



# The Case for Connected Learning

The Digital Age. The Global Economy. The Knowledge Society. All have impacted the way our society thinks about and interacts with higher education. No matter what we think of its current state, we must accept that our world has changed and will probably continue to change with mind-blowing speed and intensity. Therefore, higher education must also change if it is to remain relevant for our world.

It is time for citizens of Higher Education to advocate for  
Connected Learning for a Networked World.

Written by Laura Gogia  
July, 2014



## Introduction: Envisioning the Capacitor

**Anisa Kannan is beginning her junior year in the Virginia Commonwealth University (VCU) School of Engineering. Although officially in a pre-medicine track, she is also considering engineering as a career. This summer Anisa enrolled in VCU's first massively open online course (MOOC), best known by its Twitter hashtag #Thoughtvectors. It is her first online course experience. On a Friday afternoon Anisa sat down with me to discuss her thoughts about learning in general and #Thoughtvectors as a connected learning experience, specifically. Here is what she said.**

**A lot of my classmates** don't get the importance of working with each other. You know, you spend all that time in high school where you're told to write an essay and you don't get much back besides a graded essay. And then maybe you put it on a shelf somewhere. That's it.

**But early on in college I had this professor** who didn't just put a grade on my paper. He gave me real feedback. He'd say, 'This is great but have you thought about this?' Suddenly I saw that getting feedback, not just from one person but a lot of other people, would be extremely helpful.

**I was nervous about taking an online class**, because I understand how important interaction and group work is, but if anything this online course has had more opportunities for participation than any other class I've taken.

**I get a little frustrated** when I post and all I get for comments is three classmates telling me "Oh, that's so great!" I want to have a discussion, and that's not a discussion.

**But there are so many other people in this open forum** commenting on my posts too. It's not like just having one teacher, it's like having six or ten or twelve teachers giving me feedback and showing interest in what I'm doing. It can be a little overwhelming, but a good kind of overwhelming.

**I think I'll send my final class project [on math education reform] to the Board of Education.** It probably won't change anything but will anything change education?

**It's really cool** to think that I can send my work to people and make a difference. It's a long way from just writing a paper for a class and sticking it on a shelf after it's graded.

**I wish for every learning environment** to be an open space, both emotionally and physically. I want space to move around and talk to people. And I want to be able to experiment without people getting all judgy or biased.

**You know that virtual spaces** are wide open, right?

**The problem with laboratory classes** is that they have manuals, so even though they are hands-on they aren't the right kind of hands-on. You go in and there's instructions waiting for you, telling you what to do and how to do it.

**Say “Ok, build a capacitor.”** Don’t say “Ok, build a capacitor and here’s how you do it.”

**Hands-on.** I mean creating, making something. Groups of students figuring things out and sharing what they’ve found.

**We need to teach ourselves if we really want to learn.**

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A capacitor is an electrical device that accumulates energy and then discharges it when a switch is flipped. Institutions of higher education have the potential to be capacitors, helping young people build their passion for learning and doing before they flow forward — headlong and fully-charged — into the wider world. But there are challenges to overcome, not the least of which is an educational tradition that often leaves students disengaged, instructors frustrated, and both unfulfilled.

We are Academic Learning Transformation (ALT) Lab, a unit housed in the Office of the Vice Provost of Learning Innovation and Student Success, devoted entirely to faculty development and student engagement at VCU. In the following pages we briefly define the predominating educational tradition before describing how that paradigm is not consistent with the digital, networked age in which we live. Then we introduce connected learning, a powerfully relevant educational paradigm that capitalizes on the unique characteristics of the digital age to engage students in experiential and situated learning experiences. Pockets of connected learning already exist at VCU, and we will showcase some of them as the pace cars for our urgent action: **ALT Lab is aiming to make VCU a distinctive capacitor for deeper learning, high engagement, and student success by facilitating a decisive institution-wide pedagogical shift to connected learning.**



# Chapter 1.

## The Inertia of Tradition

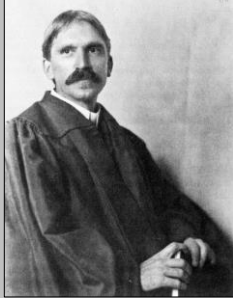
*Do not confine your children to your own learning for they were born in another time.*

– Hebrew Proverb

*If we teach today as we taught yesterday, then we rob our children of tomorrow.*

– John Dewey

One hundred years ago, the Industrial Revolution changed the United States from what had been a relatively modest agrarian society into a manufacturing giant with international clout (1). The needs of growing industry and the massive influx of immigrants from every corner of the world drove the first wave of national education reform that the country ever experienced. The reforms created a comparatively skilled workforce, but this was secondary to the policy makers' primary goals which were to



JOHN DEWEY

## ALT- EDUCATOR:

THERE HAVE ALWAYS BEEN EDUCATORS WHO HAVE REJECTED THE “INSTRUCTOR-CENTERED” APPROACH. JOHN DEWEY WAS ONE OF THE GREATEST “ALT-EDUCATORS.” DISCOVER WHY ALT LAB HOLDS HIM IN SUCH HIGH ESTEEM BY READING ABOUT HIS LABORATORY SCHOOL AND ENDURING MESSAGE.

bring discipline and uniform nationalism to as many young people living in America as possible (2).

Horace Mann had these goals in mind when he introduced the Prussian-Industrial educational model to the United States in 1852 (3). A strict physical and psychological hierarchy existed in Prussian classrooms, with students typically sitting in rows of desks behind a teacher standing at a chalkboard. Based on contemporary factory practices, this model promoted a pattern of lecturing and drilling for instructors, and encouraged obedience and conformity among students (2). As Ellwood Cubberley, then Dean of Stanford University School of Education, wrote in 1916: “Our schools are, in a sense, factories in which the raw products (children) are to be shaped and fashioned into products to meet the various demands of life (4).”

Over time the “Prussian-Industrial educational model” evolved into the “instructor-centered educational approach.” Similar to its predecessor, the instructor-centered approach encourages quiet and orderly classrooms. Professors convey facts that students memorize and then recite back to professors in graded examinations. Although the name of the educational model changed, the underlying assumptions remained the same: As long as instructors maintain proper class discipline and deliver content adequately, “good” students will succeed while “poor” students are culled from the system (2). The students’ social contexts, personal interests, or educational take-away have little impact on the general educational experience at all (5).

This model for education has remained stubbornly in place and intact in K-12 and higher education learning environments since Mann first introduced it. Some suggest that it is almost impossible to change any model that supports such strong power hierarchies (structural and psychological) as those that exist between students and teachers and teachers and administrators (6). Some blame the lack of change on barriers to instructional innovation, including the negative consequences of poor student evaluations if things do not go as planned. Others point to faculty reward systems that deemphasize teaching and prioritize research. The general lack of faculty pedagogical expertise has also been blamed; after all, many faculty are subject-matter experts who care deeply for their students but only know how to teach as they were taught (7, 8). Regardless of the reasons, the fact remains that many — too many — undergraduate

courses nationwide are as one VCU student put it, “...all lectures. All I do is sit quietly and listen to what someone else has to say.”

Instructor-centered, depersonalized education reflects the American educational context of the Industrial Revolution. Given the widespread illiteracy, social unrest, scant educational infrastructure, and almost nonexistent understanding of how people learn, an efficient, uniform, nationalistic educational approach might have been a reasonable – or at least an understandable – place for reformers to start. But, over time, contexts change. We have changed. And here’s how.





## Chapter 2. A Networked World

*The only person who is educated is the one who has learned how to learn and change.*

– Carl Rogers

*The illiterate of the 21st century won't be those who can't read & write but those who can't learn unlearn & relearn.*

– Alvin Toffler

**Tuesday August 6, 1991:**

*The WorldWideWeb (WWW) project aims to allow all links to be made to any information anywhere.... The WWW project was started to allow*



TED NELSON

## ALT-HYPertext:

ALT LAB FEELS IT IS FITTING THAT BERNERS-LEE INTRODUCED THE WWW PROJECT TO THE WORLD THROUGH A NEWSGROUP CALLED ALT.HYPertext. HYPertextING HAS A RICH HISTORY. THE MEMEX, THE MOTHER OF ALL DEMOS, COMPUTER LIB/DREAM MACHINES, HYPertextING CAN BE AN ARTFUL AND PHILOSOPHICAL ACT THAT SUBVERTS LINEARITY AND PROMOTES ALTERNATIVE OR SCAFFOLDED FORMS OF EXPRESSION. FROM THAT PERSPECTIVE, HYPertextING IS FAIRLY AWESOME.

*high energy physicists to share data, news, and documentation. We are very interested in spreading the web to other areas, and having gateway servers for other data. Collaborators welcome!*

With these comments about connecting and collaborating Tim Berners-Lee made the WorldWideWeb (WWW) project public. It was not the first milestone in internet history; indeed, the internet's modern history can be traced back through the 50 years preceding Berners-Lee's announcement, to Vannevar Bush, Doug Engelbart, Ted Nelson and many others. But the introduction of the WWW and the Mosaic web browser two years later signified the first time many everyday people were able to grasp the concept of a networked world (9, 10, 11).

### What is a networked world?

As a *thing*, a network is an interconnected group of people or objects. The internet is an example of a network, although technically it is a super-network that connects regional and national information and communication networks into a worldwide web. As an *action*, to network means to link, connect, or operate within a network, exchanging information and developing contacts with people or things (12).

To be networked means to accept your place in a global community, to respect that cultures that have never touched before are now on the same plate. Step off of a plane in Istanbul, Mumbai, or Sao Paulo and there is a chance that you will hear the same song playing on the radio because social media allows art, entertainment, news, opinions, and trends to leap over oceans. For some people this leads to concerns about increasing cultural homogenization (13). For others it leads to a childlike wonderment and awe, because it signals the potential for any unlikely individual or otherwise under-resourced entity to impact the world. The internet, it has been suggested, can be a big slingshot in the face of any Goliath (14, 15).

To be networked means to actively participate. Individuals in a networked world receive, relay, and create information, acting on and reacting to people and situations in a far-flung ecology. Henry Jenkins frames life in this digitally connected world as a "participatory culture" evolving as such because of low barriers to artistic expression, civic engagement, and self-promotion and publication (16). Individuals consume digitized information, but they also use digital tools and platforms to annotate,

combine, imitate, support, and criticize anything and everything they consume. We don't just watch a YouTube video, we "like" it, embed it in our blog posts, and record our own video, which triggers someone living in different hemisphere to do the same.

To be networked means to personalize and individuate actions or communications specifically for the context. "The media is the message," wrote Marshall McLuhan (17). Effective citizens in the networked world understand that the communication styles and digital platforms they choose impact the message and how others will respond to it. No longer limited to text-based correspondence or voice-only phone calls, networked individuals consider the needs of the situation before generating video, podcasts, screencasts, dictation, animation, emoticons, or images using synchronous or asynchronous formats that allow for broadcasting, crowdsourcing, dialogue, or any combination thereof.

This world has implications for how we, as educators, think about preparing students for their futures.





## ALT-PRINTING:

WITH ONLINE PURCHASING AND 3D PRINTING, IT IS POSSIBLE TO ORDER SOMETHING FROM A FAR AWAY PLACE AND PRODUCE IT IMMEDIATELY (AND EXACTLY TO SPECIFICATIONS) IN A 3D PRINTER. ALTHOUGH NOT AS SPEEDY OR STREAMLINED AS A *STAR TREK* REPLICATOR, 3D PRINTERS MAKE IT SEEM AS IF THE NETWORKED WORLD CAN PRODUCE OBJECTS FROM THIN AIR. VCU FACULTY IN SUCH DIVERSE AREAS AS THE SCHOOL OF THE ARTS AND SCHOOL OF WORLD STUDIES ARE ALREADY USING 3D PRINTING TO ENHANCE THEIR TEACHING AND SCHOLARSHIP. ALT LAB HAS A 3D PRINTER SO THAT IT CAN HELP FACULTY EXPLORE APPLICATIONS IN THEIR OWN DISCIPLINES.

**Fact:** The networked economy is not oriented towards production the same way manufacturing or agricultural economies are (18). While the networked world has enabled more streamlined dispersal of tangible things, no amount of digital technology completely erases the time it takes for a bubble-wrapped, brown-papered package to travel across the Pacific. The strength of the networked world lies in its ability to provide services: the more technical and niched, the better.

**Implication:** Therefore, the networked world values workers with skills that allow them to perform highly technical services in rapidly changing, increasingly digital environments. These services often require people to solve complex and situation-based problems, typically the sort that cannot be entirely anticipated before they occur (19).

**Fact:** The networked world is built of raw data generated and tossed into a potential and virtually ungoverned space. The atomic mass of plutonium. The capital of Belize. The etymology of a particular verb. All of these facts — this *stuff* — can be stored and accessed in the networked world quickly and essentially for free. An argument, one that is gaining traction in some academic circles, has been made that content knowledge can and should be universally accessible (20).

**Implication:** While internalizing some content knowledge will always be important, content— the *facts* and the *stuff* — has been freed from the medieval monastery. To a certain degree content knowledge can be outsourced to the network, and most of society instinctively understands this. Surveys and Delphi studies tell stories of large American employers who value critical thinking, collaboration, communication, and creativity — the so called “21st century skills” — as much as traditional classroom content or even computing skills (21, 22). Value and employability, it seems, lies in the ability to work with others to filter, interpret, organize, connect, and present the *stuff* in ways that makes it manageable and useful. The value is not necessarily in the *stuff* itself.

**Fact:** The networked economy has shaped a workforce that is inherently different — different motivations, practices, and purposes — than those of the past agricultural and industrial economies. Recent research suggests that the “long job” of our grandfathers — who went to work for a company and left fifty years later with a pension, a banquet, and a watch — is no longer universally wanted or available. For a variety of reasons, the



## **ALT- PUBLISHING:**

IT HAS TAKEN EUROPE AND PARTS OF ASIA BY STORM SINCE ITS FORMIDABLE INCEPTION IN BUDAPEST OVER A DECADE AGO, BUT OPEN ACCESS PUBLISHING IS ALSO MAKING GREAT STRIDES IN THE UNITED STATES PARTICULARLY WHERE GOVERNMENT, ACADEMIC RESEARCH, AND HEALTHCARE MEET. ALT LAB RECOGNIZES OUR PHILOSOPHICAL KINSHIP WITH THE ONGOING OPEN ACCESS INITIATIVES AND PROJECTS AT VCU. WE ALSO RECOGNIZE THAT THESE PROJECTS OFTEN MAKE EXCELLENT CONNECTED LEARNING EXPERIENCES.

Millennials change jobs twice as often as preceding generations did or do (23, 24).

**Implication:** The content knowledge that individuals need to know changes swiftly and decisively. As technology advances and global markets expand, as people bounce through different jobs either from personal preference or marketplace whims, as the internet keeps streaming – stubbornly, unrelenting, and interminable with *stuff* – it is no longer enough for college graduates to be able to follow instructions, memorize facts, and provide uniform responses that would produce “A’s” on traditional exams. As our context changes, our educational needs change too. And so,

**Given that successful citizens of the networked world are those who understand and participate mindfully in a global, digital community,**

**Given the need to equip all students with valued and valuable skills (for the good of society and for themselves),**

**Given the growing importance of collaboration, communication, critical thinking, and creativity in relationship to content knowledge,**

**Given the unique characteristics of the networked world that allow for a more level playing field, enabling more individuals to respond to, create in, and make an impact on the world,**

**Given the need to move away from industrial age educational models so that our practice as educators is relevant to and consistent with this world in which we live,**

**And the need to be nimble as our world continues to change with unprecedented speed,**

**Given all of these things, how should educators respond?**



## Chapter 3.

# Connected Learning

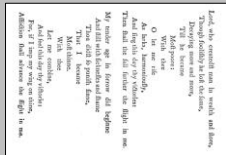
*I don't think education is about centralized instruction anymore; rather, it is the process of establishing oneself as a node in a broad network of distributed creativity.*

– Joichi Ito

*People learn by confronting intriguing, beautiful, or important problems.*

– Kenneth Bain

Connected learning is not a learning theory. It is not a specific set of teaching techniques. It is not, as Anisa Kannan would put it, a laboratory manual with step-by-step instructions. Rather, connected learning is an educational approach based on the same underlying philosophies that



## ALT- ENGLISH

DR. JASON COATS,  
ASSISTANT PROFESSOR  
OF FOCUSED INQUIRY IN  
VCU'S UNIVERSITY  
COLLEGE, TEACHES ENGL  
215: VISUAL POETRY  
ONLINE TO UNDECLARED  
SOPHOMORES & NON-  
ENGLISH MAJORS. FOR  
HIS INSIGHTS ON  
ENGAGING STUDENTS  
THROUGH BLOGGING  
AND TWITTER-MEDIATED  
CLASS DISCUSSIONS,  
[CLICK HERE.](#)

drive the networked world (25). It occurs in communities of practice, defined as generative or action-oriented entities bound together by a shared purpose (26). Connected learners learn by participating, creating, and making an impact in an integrated school-home-community-virtual-openly networked space. In other words their coursework allows them to learn through engaging as empowered citizens in the networked world: by doing now as students exactly what we hope they will do in the future (27).

**Connected learning is participatory.** Successful citizens in the networked world understand their role in a relatively nonhierarchical community. They take advantage of informal mentoring when it is offered and mentor others when the opportunity arises (16, 25). Connected learning experiences create similar circumstances within the classroom. Students learn that expertise comes in many forms, and they begin to consider and weigh the value of different perspectives. Instructors are just one type of expert that exists within a connected learning classroom; they provide mentorship and resources for group learning when necessary, but are mindful that peer feedback and other learner contributions may be just as powerful, or more so, than their own (27).

Excellent connected learning experiences also show students how they might engage with course material in a community of practice that extends beyond the classroom (28). VCU sophomores enrolled in Dr. Jason Coats' classes participate in Twitter-mediated discussions weekly. Coats uses these discussions to replace more traditional group projects that often suffered when student were unable to coordinate their schedules. When a student's class tweets capture the attention of a Twitter user not enrolled in the course, Coats observes carefully (and quietly) as the outside participant deftly guides the student into a deeper understanding of the poem. Scenarios like this demonstrate how students might benefit from academically oriented social media interactions, potentially receiving a variety of feedback and connecting their studies to people and situations outside traditional academic boundaries.

**Connected learning is generative.** Learning through the creation of a product with a clear purpose for an authentic audience is a well-supported educational construct (29). The relative ubiquity of digital cameras, mobile phones, tablet computers, and open source web apps in



## ALT-BIOLOGY

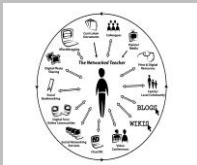
VCU DEPARTMENT OF BIOLOGY FACULTY [DR. DIANNE JENNINGS](#) AND [JILL REID](#) LEAD THEIR FIELD BOTANY STUDENTS IN CREATING AN [ONLINE, PUBLICALLY AVAILABLE RESOURCE](#) FOR THE [JAMES RIVER PARK SYSTEM](#). FOR DETAILS OF THIS PARTICIPATORY, GENERATIVE CONNECTED LEARNING EXPERIENCE, PLEASE [CLICK HERE](#).

the digital age allows students to generate and publish professional-looking creative content with unprecedented ease. The global nature of digital age communication also increases the likelihood of reaching a wider audience ([25](#)).

VCU Department of Biology faculty Dr. Dianne Jennings and Ms. Jill Reid co-teach Field Botany, a course that involves the curating, identification, and organization of flower and plant specimens. The course has always culminated in the production of student field journals, and the instructors have witnessed how engaged students are when they create something with a clear purpose: “Students have always liked this course because they feel like what they have learned can be applied and shared with others,” says Jennings. But when Jennings and Reid asked students to collectively upload their specimen photos to an open WordPress site, students were no longer making small, individualized journals to share with interested friends and family; they were creating a comprehensive, interactive online resource for the entire Richmond area. “They got really excited when we reminded them their collective work really equated to a publication that would be used by the public – and they were all authors on it,” Jennings reports. Digital networking allows students to connect schoolwork with community engagement in ways that are exciting and meaningful for everyone.

**Connected Learning has shared purpose.** Shared purpose implies the individuals have personal and shared connections to the work being performed. Learners are most engaged when they are grappling with content, issues, or skills that interest them on a personal level with outcomes that reach beyond their school grades ([25](#)). As John Dewey wrote: “Every subject gives an opportunity for establishing cross-connections between the subject matter of the lesson and the wider and more direct experiences of life ([30](#)).”

Drs. Reed and Smith of the VCU School of Education have firsthand knowledge of the educational power of personal interest and shared purpose. Passionate lifelong advocates for educating through [universal learning design](#) (UDL), they recently began collaborating with instructors from [Mico University College](#) in Jamaica to create a virtual classroom meant to provide professional development in UDL for educators,



## ALT- EDUCATION

VCU SCHOOL OF  
EDUCATION FACULTY  
DRS. EVELYN REED  
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LEARNING IN THE  
PROCESS. FOR MORE  
INFORMATION, [CLICK  
HERE](#).

internationally. Reed and Smith recruited VCU doctoral students who were interested in UDL to assist them with curating, generating, and assessing the virtual classroom content. What has resulted, according to Dr. Reed, is “dynamic, organic learning in which students get to see how what they read is applied in the real world. Because it is a real project, we have all the wonderful opportunities that the real world gives us - the often unexpected and often expansive need to learn new skills and do new things that we as instructors cannot begin to anticipate.”

**Connected learning has impact.** Excellent connected learning experiences are conducted in the open, involving public digital platforms such as but not limited to Twitter, WordPress, YouTube, Flickr, or SlideShare (25). Public platforms create opportunities for students and instructors to explicitly connect academics to the wide world, making study and scholarly dialogue inherently relevant to life. When students and instructors can see that people are interested in their work and that their efforts might make a difference in some way, they are inspired to work harder and learn more.

As one undergraduate said when describing her experience of open blogging and tweeting in VCU’s recent massively open online course (MOOC): “A professor from an entirely different university saw my posts and offered to let me interview him for my project. It feels so nice to have so many people from all over interested in my education...knowing that a lot of people are interested pushes me to come up with something inspired and unique for my final project. It won’t just be any old paper.”

Being able to harness the sharing-power and self-publication properties of the internet can amplify the impact of student work, just as it spreads the work of professional and amateur recording artists from Istanbul to Mumbai to Sao Paulo. We see that in Drs. Reed and Smith’s virtual classroom, where VCU student research provides Jamaican teachers with professional development materials; also in Dr. Jennings and Ms. Reid’s Field Botany class, where student research provides a Richmond community public service; and in Dr. Maghboeba Mosavel’s Community-Based Participatory Research seminar, where student create digital stories to be used by local nonprofit organizations for promotional purposes; and Dr. Marcus Messner and Ms. Vivian Medina-Messner’s VCU Social Media

Institute, where American and Iraqi students collaborate to create social media campaigns for nonprofit organizations; and in so many other VCU classrooms where the power of digital technologies are harnessed to stimulate deeper learning, high engagement, and student success. When connected learning is achieved, it combines personal interest, academic goals, and community presence into one charged, networked experience. It simulates what we hope students will continue to do throughout their lives: learn, create, and share.



## Afterward: Building the Capacitor

*Dream what you would love students to learn and then throw out the way you normally think about it. If you let the learning emerge through a real world experience, all the content will definitely be incorporated.*

— Dr. Evelyn Reed, Associate Professor - VCU School of Education

*I can be up at 2AM and tweet something out about class right then. It's not like a typical classroom discussion, which only happens in the classroom. I spend more time thinking about class because I can act on my thoughts – anywhere, anytime.*

*–Anisa Kannan, VCU Class of 2016*

Having met with Anisa Kannan, having read her blog posts and followed her Twitter feed during the course of the #Thoughtvectors MOOC, I can confidently state that any VCU faculty member would be happy to have such a student enrolled in their class. Anisa has an advantage over many students, the students she identified as those who think of school as writing a paper, getting a grade, and then putting the paper on a shelf (or, worse yet, the trash). A VCU professor triggered her learning transformation by providing her with enthusiastic and thoughtful feedback about her assignments. What seems like the everyday work of a faculty member launched Anisa into a connected learning paradigm that will serve her well for the rest of her life.

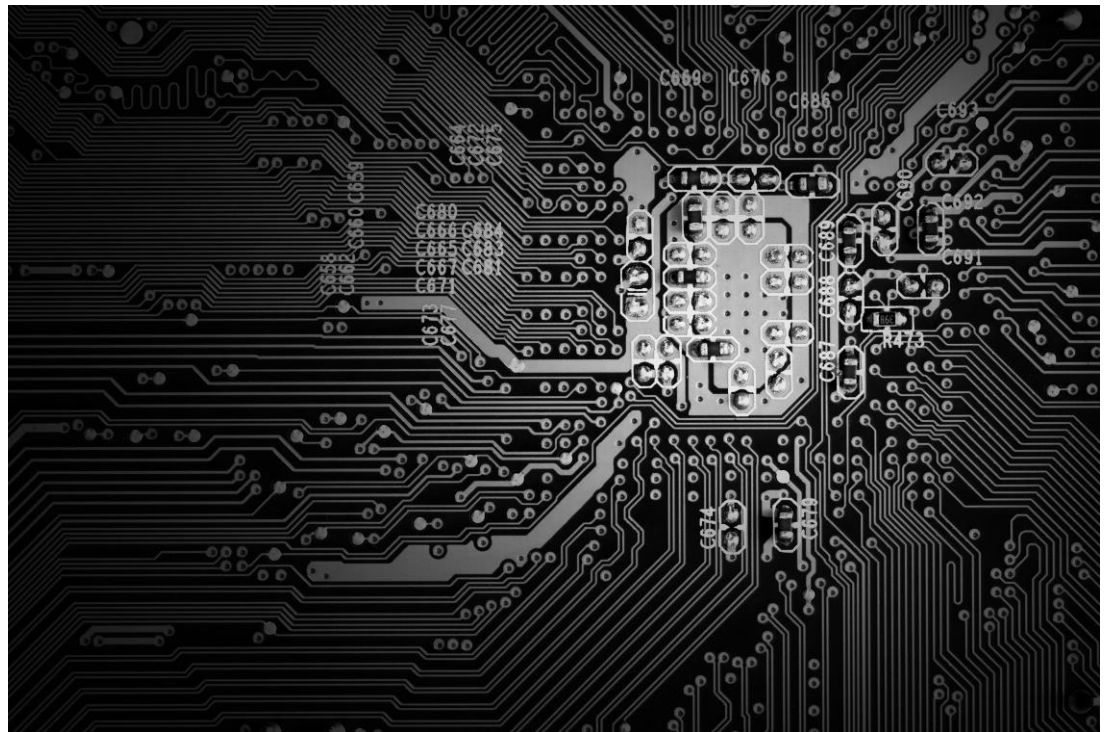
Not all students will be removed so easily from the traditional, instructor-centric model of education as Anisa was. They are so used to being told what to learn and how to learn it that they often resist alternative learning environments. This does not mean we should not try.

From a faculty perspective, building connected learning experiences is not easy, either. Every successful connected educator with whom I spoke mentioned his or her struggles to let go of the old instructor-centered, content-centered paradigm. There is a deep sense of responsibility that all conscientious faculty members have about delivering content. Those who move beyond it—who move to a deeper understanding of what it means to help students learn — are a little brave for even trying.

And yet, as Anisa so wisely said, “We need to teach ourselves if we really want to learn.” Today’s students need to do more than follow directions, perform basic skills, and conform. If they are to thrive they need to learn how to participate, create, and impact their world for good. And above all, they need to be flexible and realize they will have to learn new and different things every day of their lives. To force students to wait until after they finish their college educations to draw these conclusions (if they draw

them at all) is unnecessary, and makes higher education appear irrelevant to the outside world. Connected learning is an educational paradigm that allows students to practice living in the world by having them learn in the world. As citizens of Higher Education, ALT Lab is asking you to join us in our bold move to keep higher education relevant for our students and our times. We are asking that you help us create:

## **Connected Learning For a Networked World.**



# Endnotes

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