Teaching Creativity

A Call for the Teaching of Creativity in the General Education Curriculum

Dr. Bruce R. Jackson

Student as Consumer vs. Student as Creator

School websites often provide long lists of skill sets students need to be employment ready. Most of them boil down to reading, writing, computation, critical thinking, and an ability to communicate using an ethical reasoning that respects diversity. These lists also include collaboration, cross-cultural understanding, technological savvy, and the promotion of life-long learning. However, I am always startled when some of these lists do not include the words "create, creative, or creativity." That is about to change.

Since 2002 *The NMC New Media Consortium Horizon Report,* published by Educause, annually produces an analysis of the current state of educational technology and attempts to predict changes in teaching methodology resulting from the rapid evolution of new technologies. While futurists warn of the dangers of making predictions during the current worldwide renaissance, the *2014 Horizon Report* suggests that within the next three to five years the modern student will change their expectations of their education from a student as "a consumer to a creator."

The consumer approach towards education deeply concerned my geologist father after 33 years of teaching. He considered the checklist approach to education an anathema to a science that requires the interpretation of minute and highly dispersed pieces of information into a coherent theory. From his perspective, geology, by the very nature of the discipline, has to be creative. It was his generation of geologists that developed the modern understanding of plate tectonics.

In *Creativity in Education* (University of Venus, GenX Women in Higher Ed, 7/7/2013) Anamaria Dutceac Segesten suggests two reasons why teaching creativity is a challenge today. First, many students demonstrate a propensity towards conformist thinking that delivers expected answers rather than pursues innovation. Second, the reliance on "rules" of many educational institutions do not prioritize creativity. Such schools may fall into the trap of a form of standardization and memorization that fits quantitative tests.

While in "normal times" curricular change has generally been a slow process, education in the modern renaissance is moving at an exponential pace. Changing the expectations of students from a consumer to a creator approach to education will likely originate from student demand. Given the generational trends today, this suggests a significant shift in some student attitudes.

I know of many academic advisors who are frustrated by the student lack of attention to and understanding of the general education sequence. So often a course is selected because it would be easier, of more interest, or more convenient. To postpone the development of language, math, communication, and general knowledge skills out of personal preference

threatens important mind preparation and learning connections that are required for the cultivation of lifelong learning skills.

The consumer based approach towards education fails to make interdisciplinary connections through a progressive learning sequence that builds skill sets needed for lifelong learning. A check list education simply views individual courses as nothing more than discrete steps to a diploma resulting in a job. Students who endeavor to just meet degree requirements often fail to recognize that what is learned in math, language, and communication classes provide the necessary skills to be successful in the humanities, the social sciences, and the sciences.

This student propensity to misunderstand the importance of creativity in the development of lifelong learning skill sets is, at best, short-sighted. This is why teachers in virtually every discipline need to make a case for developing a working knowledge of a learning processes that utilizes the building blocks of the general education curriculum. The understanding of interdisciplinary relationships is key to this process and becomes the foundation for the nurturing of creativity. Until students become cognizant of the value of this process in learning, they may see no reason to exert the required effort to develop their own creative skills. It is all too easy to view education simply as a means to an end (a job).

Though my father's experience dates back to the 1980's, checklists and consumerism in education has increased in recent years. There are students who may never see an advisor in person as they self-advise their selection of classes. These students tend to take ownership of their "purchased education" with an expectation of entitlement. One side effect of this entitlement attitude is the belief that one should make an "A" with little or no effort.

Many institutions endeavor to reverse the tendency for self-advisement through the professionalization of the academic advising staff. This is long been a major objective of the National Academic Advising Association. NACADA contends that academic advisors are, at their very core, teachers serving as frontline professionals helping students navigate their education and preparing for a life of learning.

Academic advising is not only about understanding and enforcing sequential course checklists. Effective advisement instructs students on the importance of understanding relationships between subjects. Advisors teach students the core skills needed for lifelong learning as they help with planning and working for the future. For example, one takes college algebra not because they will become mathematicians (though a lifetime of computational competency is a very good idea), but because it trains the mind to think in abstractions. The recognition of the progressive building blocks of the general education curricula is essential in the preparation for lifelong learning. Mastering all the general education skill sets is not only the concern of all educators, it is the concern and expectation of employers as well.

The Expectation Gap Between Employers and College Graduates

There is an emerging gap between the expectations of employers and the skill sets of many of our college graduates. Nobel economist Paul Krugman notes that "If you had to explain America's economic success in one word; that would be 'education.'" The report titled *"A*

Stronger Nation Through Higher Education" (Lumina Foundation, 2010) suggests a national goal of 60% of the population should have some form of postsecondary credential by 2025. While 49% of the population of Massachusetts currently has some form of postsecondary credential, it is estimated that by 2018 70% percent of the new jobs there will require some postsecondary education. The credentialed population of my state comes in at a woeful 36%. The county where my campus is located is at 18.9%. While these numbers indicate the importance of student program completion, they also suggest a reason why there is a gap emerging between employer expectations and student skill sets. In our rush to educate a huge population for the new jobs of the 21st century, a consumer based education is very tempting when compared to the more labor intensive model that teaches creativity.

The most serious ramification of a checklist approach to education is that consumerism seldom prepares students to meet the expectations of many employers. Self-selecting courses as if they were sticky-widgets to be bought in the marketplace has serious ramifications. Modern employers are looking for candidates that have the ability to take the initiative. Choosing to avoid college algebra with its mind training potential is hardly "taking the initiative." In fact, the avoidance of working through a math sequence is a direct abrogation of the development of self-management skills that so many employers desire and value. Developing sequential learning skills and the ability to make a wide variety of connections is what employers expect of our graduates.

Similarly, the networking skills and team effectiveness that values leadership and followership alike are shortchanged when education is purchased rather than incorporated into a creative learning lifestyle. Maybe some of our students innately possess these valued skill sets, but placing these skills within the context of a learning environment is invaluable to employers who need employees that are capable of completing creative tasks through a collegial and cooperative effort. Curricular avoidance impacts the ability to complete assigned tasks.

In an article *At Sea in a Deluge of Data* (Chronicle of Higher Education, July 7 2014) Allison Head and John Wihbey focus on the increasing gap of employer expectations with our graduates in the area of online research. Many of our students have a mile wide and inch deep understanding of the data deluge on the internet. While they may be great at looking up definitions and cherry picking factoids from vast internet resources, these authors point out that employers need graduates to be "patient and persistent researchers… able to retrieve information in a variety of formats, identify patterns in an array of sources, and dive deeply into source material." As hands-on library resources dwindle and stacks are increasingly relegated to warehouses far distant from campus, students are often unaware of the vast array of resources and databases available through interconnected online libraries.

In this age of global competition, the need to teach creativity is acute. The problem students now face is that they are preparing for jobs using technologies that don't exist. They are facing more career changes than ever. The "Did You Know?" YouTube series has become such old news even politicians quote it. The stakes for developing a creative society are high indeed. How is this accomplished within the context of a massive worldwide renaissance where creativity abounds? This age, based on a rapidly changing communication system and the exponential growth of knowledge, is moving at such a fast pace it will be challenging to separate, organize, and incorporate new instructional methods for the modern classroom.

Teaching Creativity in the Modern Classroom

As the modern renaissance advances at a historically unprecedented rate, who knows what the modern classroom will look like in five years? The emergence of hybrid forms of instruction has redefined the classroom far beyond brick walls. It has become a virtual world where new technologies come and go. Because this was not a part of the traditional education of our older teachers, the development of new instructional pedagogies teaching creativity will demand a very high level of creativity and experimentation as new methodologies evolve. This is why diversity is so vitally important in this new renaissance age.

Sir Ken Robinson is an important advocate of the cultivation of teaching creativity in education. In *To Encourage Creativity, Mr. Gove, you must first understand what it is* (The Guardian, 5/17/2013) he defines creativity as a dynamic process that cultivates "original ideas that have value." He understands that creative work has identifiable phases that enable connections across disciplines and develops appropriate metaphors and analogies. He asserts that teaching creativity relies on fresh thinking and bold risk taking.

Sir Robinson eschews the notion that only special people such as artists can be creative. As a composer of music and improviser of jazz I am convinced that teaching creativity must be infused into the entire higher education curriculum, not just the arts. Creativity is not some "uninhibited self-expression" founded on divine inspiration that requires no work. Developing creativity in a student is a highly personal process. It is not a linear checklist where a set of skills must be mastered before creative thinking may take place. "Facilitating the creative process takes connoisseurship, judgement, and creativity on the part of teachers… [who] need to feel free to innovate without the constant fear of being penalized for not keeping with the program."

Teachers face a major shift in the educational environment. In my youth teachers were disseminators of information in lectures and textbooks while students were a memorizer of facts and principles to be parroted back on objective tests. New educational models suggest that the teacher may become a facilitator, mentor, and co-learner while students focus on research and solving problems through projects that cultivate creativity. These trends require an understanding of the pedagogy of creativity.

While defining the evolving modern classroom is difficult, the inclusion of teaching creativity is even more daunting. Models are emerging that are radically different from the classroom of my youth. Even my children who recently graduated from college only barely encountered the potential pedagogical change as open, flexibly directed learning, competency based education, and many other methodologies emerge. All this is driven by new technologies and massive amounts of information that support the evolution of a veritable plethora of hybrid formats.

In considering this Mary Bart suggests that there are *The Five R's of Engaging Millennial Students* (Faculty Focus: Teaching and Learning, November 16, 2011). She suggests that millennials prefer research-based methods that use less lecture and contain more multimedia and collaboration with pears. She points out that millennials demand relevance, seek a relaxed

learning environment, value rapport with teachers and colleagues, and want a clear rationale for policies and assignments.

As the "three-minute attention span" increasingly dominates our culture, we have found that students are disinterested in faculty pouring information into their heads via lecture and PowerPoint even though that was how most teachers were taught. When a student turns away from a consumer checklist to a creative approach to their education, they tend to rise to the task and enjoy the challenge. As Alvin Toffler puts it: "The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn."

Allison Head and John Wihbey propose that librarians are uniquely well suited to become involved in research instruction as online library databases deluge us with information. When teaching general education introductory computer information systems and college orientation classes, I dedicated a significant amount of class time inviting local reference librarians to teach in detail the use of data bases in research. Presentations were followed with treasure hunt exercises seeking to find a wide variety of types of information through interconnecting resources. This may not have been the most popular instructional method I have employed, but its effectiveness was directly proportional to its rigor.

In *The Art of Creativity* (Psychology Today, March 1, 1992) Daniel Goleman and Paul Kaufman examined motivators that may stimulate creativity in the contemporary classroom. They suggest that when developing a creative environment "small is better" as close-knit units enhance what Robert Sternberg calls "group IQ." They call for an educational environment that vanquishes negativity and values intuition. They point out that a hovering and watching surveillance, worry about grades and evaluation, promoting a win/lose competition, the establishment of an over-control that does not allow exploration or discovery, and overly grandiose expectations of prescribed results are all killers of creativity.

I am convinced that as "humanism" was the key idea of the European Renaissance (1400 – 1600), "diversity and collaboration" are key concepts of the current renaissance. Many modern scientific developments are products of cooperative teams of specialists rather than the lone genius hiding out in Moms garage (though there will always be those as well). This is why it is important for teachers to facilitate creative group activities while making room for students who want to go it alone. In this brave new world, it is about "either, or, and the holy both."

In my experience it is far easier to stifle creativity than it is to teach it. It is less threatening to expect prescribed answers rather than try to understand the complexities of a student's thinking process. For musicians it is difficult to face the fact that your students may indeed turn out to be better performers than you are. Reversing that attitude in faculty is vitally important in teaching creativity. I am proud to say that most of my bass and guitar students can play rings around me. The central objective of my teaching to advance knowledge far beyond myself.

Anyone deeply committed to teaching creativity knows that teachers face a delicate balance at the point of personal contact and providing creative space. Passiviness or indifference will not cultivate creative thinking. We all know how difficult it is to help students understand the applications of what is taught. We have witnessed the tyranny of criticism that make students

feel as though they are stupid when asking questions or seeking different approaches to solutions. Altering attitudes from competition to cooperation represents a shift in our culture.

In a knowledge age where fully teaching any subject is increasingly impossible, our teachers will find it difficult to give students the space needed for creative endeavor. Additionally, it is equally challenging to develop assessment models as students cultivate their creative skills. In contradiction to quantitative and objective testing, failure may well be much more important than success. In a classroom where collaboration, cooperation, questioning, creative thinking and the pursuit of knowledge is highly valued, who is to say that a failed project is more or less valuable than one that provides expected results? Even so, there are many instructional settings where reaching a specific result is the necessary learning objective. It is my contention that assessment will be one of the major challenges in the incorporation of teaching creativity into the higher education curriculum. Perhaps those who argue against grades have a point when considering the many challenges of teaching creativity in this renaissance age.

Individualizing the Teaching of Creativity

As an artist I believe that creativity is an essential part of human life, not just the purview of an elite few. The delimitation of creativity to stardom is an unfortunate cultural phenomenon. The challenge we all face in teaching creativity is convincing each student that they too may learn how to be creative. This will require helping individual students learn sound progressive processes that utilizes interdisciplinary relationships within the general education curriculum.

I suspect that when it comes to the application of creativity, no two students are alike. As a teacher of the musical arts I focus on teaching the student first, then the subject. For example, when teaching students how to hear two simultaneous notes, there are usually as many different approaches to that task as there are students in the room. This means that every class is different and calls for a high level of imagination and creativity in teachers.

I have long believed that if I am to be effective in teaching creativity, than I must be able to demonstrate my own creative process by producing something. However, in our current culture this approach is rarely enough. There are some music majors who consider music composition is something only a Bach, Mozart, or [your favorite star] is capable of doing.

There is a history behind this extraordinary misconception that has infused our popular culture. As a youngster I played in garage bands because everyone did. Today it is hard to find a garage band. When the only music folks ever listen to is over-produced studio music on their MP3, it is no small wonder that at the highly personal level of live music, with all its human foibles and flaws, has become increasingly passé. Human performance does not compare well to highly edited recordings on a purely objective level devoid of that undefinable "human element." In an age where more music is being produced than in all of history, it is ironic that the music industry is shrinking as traditional performing venues go dark while DJs spin disks of a few highly selected hits. With this contradiction so deeply imbedded in our culture, how can we help our students be creative? On the individual level we must go beyond the "I'm better than you" perspective if students are to embrace the creative challenge. Students must understand a deeper reason to create and be rewarded for their curiosity and effort.

The central problem is that many higher ed students have little personal experience with the creative process. In a massive educational system with a crowded curriculum it is easy miss creative development. For example, I have found that students hate orchestral music for no other reason than they have rarely listened to an orchestra in person. An occasional school field trip to symphony hall is not enough to cultivate an appreciation of orchestral music, much less understand the creative process that it represents. It takes time and effort to be able to hear and comprehend music. While students do not have to be fully trained experts to be creative, it is hard to create when they have no depth of experience with the creative processes itself.

Teaching creativity will require a significant shift in student perceptions and attitudes. Perhaps employer expectations and dissatisfaction with graduates has reached the point where students recognize that there is a real need for a change in their preparation to be creative employees. While I meet with many students who truly get it and have the desire to be creative, I still see many more students relying on checklists. There is a lot to do here if our students are to understand the importance of learning how to be creative by the application and connection of their entire curriculum; indeed, by life itself.

Mike Brown suggests that there are *7 Important Creative Thinking Skills* (Brainzooming, June 16, 2011) that need to be developed in individuals working with groups on creative projects. Author of the e-book titled *Taking the NO out of InNOvation* these seven creative skills are:

> 1. Suspending advocacy of your own idea to push for another person's concept.
>
> 2. Putting your own idea to the same test you apply to an idea from someone else.
>
> 3. Combining two different ideas and making them better (not muddled) as one idea.
>
> 4. Letting someone else take "ownership" of your idea in order to build support for it.
>
> 5. Displaying the patience to wait for someone else to say what needs to be said so all you have to do is agree.
>
> 6. Sticking to your guns amid challenges to a creative idea which makes solid strategic sense.
>
> 7. Always looking for new creative skills to develop in yourself and those around you.

It is clear that there will be a number of myths about creativity that will have to be expunged in our culture. For example, while attending a music convention I listened to a composer present a lecture on how she prepared an improvisatory demonstration. After a long theological discussion about seeking inspiration from God, she proceeded to a nauseating noodling that so frustrated me that I slammed the door as I fled the room.

Of all the improvisationists I have worked with, rarely have our improvisations been the result of preparation to perform by forming a prayer group (though my church musicians always include prayer in rehearsal and worship). Each of us bring our personal experience and skills to each improvisation. We work hard, plan, practice, revise, discuss, play again, reflect,

prepare to perform, perform with all the intensity and energy we have, and are brave enough to evaluate our performance. When we improvise we recognize the skeleton on which we hang vital parts to be covered by a defining skin. We are good at listening and responding to each other's ideas. We know when to lead and when to follow. We are not apologetic about what we do; we simply do it and enjoy the doing of it. The end product is the culmination of the efforts of every one of us. There may be a star, but where would he/she be without the band to make them look good?

The interface between prayer and improvisation is a serious challenge for church musicians. I practiced diligently for over a year before I first improvised melodies to scripture or prayer. While the experience may be mystical, the skills required for effective musical setting of prayer or text truly is truly a work in progress. *The Urantia Book* (44:1:14-15) informs us that earthbound musicians have a lot to learn when it states: "The best music of Urantia is just a fleeting echo of the magnificent strains heard by the celestial associates of your musicians. While you have assembled some beautiful melodies on Urantia (Earth), you have not progressed musically nearly as far as many of your neighboring planets."

Perhaps the time has come to move away from sports analogies when contemplating the art of teaching creativity. I suggest that we consider a symphony as a better metaphor. The objective of that endeavor is not about winning or losing. It is about presenting our very best effort. We present a whole that is the sum of a wide variety of specialists possessing vastly different skill sets. We perform as a team of equals incorporating a common knowledge. While the conductor may be important in precision, organization, interpretation, and maintaining focus, the best of them are little more than dramatic dancers when the final product is delivered. It is entirely a contributory group effort for benefit of all. It is a gift to our audience and ourselves.

In the call for a renewed effort to develop pedagogies for the teaching of creativity across the curriculum, it is essential to recognize that the creative drive ultimately resides within each student. In my experience it is difficult to teach the art of creative thinking to a student who does not fully embrace that personal challenge. As creativity emerges from within the individual, it becomes driven by a sense of inquiry and purpose. It demands a high level of self-discipline. It is best expressed through a positive and willing attitude.

If a student believes that education is little more than completing checklists of requirements resulting in a diploma that will provide a job, that consumer attitude towards education may well trump the creative spirit. Why bother with cultivating creativity in busy working students if checklists will do? From a student's limited perspective, the effort and time required in cultivating the discipline to be creative along with its inherent uncertainties in relation to success or failure could appear to them to be more trouble than it is worth. While they may not require a complete knowledge before they are able to create, students must have the opportunity to be creative if they are going to develop that skill. Otherwise, when they arrive at that "perfect job," it may well be too late if they have never been exposed to the creative process as a vitally important part of their learning development and educational experience.

Our modern renaissance has is more examples of creativity happening worldwide than ever. The internet is full of extraordinary creative accomplishments – some great, some trivial. We must help our students aspire to learn to be creative as a part of their commitment to a life of

learning. Students need to see the point of that aspiration and be willing to make a long term investment in it.

Teaching creativity should become a major focus of academia. Our schools are now challenged to play an important role in introducing the creative process to individuals by incorporating a pedagogy focused on teaching creativity into the curriculum. Our nation and world face such daunting problems that we need many well trained creative thinkers. Our students deserve the opportunity to become creative individuals. Our employers expect no less. Our academics are at the forefront of this critically important worldwide endeavor.

Final Thoughts

Employers are increasingly dealing with specialists who are unable to collaboratively create new products with other specialists. When flying over New York I met a CEO of a company producing satellites for the military. He complained that his trip was entirely about seeking out Master of Arts graduates who could help his PhDs talk to each other.

In an age of specialization, creativity will play an important role in making connections in our highly diverse global environment. Employers are calling for training our students in a way that empowers creative thinkers to expand horizons beyond their experience while working with others. They need our graduates to have an understanding of the creative quest and process that is an essential part of their lifelong learning experience.

The challenge that all educators face is the development of an effective pedagogy for teaching creativity that incorporates new technologies as a part of a rapidly evolving curriculum to the next generation of creators. In this difficult challenge there is an important point that could be missed. Edith Hamilton talks about "the pleasure of becoming an educated person and the enormous interest it adds to life." Truly creative people have fun. Ask any composer and performer of music. It will not be that difficult to encourage students learn to be creative.

Albert Einstein said that "the true sign of intelligence is not knowledge, but imagination." It will be creative imagination that will advance our world through this renaissance as we all learn to believe in our ability to create. The current age is busting at the seams with creative people, and that will open the door for our students to do even more. I believe that the greatest challenge of the modern renaissance is to learn how to appreciate diversity, adjust to rapid change, and to foster an environment of collegial collaboration that promotes creativity and stimulates lifelong learning. Education from the cradle to the grave is the foundation of this.

Just as in learning how to teach one needs to teach, if you want to become a creative person, then you must create. No excuses, procrastination, or waiting until it "feels right." The central lesson of lifelong learning is that you have to do more than just intend to do it, you actually have to do it!

 (Words: 4,739)

CONTACT

Dr. Bruce R. Jackson
Phone: (573) 474-4703
bruce@exisjaxn.com

Teaching Creativity
Bruce R. Jackson
© October 2014