characteristics of platforms for publishing are at the forefront of our discussions about making the podcast. Students report that the processes of recording prompted substantive revision; speaking and listening back offer them alternate, surprising perspectives on their work. By far the most common advice that students offer their peers is to work with recording and editing software throughout the project, using it to continually make and remake their work. Gross and Do (2009) describe this as "thinking with your hands," a process in which they locate the creative power of the maker experience (p. 211). Faculty developers might invite faculty to consider the ways tools facilitate different ways of thinking through course content. Halverson and Sheridan (2014) contend making through play with materials and tools permits "multiple entry points to participation and leads to innovative combinations juxtapositions, and uses of disciplinary knowledge and skill" (p. 526).

Aesthetic

Following the aesthetic of electrate media, podcasting is infotainment. Students consider strategies for creating aesthetic experiences capable of keeping listeners engaged. They work tirelessly to develop immersive soundscapes, articulate intriguing problems or questions, and structure compelling narratives. They invest in resolving issues that threaten to alienate a fickle listenership. This experience resonates with Kafai, Fields, and Searle's (2014) experience of students in their maker classroom who "were intrinsically motivated to learn more complex ways of doing things in order to achieve their desired aesthetics" (p. 547). The intrinsic motivation for complex learning that seems to be inspired by the aesthetics of maker projects will appeal to faculty who want to move students toward motivated, engaged learning.

Disruptive

The podcast project not only invites students to use writing to disrupt and create, but it also disrupts habitual approaches to "doing school" using surface-learning strategies to "jump through a series of familiar hoops." The unfamiliarity of the non-traditional writing task challenges students to rethink their learning strategies. Students report that they are anxious but ultimately excited about how fresh and different the project is. They come to class with questions and ideas, and seem both liberated and somewhat frightened of the absence of a template for the final project. Podcasting is an emerging landscape disposed to innovation. To develop new forms, students analyze podcasts, selecting styles and approaches that promise to meet the demands of their subject and targeted listenership. This process of constructing rather than receiving form disrupts institutional power structures, enabling students to gain independence from teachers and textbooks and make strides towards becoming independent writers. This finding is echoed by Kafai, Fields, and Searle (2014), who explain that classroom making disrupts the common student presumption of a correct answer by encouraging them to focus on problem-solving. Some students express discomfort with the messiness of the move away from mastery, revealing that disruptions traditional practices of schooling and understandings of learning and knowing is "violent" in a Deleuzian sense, and can be expected to be a challenging process of moving away from established traditions before "opportunities for new possibilities" are revealed (Dobrin, 2011, p. 189). Students tend to express

pride in their final podcasts as well as surprised to discover that they, in fact, are capable of more than they presumed. When advocating for maker writing projects, faculty developers should appeal to their potential to support content instruction through deep learning strategies.

Conclusions

While Hatch (2014) might challenge the straightforward extension of the maker movement to writing, the movement's ethos and practices are productive ways of conceptualizing powerful new uses of writing in teaching. The maker model of composition has the potential to engage students seeking participatory, democratized, and empowering educational experiences that develop the skills demanded by 21st-century creative capitalism. Faculty developers can demonstrate that, by offering students the possibility of connecting with audiences beyond the classroom, maker writing projects offer students pathways to independence, originality, and authorship; foster understandings of how tools support and coproduce communication; and encourage deep learning, intrinsic motivation, and project ownership. Faculty developers can demonstrate that this writing pedagogy has the potential to free instructors from the perceived need to create writing templates or to police syntax and usage because when writing is a maker project, it becomes the classroom, the site in which students invest in making and re-making course content.

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