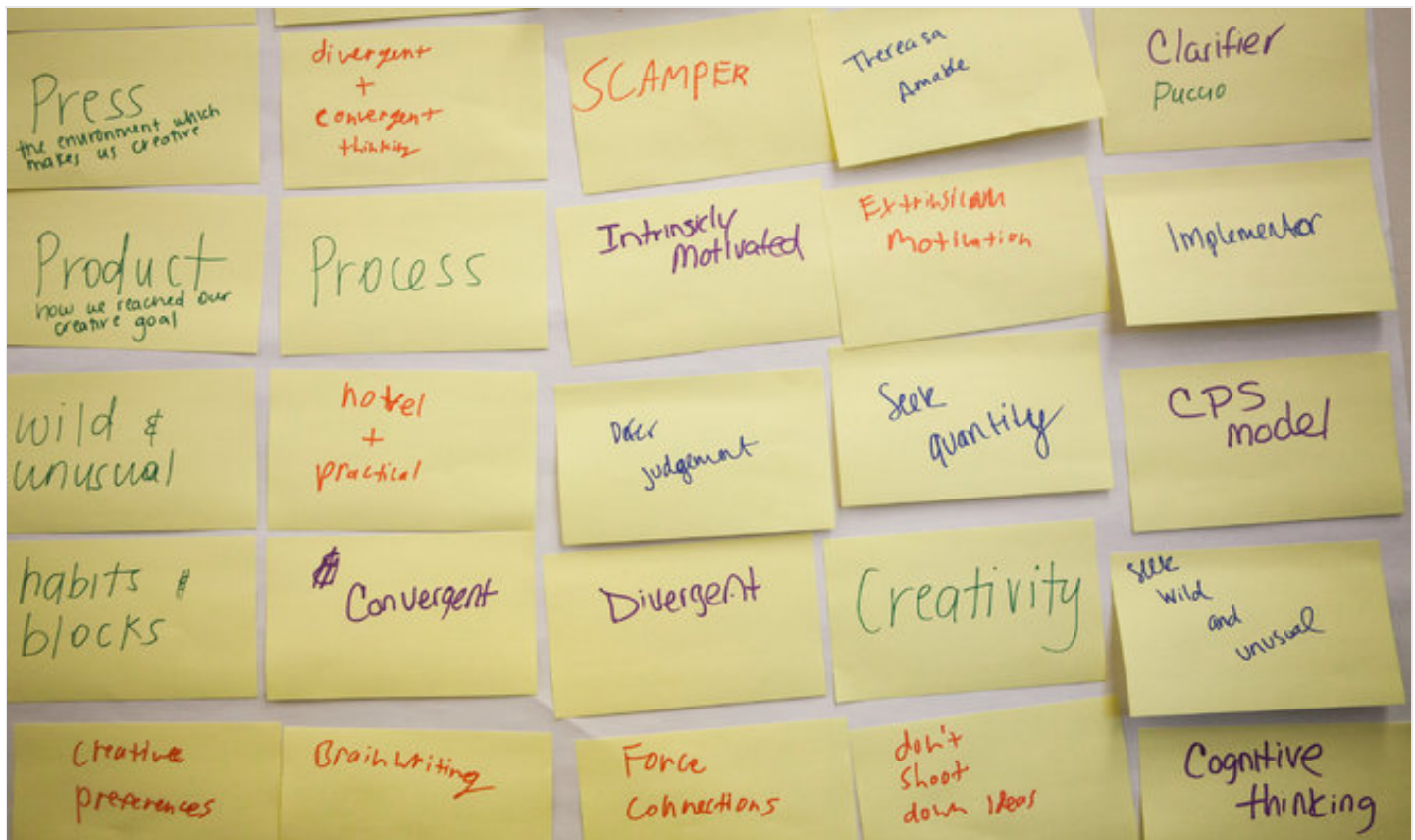


Creativity Becomes an Academic Discipline



Students in creative studies at Buffalo State College posted key points to being a creative thinker. Brendan Bannon for The New York Times

IT BOTHERS MATTHEW LAHUE and it surely bothers you: enter a public restroom and the stall lock is broken. Fortunately, Mr. Lahue has a solution. It's called the Bathroom Bodyguard. Standing before his Buffalo State College classmates and professor, Cyndi Burnett, Mr. Lahue displayed a device he concocted from a large washer, metal ring, wall hook, rubber bands and Lincoln Log. Slide the ring in the crack and twist. The door stays shut. Plus, the device fits in a jacket pocket.

The world may be full of problems, but students presenting projects for Introduction to Creative Studies have uncovered a bunch you probably haven't thought of. Elie Fortune, a freshman, revealed his Sneaks 'n Geeks app to identify the brand of killer sneakers you spot on the street. Jason Cathcart, a senior, sported a bulky martial arts uniform with sparring pads he had sewn in. No more forgetting them at home.

“I don’t expect them to be the next Steve Jobs or invent the flying car,” Dr. Burnett says. “But I do want them to be more effective and resourceful problem solvers.” Her hope, she says, is that her course has made them more creative.



Launch media viewer

Cyndi Burnett teaches Introduction to Creative Studies at Buffalo State College. Brendan Bannon for The New York Times

Once considered the product of genius or divine inspiration, creativity — the ability to spot problems and devise smart solutions — is being recast as a prized and teachable skill. Pin it on pushback against standardized tests and standardized thinking, or on the need for ingenuity in a fluid landscape.

“The reality is that to survive in a fast-changing world you need to be creative,” says Gerard J. Puccio, chairman of the [International Center for Studies in Creativity](#) at Buffalo State College, which has the nation’s oldest creative studies program, having offered

courses in it since 1967.

“That is why you are seeing more attention to creativity at universities,” he says. “The marketplace is demanding it.”

Critical thinking has long been regarded as *the* essential skill for success, but it’s not enough, says Dr. Puccio. Creativity moves beyond mere synthesis and evaluation and is, he says, “the higher order skill.” This has not been a sudden development. Nearly 20 years ago “creating” replaced “evaluation” at the top of [Bloom’s Taxonomy](#) of learning objectives. In 2010 “creativity” was the factor most crucial for success found in an [I.B.M. survey](#) of 1,500 chief executives in 33 industries. These days “creative” is the most used buzzword in LinkedIn profiles two years running.

Traditional academic disciplines still matter, but as content knowledge evolves at lightning speed, educators are talking more and more about “process skills,” strategies to reframe challenges and extrapolate and transform information, and to accept and deal with ambiguity.

Creative studies is popping up on course lists and as a credential. Buffalo State, part of the State University of New York, plans a Ph.D. and already offers a master’s degree and undergraduate minor. Saybrook University in San Francisco has a master’s and certificate, and added a specialization to its psychology Ph.D. in 2011. Drexel University in Philadelphia has a three-year-old online master’s. St. Andrews University in Laurinburg, N.C., has added a minor. And creative studies offerings, sometimes with a transdisciplinary bent, are new options in business, education, digital media, humanities, arts, science and engineering programs across the country.

Suddenly, says Russell G. Carpenter, program coordinator for a new minor in applied creative thinking at Eastern Kentucky University, “there is a larger conversation happening on campus: ‘Where does creativity fit into the E.K.U. student experience?’ ” Dr. Carpenter says 40 students from a broad array of fields, including nursing and justice and safety, have enrolled in the minor — a number he expects to double as more sections

are added to introductory classes. Justice and safety? Students want tools to help them solve public safety problems and deal with community issues, Dr. Carpenter explains, and a credential to take to market.

The credential's worth is apparent to Mr. Lahue, a communication major who believes that a minor in the field carries a message. "It says: 'This person is not a drone. They can use this skill set and apply themselves in other parts of the job.' "

On-demand inventiveness is not as outrageous as it sounds. Sure, some people are naturally more imaginative than others. What's igniting campuses, though, is the conviction that everyone is creative, and can learn to be more so.

Just about every pedagogical toolbox taps similar strategies, employing divergent thinking (generating multiple ideas) and convergent thinking (finding what works). The real genius, of course, is in the *how*.



Edwin Perez's
FaceSaver keeps your
phone from falling.
Cyndi Burnett

Dr. Puccio developed an approach that he and partners market as [FourSight](#) and sell to schools, businesses and individuals. The method, which is used in Buffalo State

classrooms, has four steps: clarifying, ideating, developing and implementing. People tend to gravitate to particular steps, suggesting their primary thinking style. Clarifying — asking the right question — is critical because people often misstate or misperceive a problem. “If you don’t have the right frame for the situation, it’s difficult to come up with a breakthrough,” Dr. Puccio says. Ideating is brainstorming and calls for getting rid of your inner naysayer to let your imagination fly. Developing is building out a solution, and maybe finding that it doesn’t work and having to start over. Implementing calls for convincing others that your idea has value.

Jack V. Matson, an environmental engineer and a lead instructor of “Creativity, Innovation and Change,” a MOOC that drew 120,000 in September, teaches a freshman seminar course at [Penn State](#) that he calls “Failure 101.” That’s because, he says, “the frequency and intensity of failures is an implicit principle of the course. Getting into a creative mind-set involves a lot of trial and error.”

His favorite assignments? Construct a résumé based on things that didn’t work out and find the meaning and influence these have had on your choices. Or build the tallest structure you can with 20 Popsicle sticks. The secret to the assignment is to destroy the sticks and reimagine their use. “As soon as someone in the class starts breaking the sticks,” he says, “it changes everything.”

Dr. Matson also asks students to “find some cultural norms to break,” like doing cartwheels while entering the library. The point: “Examine what in the culture is preventing you from creating something new or different. And what is it like to look like a fool because a lot of things won’t work out and you will look foolish? So how do you handle that?”

It’s a lesson that has been basic to the ventures of Brad Keywell, a Groupon founder and a student of Dr. Matson’s at the University of Michigan. “I am an absolute evangelist about the value of failure as part of creativity,” says Mr. Keywell, noting that Groupon took off after the failure of [ThePoint.com](#), where people were to organize for collective action but instead organized discount group purchases. Dr. Matson taught him not just

to be willing to fail but that failure is a critical avenue to a successful end. Because academics run from failure, Mr. Keywell says, universities are “way too often shapers of formulaic minds,” and encourage students to repeat and internalize fail-safe ideas.

Bonnie Cramond, director of the [Torrance Center](#) for Creativity and Talent Development at the University of Georgia, is another believer in taking bold risks, which she calls a competitive necessity. Her center added an interdisciplinary graduate certificate in creativity and innovation this year. “The new people who will be creative will sit at the juxtaposition of two or more fields,” she says. When ideas from different fields collide, Dr. Cramond says, fresh ones are generated. She cites an undergraduate class that teams engineering and art students to, say, reimagine the use of public spaces. Basic creativity tools used at the Torrance Center include thinking by analogy, looking for and making patterns, playing, literally, to encourage ideas, and learning to abstract problems to their essence.

In Dr. Burnett’s Introduction to Creative Studies survey course, students explore definitions of creativity, characteristics of creative people and strategies to enhance their own creativity. These include rephrasing problems as questions, learning not to instinctively shoot down a new idea (first find three positives), and categorizing problems as needing a solution that requires either action, planning or invention. A key objective is to get students to look around with fresh eyes and be curious. The inventive process, she says, starts with “How might you...”

Dr. Burnett is an energetic instructor with a sense of humor — she tested Mr. Cathcart’s martial arts padding with kung fu whacks. Near the end of last semester, she dumped Post-it pads (the department uses 400 a semester) onto a classroom desk with instructions: On pale yellow ones, jot down what you learned; on rainbow colored pads, share how you will use this learning. She then sent students off in groups with orders that were a litany of brainstorming basics: “Defer judgment! Strive for quantity! Wild and unusual! Build on others’ ideas!”

As students scribbled and stuck, the takeaways were more than academic. “I will be

optimistic,” read one. “I will look at tasks differently,” said another. And, “I can generate more ideas.”

Asked to elaborate, students talked about confidence and adaptability. “A lot of people can’t deal with things they don’t know and they panic. I can deal with that more now,” said Rony Parmar, a computer information systems major with Dr. Dre’s Beats headphones circling his neck.

Mr. Cathcart added that, given tasks, “you think of other ways of solving the problem.” For example, he streamlined the check-in and reshelving of DVDs at the library branch where he works.

The view of creativity as a practical skill that can be learned and applied in daily life is a 180-degree flip from the thinking that it requires a little magic: Throw yourself into a challenge, step back — pause — wait for brilliance to spout.

The point of creative studies, says Roger L. Firestien, a Buffalo State professor and author of several books on creativity, is to learn techniques “to make creativity happen instead of waiting for it to bubble up. A muse doesn’t have to hit you.”