

BEYOND LEARNING- AS-USUAL: Connected Learning Among Open Learners

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CONNECTED LEARNING
WORKING PAPERS

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INTRODUCTION

One of my favorite quotes by Howard Thurman says, ‘don’t ask what the world needs, ask what makes you come alive. Because what the world needs is people who have come alive.’ And I feel like that’s what the financial downturn has demanded of us.
– Molly¹

Molly’s choice to pair a theologian who spiritually advised Rev. Dr. Martin Luther King, Jr. with the financial downturn of 2008 might seem like an unlikely appropriation of Thurman’s words. Yet, Thurman’s call for people to come alive stuck with Molly as she navigated job-scarcity in a post-recession economy while carrying over \$100,000 in student loan debt. When I interviewed her, there was a palpable weight in the conversation and at this moment in particular. She spoke proudly of the choices she made amidst the uncertainty of a labor market that did not value her expensive graduate degree. Despite her optimism, it wasn’t hard to imagine what caused the heavy silence behind her pride: unavoidable and omnipresent economic risk. Molly mediated that risk with open learning. She had dreams of one day owning a pre-school education center on a farm with her fiancé, where she would build a learning environment based on a community-centered educational philosophy she had been teaching herself through open study. Molly accessed content through various online and offline resources, then remixed them into shareable digital products that she featured for free on her neatly curated blog and Pinterest page. Through social media, she created a virtual community of educators that helped her find new resources and refine her thinking. Open learning helped Molly connect and come alive, even amidst high levels of economic uncertainty.

Molly’s story is not unique, yet it is often missing from the dominant narrative of open learning that one finds in *The Chronicle of Higher Education* or *The New York Times*. Journalists, technologists, and educators, first heralded open learning as a solution to a growing cost and access crisis in higher education. Over the last three decades, the cost of obtaining a college degree has increased twelve-fold while income levels have fallen for many Americans.² Higher education is unaffordable for a significant portion of young people and their families. Though there are still significant returns to higher education on average, studies show that not all degree programs are valuable in the US economy.³ As a result, many young people are taking on significant debt loads without certainty that their degrees will pay off in the future. In 2012, 71% of students who received a BA degree from a four-year college were in debt from student loans, with average debt levels nearing \$30,000.⁴ As the federal government debates policies to combat these sobering statistics, technologists and venture capitalists are busy creating and investing in their own solutions. Platforms such as Udacity and Coursera have emerged, offering Massive Open Online Courses (MOOCs) that can be taken without

1 To protect participants’ anonymity, all names are pseudonyms.

2 Michelle Jamrisko and Ilan Kole, “Cost of College Degree in U.S. Soars 12 Fold: Chart of the Day” Bloomberg, Aug 15, 2012. <http://www.bloomberg.com/news/2012-08-15/cost-of-college-degree-in-u-s-soars-12-fold-chart-of-the-day.html>

3 “Is College Worth It?” <http://www.economist.com/news/united-states/21600131-too-many-degrees-are-waste-money-return-higher-education-would-be-much-better>

4 Beckie Supiano “Borrowers’ Average Debt at Graduation Climbs to \$29,400” <http://chronicle.com/article/Borrowers-Average-Debt-at/143381/>

cost by anyone with a working Internet connection. Top professors at prestigious universities teach their courses online, sometimes to hundreds of thousands of students at a time, while taking advantage of artificial intelligence, peer-to-peer evaluation, and administrative staff to handle the challenging logistics of teaching and evaluating on such a massive scale.

While the popular imagination remains optimistic about such a techno-solution to the ills of higher education, MOOC-fever has also elicited a fair amount of critique from various sectors of the education world. Faculty began to fear further marketization⁵ of their jobs, wondering what would happen to young professors entering an already bad labor market when MOOCs turned the academy into a capital-intensive rather than labor-intensive teaching venture. Social justice activists argued that Internet connections were not the only access issue⁶ to this new technology and that many people lacked the technological literacy to navigate these platforms, along with the time to engage in them. Urban educators and activists chided technologists for suggesting that young people develop digital literacy as a techno-solution to urban poverty.⁷ Progressive technologists and futurists placed their faith in platforms with governance models more closely aligned with open access and social justice missions, like the nonprofit, community-run learning platform Peer 2 Peer University (P2PU). The demand for MOOCs also opened up a niche for entrepreneurial platforms, such as General Assembly and Skillshare, to offer low-cost classes and workshops in hybrid online/offline formats or smaller offline settings, thereby undercutting the need for university sanctioned knowledge.

At this moment, it is very difficult to define what criteria is used for classifying something as open learning or not. Must it be free? Open access? Should there be outreach to underserved populations? Does it have to lead to a badge or credential? Should there be instructors? Can a university be involved? What about a corporation? Does it matter who invests in it financially? Must governance be community-led? Is it taxable? As the emerging institution of open learning evolves, these questions lead to more questions, folding in more and more leaders into the conversation. It would be hard to deny the potential disruptive moment that is happening before us – though it is hard to say if it is as a result of open learning or if open learning is just mediating that disruption. Regardless, these conversations typically fail to address the perspectives of some of the most important stakeholders: the learners. This study was designed to hear their stories and to situate them sociologically within a larger narrative of the economic risk society.

5 Carl Straumsheim, “Rhetoric Check” <https://www.insidehighered.com/news/2014/05/14/faculty-group-continues-anti-mooc-offensive>

6 Gayle Christensen and Brandon Alcorn, “The Revolution is Not Being MOOC-ized” http://www.slate.com/articles/health_and_science/new_scientist/2014/03/mooc_survey_students_of_free_online_courses_are_educated_employed_and_male.html

7 DNLee, “If I Were a Wealthy White Suburbanite” <http://blogs.scientificamerican.com/urban-scientist/2011/12/13/if-i-were-a-wealthy-white-suburbanite/>

CASE OVERVIEW AND METHODOLOGY

This study is one of several case studies from the interdisciplinary Connected Learning Research Network (CLRN) and is supervised by Juliet Schor, the principal investigator of the Connected Economy team at Boston College. Our research team combines theoretical insights from the sociology of culture, consumption, education, and economic sociology to critically evaluate new platforms and spaces in the sharing economy as sites for connected learning. This case study draws on ethnographic methods, particularly participant-observation and in-depth interviews, in order to better understand open learning and the people who access it. Open learning takes on a multitude of meanings and forms to people; in my sample of 34 participants, approximately 50 different sites and platforms were named as part of their open learning. I explored with participants what, why, and how they were learning; their social connections; and formal education backgrounds. I also asked participants to talk about their experience, if any, with the financial crisis of 2008 and with connected economic practices of the sharing economy. During my roughly 300 hours of participant-observation over the course of a year and a half, I became an open learner myself and examined open learning in my own practice and in interaction with other learners. While it was not initially my intention to study entrepreneurs or people learning to incorporate entrepreneurial skills into their lives, I quickly discovered the underlying theme of “entrepreneurship” among my age range of participants (18-34). Thus, this study of open learning is more accurately a study of open learning among a group of young people learning the skillsets, culture, and personal narrative of entrepreneurial types.

My fieldwork entailed enrolling, lurking, and engaging in as many platforms and open learning resources as possible. Initially, I joined platforms that I had heard about from popular media descriptions of open learning. But as the research went on, I followed people I met to where they were learning and spent time in places they were calling their classrooms. Online, I hung out at Coursera, Udacity, EdX, P2PU, General Assembly, Skillshare, Code Academy and other sites. Through an offline Skillshare class I found Intelligent.ly and started observing classes there, which led to people inviting me to half-learning, half-networking events at places like Boundless and Venture Café. I purchased a membership for several months at a co-working office and participated in community events that included presenting work and ideas. Online, I curated my Twitter presence to reflect the research project and engaged in conversations with people in the open learning world. I subscribed to every blog or newsletter I heard people talking about and tried to read a few chapters of every book mentioned by people I met, like *The Power of Habit*, *Thinking Fast and Slow*, and anything by Seth Godin. I watched the TED talks participants told me they liked, sometimes checked out their profiles on GitHub when asked, and offline I joined them at events in the startup community when they were afraid to show up alone. Through all of these experiences, I met people who wanted to tell me everything about their learning. Thirty-four of them turned into formal in-depth interviews, but there are at least 15 more people I stayed in touch with that I met through the research either virtually or in person. The people I met appear in my Twitter feed with suggestions of articles to read, in my inbox with suggestions to check out a platform they were just learning from, or in person with invitations to join them at hackathons and Startup Weekend.

Interviews lasted from 45 minutes to an hour and a half and were conducted primarily in person and over video chat, but slow Internet connections forced a few interviews to be conducted by phone. All respondents were asked to fill out a demographic survey as well, and only one respondent declined. About 90% of interview respondents stayed in touch with me semi-regularly after the interview and I continued to interact with them through participant-observation throughout the study. I interviewed 18 men and 16 women. The youngest participant was 19 and the oldest 33, and the median age for the group was 27. Twenty-eight respondents identified as White, four as Asian-American, one as Black, and one as Latino.

In the interviews, participants were asked how they became involved with open learning, what resources they were using, and what they were learning. The majority of participants were learning some type of skill relevant for entrepreneurship or becoming more entrepreneurial in their work. This included skill areas like programming or basic programming literacy (HTML/CSS, Python, Ruby on Rails), marketing (customer segmentation, search engine optimization, content management), business development (funding sources, database management, scaling strategies), and graphic design (infographics, Adobe basics). Others were using MOOCs to learn some of the basics behind a skill they wanted to learn, like learning statistics in order to understand a data analytics class. Some were taking their traditional careers, like in healthcare and education, and were learning skills to make them more entrepreneurial. This included learning basic web development to publish a blog on content from their work lives, or curating guides on their expertise that could be easily consumed by the public (through eBooks, scalable business models, how-to videos). These portfolio pieces were often thought of as ways to show expertise or gain consulting opportunities.

After asking what respondents were learning and how, I then asked what they learned about themselves, both as a learner and in general. From there, I asked about respondents' experiences with traditional education; answers varied significantly. Some respondents were not successful in the traditional education system and saw open learning as a chance to redeem themselves, while others had been quite successful and saw open learning as a compliment to what they had already done. Only one participant had dropped out of college to use only open learning to construct his education and one more had decided to use open learning instead of going to college after moving to the United States from a country with state-sponsored higher education. Five respondents were currently enrolled in college⁸ when I interviewed them, four were enrolled in a graduate program, and two would enter graduate programs within the next year. The remaining 21 respondents had the following educational backgrounds: 1 PhD, 9 graduate degrees, 9 bachelors degrees⁹, and 2 with some college.¹⁰

⁸ One of the five respondents was just finishing his BA from a community college after eight years working full time and attending school. The other four were students in good standing at reputable colleges and were worried that their degree would not find them a job.

⁹ Degrees ranged from for-profit institutions to prestigious liberal arts programs.

¹⁰ One respondent was a high school dropout who earned her GED and then went on to take some college courses. The other graduated high school, went onto the Marines briefly, and acquired some college credit to advance his rank.

Next, I asked respondents about their social connections online and offline. Again, their responses varied. Some preferred to primarily engage others online, some preferred to engage offline, some did not have a preference, and still others preferred to not engage at all. This was often reflected in their descriptions of their best open learning experience or their preference over having a class facilitated by a person or not. Interviews ended first with an examination of how, if at all, they were affected by the 2008 financial crisis, and then a conversation about their collaborative economic practices, if any. The 2008 crisis affected respondents variably, but most respondents stated that it changed their expectations, if not their material reality. A few respondents lost jobs directly related to the downturn and several others found their college degrees obsolete in a post-downturn economy. Younger respondents found that the crisis, which hit while they were in college, changed their outlook on the economy and their education. Many reported no longer feeling like they were guaranteed employment as a result of a degree. In some cases respondents talked about more global views of the economy or the education system, but I primarily tried to focus the conversation on their experiences.

In the coming pages, I present a descriptive analysis of connected learning among open learners using the three crucial contexts for learning (interest-driven, peer-supported, and academically oriented) and three core properties of connected learning experiences (production-centered, openly networked, and shared purpose) as a guide for analysis. Then, I present a sociological analysis of the role of risk and uncertainty among open learners. Finally, I conclude with a call to designers and educators interested in using open learning as part of a higher education reform agenda.

TAYLOR FINDS SUPPORT



Taylor is an east coast transplant from California with a warm, friendly, and energetic vibe that's inescapable from a mile away. He exudes a level of happiness and wonder for the world around him, making it surprising that just six months prior to our interview, he had filled out the necessary paperwork to drop out of college. At that time, he was questioning the value of his \$50,000 a year education and was struggling to make meaning of the college experience of impersonal lecture halls and binge drinking. While doing schoolwork at a local coffee shop, he befriended the barista and a few other regulars, and was soon engaged in long, exciting conversations about entrepreneurship. Taylor joined one of his new friends on a road trip to watch a competition of other people his age who were presenting creative new business ideas. He fell in love with their drive and autonomy, recalling how it seemed so counter to the Wall Street field trip he took earlier that year with the finance club at his home university.

After that trip, he started to read more about startups and began messing around with a handful of online platforms to learn about programming and business development. Soon, he reached out locally and found physical spaces where he could network with other young people like himself who were questioning the value of their education but were also thirsty to keep learning. His peer group changed entirely and he traded late nights at parties for early morning accountability sessions with a handful of friends who also wanted to "get stuff done." He and his new friends would call each other at 6 a.m. and discuss their independent learning goals for the day. Then, they would work on their own until 8:30 a.m., when the rest of campus would begin to wake up. At that point, they would go back to their normal college student lives and focus on their academic schoolwork, having already logged two-and-a-half hours of open study.

In the open world, he learned to email and tweet people directly to ask for clarification on concepts he didn't understand.

I've become a lot more comfortable just talking to people...I think asking for help is the best thing you can do.

Becoming an open learner not only brought out his passion for his work outside of school, but also made him

engage more deeply with his academic coursework.


I started emailing my professor. I never would have done that. I was like 'Hey man. I know I've been to class every day, but I really don't understand this concept.'

Taylor became amazed at how willing people were to help him when he showed an interest. He also learned that solving problems kept him engaged in a project.

I love figuring things out, solving problems, that's why I like econ. I like math. I like going to the end of a huge problem, and you get it right, and you look at it, and you look at the answer, and you're like 'Yes!' You get so stoked and it's really cool.

The more he learned on his own, the more he discovered his own learning style and what made him tick as a person. He reengaged with his academic coursework while building his first company on the side with a few friends. Taylor was aware that the company would likely fail, but he didn't care – all he wanted to do was build something and see if it worked. He figured that either way he could learn a lot and became comfortable with the idea of failure as part of learning. When all of his old friends were getting internships with finance companies, he reached out to an entrepreneur he followed and admired on Twitter and asked him if he knew of any cool summer opportunities. Within a few weeks, Taylor was on an airplane to a country in South America, with a grant from their government to help build their startup community through small projects out of a co-working office. While there, he kept teaching himself various programming languages, presented tutorials to other fellows in the program, and started a company to help alleviate a small portion of the income gap he noticed in the local arts community. When Taylor came back to the U.S. for the start of a new semester, one of his old friends reached out to him because he was so unhappy and worried about his own future. He was afraid of the post-graduation labor market and was beginning to question his commitment to a major that would lead him to the cutthroat world of finance. The friend wanted to know how Taylor changed his outlook in such a short amount of time. "I'm getting him started how I got started," said Taylor, now taking on the role of teacher and mentor that he could not have imagined himself six months prior.

ANALYSIS: CONNECTED LEARNING AMONG OPEN LEARNERS



Connected Learning is an approach to education that aims to connect the often-separate spheres or contexts of interest-based, peer-supported, and academic/career-oriented learning. With the choice to learn at their discretion, open learners are connected to the sphere of interest-based learning. When learning is relevant and interesting (interest-based), a learner achieves higher-order learning outcomes (Ito et al, 2013). Open learners interviewed for this case study demonstrated an affinity toward the collaborative, peer-supported environment of open learning that emerged naturally for them as they connected to others also committed to self-study. This was one of the more counter-intuitive findings of this project and several participants voiced their own feelings of irony toward finding peer-support in what seemed like an isolated enterprise. The sphere of peer-support allows learners to share and give feedback in an inclusive setting that is engaging, fluid, and collaborative (ibid). Open learners also felt like they were learning with purpose toward their academic and career goals, many of which emerged for them through interest development. Learners thrive in environments that connect their interests to academic, career, and civic contexts (ibid). Connected learning is a model that brings these three spheres into conversation with each other, creating synergies unrealized when each stands in isolation while simultaneously strengthening the merit of each context.

In addition to the connected spheres, three properties emerge in the connected learning framework for learning experiences: production-centered, openly networked, and shared purpose. In this case study, open learners show that they value production-centered learning that allows them to solve problems and get things done. Production-centered learning, especially when paired with digital tools, allows learners to create and experiment with content, providing opportunities for the sharing of knowledge and media (Ito et al. 2013). This sharing became crucially important for the open learners I talked to, who were particularly drawn to the openly networked aspect of their learning. They used the open networks they were primarily finding online to connect with others, which encouraged reflexivity during the learning process. Openly networked learning contexts are visible, accessible, and abundant— thus making them ideal sites for connection and reflexivity (ibid). Lastly, the open learners studied felt committed to give back to their learning communities and pay-it-forward whenever possible. This attitude created a shared purpose around their learning, which connected them cross-class, cross-generation, and cross-discipline to unlikely peers for the purpose of achieving common goals and interests (ibid). In this section, I will detail how the spheres and properties of connected learning couple nicely with the practices of open learners in order to demonstrate how the framework of connected learning can be utilized to understand pedagogy in an amorphous learning ecology like open learning.

INTEREST-POWERED: NARRATING SELF THROUGH INTEREST DEVELOPMENT

The open learners in my sample told similar stories of interest development or the role of interest in their learning. Open access to free or inexpensive content gave learners a chance to experiment without penalty for failing to understand a concept or finish a project. While this meant that many of the people interviewed spent a significant amount of time lurking on platforms and not completing assignments, they also found moments where they went

above and beyond the requirements for some of the classes and challenges. These moments taught them a lot about their own interests and their ability to sustain interest while learning something. For some, they contrasted these bursts of sustained interest with how they learned in formal education environments, where they might do the minimum amount of work required or would have to endure something “miserable” as one participant recounted. William decided to pair his interest in board game design with a class on P2PU and surprised himself with how much time and effort he was putting into the class:

As I mentioned before, board game design is just one of the nerdy things that I’m hoping to learn about with open education, or at least self-motivated education. And so I decided that I would combine an exercise from this book I was reading [about game design] with the Web-making 101 Challenge and just sort of kill two birds with one stone. And I felt like I was glad that I could meet both those goals at the same time. And I saw myself going beyond the assignment descriptions in a way that I don’t usually do in my traditional classes. I was pushing myself a little more, I was trying to do something that was really good and not spectacular, but I was trying to do something interesting rather than the easy way out. You know, what you have to do to survive in a university program.

Brian similarly found interest playing a large role in his learning. While struggling with severe Attention Deficit Disorder, Brian internalized a lot of what formal education told him about himself: he was a bad learner, he couldn’t sustain his attention, and he wouldn’t amount to much. An Emergency Medical Technician class after high school gave him a chance to feel good about learning, but six years at a community college after that program led him into what he described as a “dark” period in his life. After finishing his bachelor’s degree at a four-year college, his friends pushed him to apply for graduate school in something more hands-on. While in his master’s program, he found faculty members who encouraged him and other students to learn from outside the traditional curriculum. They forwarded links to open courses online and welcomed their students to explore their interests outside the program. For Brian, this meant enrolling in a few open courses as well as spending a lot of time on Reddit. “I honestly learn more from Reddit than I do any other site,” he told me, explaining in detail how he’s been able to combine his degree program with all of the things he’s learning outside the classroom. “There’s too many things I learn in a day on that site to even, like, come up with, because it’s just fun at that point, and when it’s fun I can just do it for hours and hours on end,” he said, not sounding like someone who had been told that he was bad at school. Exploring interests in the open world gave him a different perspective on learning within the formal world and also made him re-evaluate some of the things that he believed about his own potential.

Interest development didn’t always lead learners to obvious places. Some learners knew they liked hands-on projects or learning opportunities that incorporated visual media, so they sought out open learning opportunities that matched their learning styles. Others narrated a process of learning in open environments and having “aha” moments when they found themselves sustaining an interest in a topic for a long time. Sarah found an unlikely passion for databases through open study, but was able to narrate how it made sense to her: “It

fascinates me that I can put something together and I can get a report based off it.” She also talked about liking the aesthetic nature of the platforms she was learning: “I really like art, even though I’m not an artist. So, I like having something aesthetic in my day.” Sarah didn’t struggle with formal education, but was amazed at how much she was learning about herself through open study.

Mike was more adrift than Sarah and described graduating from a prestigious college only to land in a dead-end job with very little potential for growth. He said his life felt stagnant; when he looked at his future with the large corporation that employed him, he saw that he had been tracked into a part of the organization that offered few chances for advancement. Older employees looked burned out and like they hated their life, so he decided it was time for a radical change. Mike called upon a few older friends that he looked up to and asked for some advice. They offered him an entry-level position with a tech company they had started and Mike jumped right in, though he wasn’t sure how he’d fit in. The tech world would require him to create his own learning opportunities if he wanted to grow beyond his entry-level spot. I met Mike at an offline introductory class on HTML/CSS and overheard him talking about other learning platforms he was trying. He was eager to get the instructor’s advice on how best to master the concepts presented that evening, so I took him initially to be a tech-geek. “This is great, isn’t it?” he mused when I walked up to him and introduced myself. His eagerness to learn translated into an eagerness to get to know other people eager to learn. Within a few minutes, we had befriended another student and all made plans to go to a tech event together the next night.

Mike had only recently begun to take to the tech world and, more specifically, to computer science. A former political science major whose first real job was in sales, he described feeling interested in learning and his career in a way that he hadn’t before. He also recalled his initial stubbornness to trying something new that now sustained his interest long after he left work each day.

I think it has been sort of revelationist to come work in this sort of a tech industry because the whole thing, like, is actually exciting and cool, whereas before I was, like, I was being kind of obstinate about it. I was, like, ‘No, that’s, like, whatever I don’t care.’ But, like, once I, like, dropped myself into it, I was, like, ‘Ah, (expletive) sick!’ you know? So I think that has been really interesting. And I guess just a healthy reminder to not just be so (expletive) stubborn about something and just be, you know, like there’s a lot of cool stuff out there. And so it’s, like, I guess I’ve maybe, like have learned that, or have been reminded that just ‘cause I chose to shut myself off to something doesn’t necessarily mean that there’s no appeal in there for me.

When open learners talked about what they were learning, they interwove the “what” with a story about how they decided upon the “what.” For many learners, that story evolved into an evaluation of capability as well as who they were. Brian and Mike are examples of how formal education and the labor market had somewhat wounded their self-image and sense of efficacy. Open learning gave them a low-risk chance to explore new interests and nar-

rate a new story of self. William and Sarah were less troubled by their experiences in formal education, but were still surprised when they found themselves putting in extra effort or developing new interests in unlikely places. Open learning offered them an opportunity to expand their repertoire of interests and narrate a creative, evolving story of self not restricted by the boundaries of formal education.

PEER-SUPPORTED: SHARING KNOWLEDGE, CONNECTING BEYOND THE LEARNING

While learners narrated a process of self-evaluation and understanding, they also spoke extensively about the social aspect of open learning. Open learning allowed them to break down their own walls and ask for support. Participants were drawn to the peer-production element of open learning, which pulled apart some of the hierarchies between teacher and student. Keith, who had gone to a two-year for-profit college after high school, recalled how helpful he found other students in open contexts:

But with these courses that actually run kind of like a traditional course where they're kind of instructor led but they're peer led at the same time, where you have the structure of the lectures, but you have so many people taking it. And they're all taking it at the same time. Then they have a forum where they can all interact. That's been something really helpful for actually learning more in the classes and bouncing ideas of other students. You see other people struggling with stuff. You struggle with stuff. And you can help each other out.

Alexandra reflected that “the people are awesome” and “they're really interesting, fascinating people” when recalling some of her best experiences with a class she co-created on a site:

The people in my poetry course are, I keep in contact with them. I think one of them is actually publishing my work next month. Like, isn't that the way true learning is supposed to work? First pursue like a writing workshop and then we'll all help each other get better, get published.

“True learning” is associated with an environment where people work together to make each other better, not an environment where one learns in isolation and the best person wins. Both Alexandra and Keith were discussing experiences with online platforms, where they struggled alongside and supported peers they had not met in person. When I helped co-facilitate a class as part of my participant observation, I watched these rich digital connections unfold on the class forum. One participant might post a comment like “where can I learn more about this topic” or “how do I hold myself accountable to learning this topic” and other participants would chime in with suggestions. Several people marveled at how helpful others they met in their open learning journey have been, so much so that they felt compelled to give back to the community in some way. Keith, for example, had curated a guide to open learning on his website so that others could easily access online content and not go through the trial and error that had consumed much of his time. Annie hosted

a breakfast club with some of the entrepreneurs she had met in her co-working space that also hosted online and offline learning programs. She figured she was still too new to teach anything she was learning, but she could provide a regular space for others to convene and share their lives. Implicit in Annie's decision to host the club was something echoed by most open learners: a desire to give back what was freely accessed and continue connections beyond the classroom.

Sharing knowledge was a norm; so much so that the majority of interview participants regularly stayed in touch with me and shared things they had read or courses they had taken that they thought might interest me or help my research. Some even scheduled additional calls just to hang out and learn about what I was learning from other participants. On several occasions, participants would take pictures of their learning spaces or flip their laptops around so I could see how they organized their learning. On three occasions, learners pulled their white boards off the wall to put them in screen view so I could see how they imagined their learning ecologies. It was clear that the people I talked to were eager to share what they had gained and also learn from others they met, whether online or in person. As a researcher, I was invited into that sharing as part of the peer-produced space of open learning. Mark, Jerry, Nita, and Taylor told me about times where they each left an offline classroom with another learner they met in the class that night and shared drinks while discussing what they had just learned. Mike and Dara had asked the same of me when we first met and sent me "life updates" and notes from classes they attended. Taylor brought me to another learning space after our interview, stopping first to sit at a diner for an hour and discuss learning even more than we already had done on the record for the interview.

When learners became more comfortable with their own interests, they started to broaden their interests to learn about other people, regardless of whether their interests were shared or not. "I just want to know people who know things," Nicolas summarized, a sentiment which became a theme with the learners. Derek said that he learned that he no longer had time for people in his life who weren't contributing to his learning and motivation:

I used to just kind of deal with it...But now it's like, I, as much as possible just want to set up a life where I just hang out with people that I think are talented, intelligent, are like aspiring to actually do something, and just get me pumped, and who I can just have an awesome conversation with.

Learners found the peer-supported environment of open learning went beyond the paradoxical realm of "self-motivated study." Open learning could exist in isolation, though none of the respondents talked about open learning without embedding it into some social part of their lives. William was probably the one participant who was least interested in connecting online with classmates, though he spoke about how he talked with his wife and friends about open learning and how it had become a regular part of his repertoire with the students he tutored. A strong contingent of learners described new connections made through their learning. Some of these linkages existed just for one night after a class or a few months during a challenge, and some continued to change peer circles entirely.

CAREER/ACADEMICALLY ORIENTED: LEARNING WITH PURPOSE

Many participants stated that self-motivated study was not for everyone. Capitalizing on open resources for future gain requires a fair amount of discipline and organization. For some, though, the incentive to craft an alternative career future was promising enough to summon the discipline and organization that made self-motivated study possible. For Andre, the stakes were high. A college graduate with a successful academic background, he had just left a career in finance after watching the 2008 financial crisis swallow the jobs of his friends also working in finance. Fearing that he was next, he started consulting on the side in a related area before quitting his career in finance completely. After he quit his job, he started a self-study program for the GMAT, with the end goal of completing an MBA in order to make him more marketable as a professional. While studying for the GMAT, he began to question whether taking on a large amount of debt in order to guarantee a stable future was a wise choice. Andre started reading about startups and that developers were in demand. Using free resources, he tinkered with HTML/CSS before deciding that he wanted to learn more about backend development. Soon, he dropped his GMAT study completely and began learning Python on his own, spending up to 8 hours at a time in the public library in self-study. After developing enough basic programming literacy, he enrolled in a low-cost apprenticeship program with General Assembly and reasoned it was a better investment than an MBA program:

I'm going to have to invest my time, but otherwise I have to invest \$250,000 in debt to go to business school, and after these learning sites you start right away... And a lot of people aren't ready for self-study, but I am and I took the course really for the service that they have in place. So if you had, like, some basic skills and a few other things that would prepare you for a job – for example, the apprenticeship program. Right from the start there were, like you know different startups, and you work with them for three months, and everything goes well, you pretty much have a full-time job at the end. Then there are the happy hours every Friday where a lot of entrepreneurs and startups just come to hang out and just have a beer after work, and you can network for a job right there, it's like, a part-time externship when you meet a company, so you start going to the happy hours... So that's kind of why I, so I kind of made the choice to do the GA stuff rather than to go to business school for my personal goals.

Andre, like Derek, also talked about how much he enjoyed meeting people also trying to grow and develop their skills. He started a Meetup for others learning how to code, only expecting a handful of participants, and had to have the location moved for the first night when more than 80 people signed up. This group evolved into a community of learners who met regularly and took MOOCs together. Andre sent out weekly newsletters with links to helpful learning resources for the community. Open learning became a large part of Andre's career and social life, and he expressed being much happier since leaving finance.

Andre was not alone in expressing satisfaction in transitioning to a new career. Jess, a person who described herself as addicted to learning, talked about how losing her job evolved into the creation of a family business requiring her to learn new skills:

We started it kind of as a part-time hobby when I was pregnant, three and a half or four years ago, I think. Just – I started – I got laid off from my job at a title company, which was right when I think the recession kind of hit, and so we had already started kind of, you know – he (husband) had a client, and this little company that needed a website, so we kind of did that, we decided, well, ‘I definitely have some time now, and I can learn a little bit while I don’t have a job,’ so I did and we kind of got more and more just built up.

The business grew so much that her husband eventually quit his full-time job to join her. They rented out office space and were on the horizon of offering new services that Jess thought she could teach herself through open learning. The freedom to move from class to class or resource to resource benefited Jess because she was interested in learning a skill, not in gaining a credential. She had taken a few courses at a community college after receiving her GED, but explained that “college is so expensive” and she couldn’t justify the cost when she wasn’t sure what she wanted to study. When we talked, she had just left a data analytics MOOC halfway through the curriculum because it was clear she needed a better grasp of statistics, so she signed up for another MOOC on statistics. She had started the data analytics class out of curiosity and within a few weeks realized it would be a great service to offer in her business. She was diligently studying statistics when we talked, a topic she hated previously but could now see as useful and interesting because of the few weeks in the more advanced data analytics class. That experience was one of many Jess was “freestyling” through with her learning, where her interest in advanced topics was allowing her to lurk online enough to find the building blocks to make those skills learnable.

Open learning was sometimes used as an alternative to traditional education, but for Erin it was complimentary to helping her work through the difficult science classes she was taking to qualify for a nurse practitioner’s program. Erin’s background was largely in the social sciences, but she came from a family of medical professionals and was having trouble finding a job with her degree. Open learning taught Erin that she could enjoy and excel at STEM related material, despite believing previously that she wasn’t cut out for it. She explained hearing somewhere in middle school that she was not good at math and science, so like a lot of her female peers, she tracked away from those disciplines. After getting a master’s degree in an interdisciplinary social science field, she took an internship with a startup where she had to teach herself many new skills on the fly. She started learning basic computer programming and found that the immediate feedback of online platforms plus the offline collaborative community of Meetups gave her the confidence to try new things. Erin began to feel like she could learn anything, so she decided to start a nurse practitioner’s program to ground her interest in gender studies into a career path. Erin explained to me how she continued to use open resources while taking prerequisite online courses for her program:

Pretty much the first step for my anatomy class is just as soon as we start a unit, I go on Khan Academy and see if there are videos. And it’s good to get a sort of, like, high-level overview of the subject matter. And of course there are details that you need to fill in. Sometimes if I’m confused about something, I’ll, like, Google it. Wikipedia’s actually great for science classes, which is something I discovered, surprisingly...

And when there are more complicated concepts that I need more detail on, I'll search other YouTube channels. And there's this one guy and he's, like – I don't know his name – but he's, like, a doctor or professor, and he has this huge playlist of different biology videos, which is really helpful... So yes, I'm like, totally not on the textbook right now. But, I mean, I feel like I've learned really well.

Open learning required many participants to re-learn how they learn. Without some of the institutionalized features that formal education offers, like degree paths and stable curriculums, learners had to create their own strategies and capitalize on their strengths while deepening their interests. The carryover of open learning into career and academic contexts made that self-awareness not only possible, but also necessary.

PRODUCTION-CENTERED: GETTING THINGS DONE

The open learning sites observed predominantly use an iterative style to deliver content. Content is often broken down into small chunks so learners can step from one concept to the next, but only after mastering the first concept. Jamie, one of the content creators interviewed, explained that the open learning space was being modeled after how people learn computer programming. An iterative style of learning allows for production-centered techniques for displaying mastery. Computer programming is straightforward to test: a loop works or it doesn't, a command returns the right value or not, etc. For Mike, this type of instant feedback inspired him to tackle a larger task: creating his own landing page in HTML/CSS, modeled off an example given in class. The landing page would serve as both a project that would structure his learning and a product to display what he had learned.

Production-centered learning is easy to imagine with computer programming, but how might one learn how to design a preschool curriculum in a specific pedagogical method and show competence with that method? Molly creatively combined her open learning with an offline experience WWOOFing¹¹ in Hawaii, where she was invited to spend part of her time on the farm educating the farm owner's preschool-aged daughter. Molly was teaching herself a community-centered educational philosophy through various online resources and then would try out the philosophy during her time with the young girl. Each day, Molly would blog about her curricular choices and she kept an active Pinterest page for resources she was using. The Pinterest page acted like a bibliography for a final paper based on the curriculum Molly was iteratively designing for the farmer's daughter. In five years, she expects to open a preschool of her own alongside an organic farm she and her fiancé are dreaming of starting in the Northeast. Her open learning, brought to life through WWOOFing and curated online, substituted for a graduate degree in education – an endeavor she vowed not to take due to her \$100,000 in student loan debt.

¹¹ WWOOF stands for worldwide opportunities on organic farms and WWOOFing is used to describe the practice of people committing their time to labor on an organic farm in exchange for food and housing on the farm. These opportunities vary in time commitment and type of labor involved.

Marco appreciated the production-centered aspect of open learning because it wove his learning into a final product that he could use for his small business. After high school, Marco joined the Marines after being told that he was not a good student and that he shouldn't pursue college. A football player with severe dyslexia, Marco was labeled as "not caring" about his education in high school. He kept a C average after being pulled out of special education classes and reintegrated into the larger classrooms – a high enough GPA to not be a problem, but low enough that no one believed in him. He somberly told me that he truly believed his role in life was to shoot the bad guys since he wouldn't be good at much else, according to his teachers. Halfway through basic training, his father fell ill with terminal brain cancer and Marco was let go by the Marines so he could take care of his father. He nursed his father during the day while his mother was at work, worked as a personal trainer at the local YMCA in the evenings, and then, at night, found himself online looking for something extra to keep his mind busy. While online, he discovered that he could actually learn quite well when watching videos or listening to audio-recorded versions of lectures. When Marco did not have to read much, he could suspend his learning disability enough to learn new content. After his father passed away, he put a down payment on a room above an ice rink to start a gym, with very little knowledge about how to run a business. Suddenly, his learning was ramped up to full speed, as he needed to learn everything from marketing to accounting for his venture:

I mean, I've probably watched thousands of hours of YouTube videos on everything from running QuickBooks to building your own website. And everything was done on my own at 2:00 in the morning trying to figure out 'cause it needed to be up the next day.

Marco fell into a habit of producing something out of his learning, first out of necessity, and then just for fun. He learned that he liked to see things work and that he could learn endlessly when he could conceptualize the outcome in a tangible project.

Within a few years, he and his brother/business partner Nicolas would sell their gym, launch a handful of other successful businesses in the fitness industry, and then settle on a citywide venture designed to promote healthy living in their rust-belt hometown. Their most recent venture has landed them a spot in a prestigious accelerator program and Marco now finds himself co-owning a business whose clients include the city's largest healthcare provider. His brother Nicolas reflected upon their success as business owners, an unlikely career path for them after family tragedy:

...It's not that there's some secret to what makes successful people successful. It's when you look at it and you look at what these people have in common, it's that consistently they get up and do the things that everybody else talks about doing.

Nicolas often talked about "getting things done" and how Marco was a better learner, even without a college education, because he found a way to get things done. Before coming home to take care of his father with Marco, Nicolas was a teacher struggling to find work in the post-recession economy; his younger brother amazed him. He was in awe of how he used small projects as a way to structure his learning. Nicolas would often talk about how his brother was a big example of what was wrong with the education system, because Marco had found so much success once escaping traditional education.

Mei was just as troubled by the lack of problem solving in education. She often sat through painstaking dinners with her academic parents and their peers. Mei recalled rolling her eyes at the level of posturing happening in the room. She developed an oppositional identity to the world of education, though admitted a strong hunger for learning. After college, she found open-sourced ways to teach herself new things and during her interview expressed her vision for a more flexible definition of learning:

In a better world, I wish that adults and kids alike would be more flexible in their definition of learning, and allow for more exploratory, problem-solving based learning, so that you have a chance to try, and fall on your butt, and get back up again.

The production-centered aspects of open learning allowed learners to explore their interests, learning styles, and challenge themselves through trial and error of content creation.

OPENLY NETWORKED: REFLEXIVITY THROUGH CONNECTION

The abundance of open content and users engaging in the shared production and consumption of open content allowed learners to be reflexive in their work. When learning something from an open network, they often tried to take what they learned and reproduce it for the network. Learners used that networked process to reflect back and enhance their own learning. Keith described learning Mandarin through an online language community, where he uploaded content to gain feedback from his peers:

On my website you can actually see this journal in a digital format there. I did this so I could take a picture. And I made kind of like a little sub-blog inside of that where I can go through the pages of that. I didn't actually scan each page. I just scanned the front and then I scanned a blank page. And then I took a picture of it after I handwrite the characters. And then I record the audio of myself saying it. And then I typed it up too. So, I've got the typed, the handwritten, and the audio and then the ability for people to add comments. So, that gets shared. And, again, it kind of shares my learning with other people and then gives me feedback on my learning it from native speakers and people I otherwise wouldn't have come in contact with.

Keith went on to talk about how an open network forced him to investigate the process of learning, which made sharing easier and made him better, too.

I think I'm a big proponent of just open pretty much across the board, open access, open data, open source. The stuff you're doing if you can find a way to turn what you're already working on into something that you can produce for other people, because you never know who's going to use it, especially with the amount of reach you can get through the internet. So, that's been one thing I've been focusing on is trying to kind of modularize my learning and break it into reasonable chunks kind of, try and find things that I've been doing as I take other projects and find ways to put them out there so that other people might be able to make use of them as well. In that same process I feel like I enhanced my own learning because I put a little more thought into how it's packaged and how I'm tying everything together.

Participants who engaged in this openly networked element of open learning felt compelled to share and found that the peer element was easier to access when content and processes were transparent. Kam felt like feedback enhanced his learning, as did Ben, who used surveys attached to videos he produced to learn how to better teach content he was learning. Openness allowed learners to “teach-to-learn,” a process many felt to be part of their responsibility as consumers of open content. By teaching-to-learn, learners helped produce the content that others were learning, and in those experiences they gained feedback on their own learning. Ben talked about how openness expanded what he originally believed to be possible, because the how-to videos he was producing about a common software program received feedback from people in countries far beyond his imagination. He took these experiences and used them as evidence that he should begin a small business teaching and consulting with individuals on this software program. In addition to his paying customers, he also set up free software help in coffee shops and published free videos on a few teaching platforms, where he continued to learn more about his craft.

The openly networked dimension of open learning taught Elaine that she was the kind of person who “always likes to be learning” and she attributed this realization to the amount of time she spent online finding new communities and content areas she would not have experienced had she not started open study. A marketing student, Elaine started teaching herself search engine optimization (SEO) online and became comfortable navigating open communities online. In a remarkable series of events, her comfort level in the openness of a digital world helped her secure full-time employment post-graduation. Through Elaine’s online study, she learned about a major conference in marketing that would be happening in her hometown in a few weeks. She tweeted at the conference’s organizers and asked to volunteer at the conference in exchange for free admission. While at the conference, another conference attendee tweeted that his company was looking for someone proficient with SEO to join their team. Elaine was lurking on the conference’s hashtag while volunteering to stay apprised of the content being presented, found the job-description tweet, and responded with a link to her online resume she had learned to curate through open study. By the end of the conference, she was interviewed by the company and secured a full-time job that would begin when she graduated. A somewhat shy, self-described geek, Elaine found that learning through open networks introduced her to people and experiences offline she might not have had access to previously.

SHARED PURPOSE: GIVING BACK AND PAYING IT FORWARD

The collaborative element of open learning allowed learners to strip down hierarchies between teacher and instructor and, as noted earlier, created a peer supported learning ecology. Peer support gave learners a sense of shared purpose in their learning, which then reified a culture where everyone could benefit through collaboration. Joan, an active learner and teacher on P2PU, often created challenges for others on the platform in order to enhance her own understanding of a subject:

I think that’s a positive part of a platform like P2PU is that you don’t necessarily have to have all the answers. And that people can come on and you guys can learn

together instead of it being, 'I'm the instructor.' It's like, 'No, no, no. I just created the challenge. This is something I want to learn. And if you guys want to participate too that's awesome.'

Learners exhibited a general sense that by giving back to their learning communities, in time they would reap the benefits of their sharing. Jin gave several examples of times he created a community environment for learning through sites like Meetup.com or on the online message boards of Coursera and EdX. After Jin took a class on gamification at an offline startup school, he coordinated with the instructor to organize a Meetup group for class participants to stay in touch. He and the instructor organized game nights, dinner parties, museum trips, and coordinated to attend workshops together in the city. Jin's mindset was geared toward sharing, collaborating, and connecting:

I try to think of it like, 'How can I add value?' And then, 'How can I pay it forward?' Over time, I think that it will pay itself back 10 fold. When I meet people, I try to mention relevant resources, or connections, introduce people.

Naomi also shared Jin's belief that sharing and giving back to the community would benefit her long term:

But there's also just collaboration aspects. I learn so much from the codes that I find from other people on GitHub or just in the programming community. And I can collaborate with people easily. I can collaborate with my friends on my own projects easily. And then other people can use that and actually, that is fine and rewarding for me. And I become a better programmer, which I can also then get paid for if I wanted a job as a programmer, through learning in that open community.

Naomi admitted that she had never tried being proprietary with her coding, but found that she was actually turning down opportunities found through her open networks because she was at capacity. She expressed that she could not imagine there being a benefit to proprietary work, when she was enjoying the culture of collaboration so much and also was making more than enough money. Naomi, like Jin, was thriving as a learner, community member, and professional as a result of her commitment to open learning.



Jenni attended graduate school in the United States before deciding to move here permanently from China. During her education in her home country, she recalled being discouraged from speaking out of turn or displaying creative independence in the classroom. While in the US, she quickly found that the norms were different both in the classroom and in the workplace. When asked how her graduate education could have better prepared her for the marketing internship she held post-graduation, she explained how she had to learn to think on her feet and show expertise while communicating with people from all levels of the company. For Jenni, there was a moment of cultural dissonance, because she had grown up with the norms that such behavior would be disrespectful and egotistical. In the U.S., that kind of normative behavior was critical to success.

Jenni also found that if she wanted to be valuable to her company, she needed to spend time outside of work learning new skills. Her internship eventually ended and did not lead to a full-time position, so she was spending the majority of her time learning, volunteering, and networking when we talked. Jenni was teaching herself search engine optimization (SEO) through at least two different online platforms and was attending various Meetup.com meetings in the evening with peers also interested in SEO, marketing, and design thinking. She was a huge fan of IDEO's open platform, where non-employees could contribute to design challenges and receive a design quotient score for their time and input in the community. She liked the idea of total strangers coming together digitally in an open environment to solve a real-world problem like access to clean water or the empowerment of girls in the Middle East.

Through her networking, she met people who would give her opportunities to try out her new expertise in SEO:

So I told you earlier I've been actively networking, meeting people. So I think it's last month, I went to a networking event, and it happened that there was someone looking for entry-level SEO projects.

So I said, 'Oh, I'm learning SEO and I'm interested in helping you.' So and then he said, 'Okay, so let's talk.' So yes, so by meeting people I got to get new projects that will, at the same time I'm helping them and also it enhances my skill, too.

Through these projects she had a chance to test out what she learned on an actual client, helping her build a portfolio of work to prove her skill. She also volunteered with the local Chinese networking and information group in town that welcomed new immigrants into the community with resources like English language learning opportunities, housing leads, and job networks.

So I think it's the right time that I study Google Analytics and volunteer for an organization, because I feel that it provides me a good platform for me to apply my knowledge, learn – I learn from Google Analytics – to the platform. So right now I'm doing website traffic analysis and tracking for them, and I'm working with a marketing team to see how we can use the data and the metrics that we've discovered – we dug out from the report – and apply that to the next marketing campaign.

Jenni felt a sense of completeness that her learning, networking, and volunteering were all fitting together so nicely and she was gaining confidence in her ability to show expertise for a future employer. She also was using some of her volunteer time to design a curriculum on design thinking and entrepreneurship for Chinese youth in her community. Jenni said it felt important to her to give back and teach young people, especially given all she had to learn without guidance through her own experience with the culture of American higher education and workplaces.

FINDINGS: VENTURE LEARNING AND THE SHIFT OF RISK FROM INSTITUTIONS TO INDIVIDUALS

Studying open learning from the perspective of the learner is a unique contribution to the current dialogue surrounding open learning. The connected learning model provides an appropriate framework for analyzing the practices of open learners, which can help inform further study and design of open learning contexts while advancing the project of connected learning more generally. However, as a sociologist, I would also urge that any takeaway messages from this report also be situated within a critical analysis of global forces contributing to the precarity of work and education for the young people I studied. My research was not designed¹² to measure whether or not open learning had a transformative impact on the economic and educational lives of interview participants. Still, I am able to report on how learners narrated their open learning within the context of catastrophic events like the 2008 financial crisis and through a theoretically-informed coding scheme, I was able to identify a conceptual theme taken-for-granted by learners: risk shift from institutions to the individual.

The study of risk and uncertainty emerged in sociological research in the mid-1980s with Ulrich Beck's (1986) risk society approach. Beck (*ibid*) argued that in advanced modernity, the production of wealth and the production of risk were systematically linked as social processes. Technological change and the risks that accompanied that change (like the collapse of a nuclear power plant) spurred legal and welfare-state protections, which eventually lead to "institutional individualism" or "individualization" (Giddens 1991) understood as "a new contradictory mode of societalization" (Beck 1992: 90, 127; see also Zinn 2008). Individualization sets the individual free from the social forms of industrial society – like class, race, and gender status – and allows for the social reproduction of a reflexive modernity, where the individual is now more dependent on the labor market (Zinn 2008). The institution of education, intimately linked to the labor market in Beck's analysis, folds into risk society as a locus of social control and cultural communicator of individualization. An individual's failure to succeed, or relationship to crisis and injury in any institutional context in risk society becomes internalized as personal failure, because the process of individualization relinquishes political accountability to risk.

Sociologist and communications scholar Gina Neff (2012) recently advanced Beck's theories of risk to include an analysis of entrepreneurial behavior among employees of Internet startups during the dot-com boom of the 1990s who invested in their jobs as what she called "venture laborers." Venture labor is "the investment of time, energy, human capital, and other personal resources that ordinary employees make in the companies where they work" (*ibid*: 16). For her respondents, economic risk was framed as desirable. The desirability of risk shifted collective responsibility of uncertain economic times to individuals and she identified social and cultural processes that made employment risks seem "safe, natural, and routine" (*ibid*: 3). Following Neff, I argue that the open learners I studied are "venture learners" in that many are not yet employed by risky enterprises, but also invest their time, energy, human capital, and other personal resources (like their personal narrative) into an evolving learning ecology that potentially cannot institutionally legitimize and protect that investment.

¹² Further work will include follow-up interviews with participants in order to better understand impact and transformation.

Open learning, regardless of its lack of a stable credentialing mechanisms and its requirement of a significant time investment, was described as a risk worth taking for learners – as long as that risk was understood as an active choice. Neff writes:

The lure of risk – and by this I mean the idea of taking chances – replaced the fear of uncertainty as the predominant economic rhetoric of the Internet boom. This shift is subtle but important as risk and risk taking in economic life now imply active choices while uncertainty connotes economic passivity and forces beyond one’s own control (2012: 15).

Similarly, I found that open learners used their investment in open learning to buffer uncertainty and avoid passivity.

In the following pages, I summarize three sociological findings that center on the concept of risk shift from institutions to the individual. First, I show how a focus on process, not product, creates an environment of empowered learning for individuals. Then, I position that empowerment next to the critique of traditional higher education by learners. In the third section, I argue that learners’ gravitation toward entrepreneurialism characterizes a type of emotion management they have internalized in order to make sense of their paradoxical disappointment in the outcome of their investment in traditional higher education and their insistence that learning not emphasize product.

EMPOWERED LEARNING: PROCESS, NOT PRODUCT

And so we’re trying to secretly instill these big values into people of self-empowerment. That, in fact, even if you are not the expert in it you can still teach it. As long as you’re organized and as long as you’re motivated you can take any topic and learn it with your peers. You can say, ‘Hey, I want to learn this. I’m going to do some groundwork, I’m going to try to figure out how to lay down a foundation, and then I’m going to invite a bunch of other people to help me improve on the content I found, and then we’re going to learn it together.’ And then as the content evolves more people are going to come in and learn from it and improve it. – Jamie

A consistent finding from this research revolves around the theme of “empowered learning.” Learners were thrilled to share their stories of open learning, often seeing their learning as central to a process of transformation in their lives. Freely or inexpensively accessible content empowered learners to develop new or existing interests without consequence and at their own convenience. These interests were embedded in their personal narratives and became part of the identities of learners. However, they did not embed into identities of traditional education or careers, as one might expect. For example, a university student might say, “I’m a biology major” or “I’m an engineer.” The open learners interviewed often distanced themselves from the institution of education or what I like to call “learning-as-usual.” They also typically had a strong distaste for the traditional economy and business-as-usual economics. Open learning enabled learners to interact with content and peers in a manner that could be combined, hacked, or remixed to suit a learner’s particular need or learning style.

As Jamie states in the above quote, learners express and develop an interest and they form peer-supported communities for learning and sharing that interest. For those I interviewed, that learning was most meaningful when connected to an academic or career orientation. These pathways, or connected learning contexts, created a semi-bounded environment for learners to build their confidence with new material, communities, and future academic and career orientations. Personal narrative became extremely important for learners and created a trajectory for learning amidst the vast uncertainty characteristic of open learning. That narrative, however, became less embedded in an institutionalized end game and instead embedded in process. An investment in process rather than outcome allowed for iterative, trial-and-error style proof, which empowered the learner to take the next small step in their learning and also reflect back on non-linear progress as important milestones in their journey. Kam, for example, talked about this focus on process as a shift in cultural values:

I was thinking about how it lets us refocus our energy on community and the process and living, which means our value set changes slightly. It's not "What do we get from the process?" but getting the best, richest process, right? Like, it's not just about going to Rio, it's about how you got there, and who you stayed with, and what are the things that you experienced there. And that shift in cultural values is, I don't know if that's a product of open education or open learning or if it's a cause.

A focus on process rather than product empowers learners to situate their identity around tangible moments and active choices that can combine into a personal narrative, rather than focus on the passivity and lack of control inherent in outcome or product.

CRITIQUES OF HIGHER EDUCATION

A focus on process empowered open learners to develop complex but stable personal narratives, as well as openly networked communities of peer support. These robust narratives self reflected not only a process of empowerment, but also spoke to what felt precarious in their lives: their investments in the institution of higher education. Despite high levels of educational achievement, learners like Nicolas felt like their success in traditional schooling was irrelevant:

But, see, and it almost, I don't want to say it angers me, but it upsets me how much I feel like everything I did in school, or in terms of traditional school, I don't know how much it's helping me right now.

Annie felt like traditional higher education could not keep up with the pace of innovation in her industry:

We live in a time now where things are just moving so quickly. With technology and everything you get new tools for marketing, which is, you know, my space. Tools are popping up all the time, and what you're reading in school is outdated tomorrow.

Bradley also echoed Annie's sentiment that higher education could not keep up with innovation, and added that traditional schooling could not tailor to the individual interests of students:

It's really just because it's holding people back, not because it's not interesting and not because it's teaching the wrong stuff. It's just not teaching it fast enough. And it's impossible for a school to become so specific in its teaching. So, you can't focus on individual topics because you're only going to have three or four people that are interested in such specific fields, which is a tough thing to overcome. But those people then want to pursue that outside, so they'll go and read a book. They'll go to EdX or to Coursera or just any other website out there.

Stepping outside the traditional curriculum and engaging open resources became a strategy for people like Bradley who were currently enrolled in a traditional degree program and were dissatisfied with their education. For learners like Nicolas who had been out of school for several years, or Annie who chose not to enroll, open learning was a way to stay relevant. Despite learners' insistence that they were focused on process, not product, relevance implies awareness for an institution that was failing to meet their implicit expectations that their learning would pay off in the labor market.

ENTREPRENEURIALISM AS EMOTION MANAGEMENT

Open learners, whether interested in becoming entrepreneurs or not, exhibited an affinity for learning entrepreneurial values. Learners prided themselves in their ability to troubleshoot problems, their drive, creativity, and desired a work life that allowed for flexibility and autonomy.

And that is why I'm doing it is 'cause I want to make myself potentially more valuable. And also not only, like, just more valuable so I can make more money but, like, so that I can have a job that I like, and that I have flexibility, and that maybe I can work for myself and just do, like, be a contractor. – Liam

The stripped-down lifestyle of the bootstrapped entrepreneur or freelancer appealed to many. They glorified downshifting for allowing them to focus on more important values than those available in the business-as-usual economy. Mei described learning from entrepreneurs in the open learning world as something that created “more richness in life” and how relationships developed in those environments built “societal fabric” that allowed for “skill transfer and self actualization.” Marco reflected upon the relationships he lost and gained since undertaking the lifestyle of an entrepreneur. If he wasn't building something for his business, he was learning how to build something for his business and many people walked out of his life as a result. He found comfort in conversations like our interview, where his choices were at least validated as something interesting and worth talking about:

I've lost a lot of relationships, both girlfriends and friends, that can't handle the fact that I want to work 24/7. I'd rather work than go to the movies or do something at this point and time in life. But it's really great in the area of, I would say, people like you. Like, we just meet people, and once it clicks it clicks. Like, I probably have a group of five people that all they want to do is talk about the cool stuff that we could do in life.

The overwhelming optimism of learners when talking about their new entrepreneurial career aspirations spoke of empowerment, but also hinted toward uncertainty and economic risk. Learners made virtue out of necessity by reframing social isolation and job insecurity as part of a more authentic shift in values that reflected entrepreneurialism. This shift reflected an individualized response to an institutional problem. Open learning taught interview participants how to take ownership over challenges and reframed failure as another part of the learning process. Brian even mused that the skillsets he adopted through open learning were necessary for entrepreneurship:

I think if you're going to be an entrepreneur – and I'm intro-learning here – but, like, you have to be able to figure anything out, like anything possible that comes up. And you have to be driven. Like, [self-drive] is, like such a key part of wanting to start your own company. At any point you can't go back and say, like, "Nope, not going to do it. I'm going back."

The self-driven process of learning to figure anything out became embedded in the narratives of learners, contributing to their confidence that they were well equipped to navigate labor market uncertainty. As I attended startup-community networking functions with a handful of participants, I immediately noticed how branding and marketing experts in the space were promoting storytelling to new recruits. At one event, when I introduced myself improperly with my name and the school I attended (proper etiquette for a university setting), I was confronted by an entrepreneur who said "yes, but what is your story?" Storytelling was not only how entrepreneurs related to each other and their companies, but also how angel investors connected with potential investments. Founders were taught to tell their story passionately, so that the investor could see their own passion in the passion of the entrepreneur.

Brittany, a founder of a health-related startup nonprofit, prided herself in her ability to put herself out there and take initiative to ensure the success of her organization. As she talked about learning hard skills through open study, it was clear that the accomplishment she was most proud of was learning how to belong among a community of funders and investors who could launch her company. Brittany attributed her success to networks and narrative:

Cold call somebody. Cold email somebody. Tell them who you are. Tell them your story and try to set up a time to talk. Yeah. That's how it works.

The emphasis on networks and narrative buffered learners from an uncertain labor market, especially when learners feared their university degrees were not relevant. But, a closer look into the entrepreneurialism inherent in learning to network and tell your narrative, and you see another sociological process emerging: emotion management.

Emotion management is a process whereby individuals adjust their affect according to the norms prescribed by a given social situation (e.g. Hochschild 1979; Thoits 1990; Gordon 1990). Participants' overwhelming optimism, confidence, and openness to risk, failure, and uncertainty was almost uniform across my sample. Without behavioral data on participants,

it is impossible to assess if my sample included individuals whose personalities were somewhat homogenous and that their attraction to entrepreneurialism was simply coincidence. However, Collins (1982, 2004, 1990) has argued that everyday situations that focus the attention of a group create a ritual situation, called an interaction ritual chain. These chains provide a foundation for emotional resources, such as people feeling sadder after a funeral or more humorous at a comedy show (1990: 32). Given the snowball method of sampling my respondents, it is likely that I interacted mainly with those who were succeeding in the space of open learning. Collins (ibid) argues “successful interactions in the power-status spheres breed enthusiasm, confidence, and a sense of meaningful affiliation with the groups in which emotional energy was gained” (Kemper 1990). The uniformity of affect across participants may signal successful interactions in the power-status sphere that unites them – or in this case, in something less institutionally embedded: the ethic of entrepreneurialism.

Participants described learning entrepreneurial values, which matched the process-oriented approach of open learning. Many found themselves drawn to either startups or a more entrepreneurial lifestyle, which they often used as a critique of either the labor market or of traditional higher education. That critique was always voiced as a denouncement, where they articulated that they stood against something while announcing that they had found something better: open learning and entrepreneurialism. Yet, when they described these confluent spheres, they did so without an emphasis on product and outcome. In line with Neff’s (2012) argument about a shift from collective to individual responsibility, and the work of scholars in the area of sociology of emotions (Kemper 1990), I would then argue that this inconsistency reflected something deeper than a shift in pedagogy, practice, or mobility pathways. It reflects what Molly articulates in the beginning of this paper: that young people have internalized a world that needs them to come alive in order to combat institutional crises. This is not a political statement; it is an individualized response to problems vastly distant from the individual level. It is an active choice amidst risk and uncertainty.

CONCLUSION

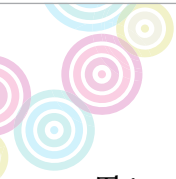


As described above, open learning has emerged within the public imagination as a potentially disruptive force in higher education. It has attracted the attention of policy makers, venture capitalists and the technology sector, key functionaries in higher education, teachers, students, activists, progressives, futurists, and researchers. Despite the amount of attention it has received in popular media, there has been very little research on open learning from the perspective of learners. This case study was designed to provide that vantage point. Open learning pairs well with the core contexts and properties of connected learning. My descriptive analysis of connected learning within open learning provides insight on how educators, designers, and technologists can continue to assess and design learning ecologies that promote the framework of connected learning. This framework was designed with access and equity as foundational, therefore, I am hopeful my analysis can contribute to a dialogue on how we can use connected learning to ease some of the national anxiety around higher education reform. However, we also cannot forget David Berliner's reminder to scholars of education that general education reform is often constrained by factors outside education, notably the prevalence of poverty (2006) and, more recently, the aftermath of the 2008 financial crisis (Ito et al. 2013). The open learners studied in this report and the participant observation done throughout the study speaks to some of these factors outside education. Reform that includes open learning as a pedagogical alternative should also heed the role of risk and uncertainty that becomes embedded in the emotions, narratives, and identities of young people.

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