



Creativity and the Common Core

What we should know before we move forward

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School leaders and teachers may need some help understanding how work-climates - classroom and building-wide - stifle or stimulate creativity; an important skill for 21st Century living and an expectation expressed in new reform policy. Before schools spend valuable resources adopting new textbooks and learning new teaching strategies that will prepare students for the Smarter Balanced Assessments, taking time to learn how to sustain creativity from wall to wall, and across the building is becoming increasingly important.

Much of what educators hear about creativity is how a teacher organizes learning activities that engage students in creative work. Some wonder how the teacher stimulates students to be creative. Others become curious about creativity and question what creativity actually means.

A person thinking about the concept of creativity in schools might conjure up images of talented and gifted

students engaging in music and art or the whimsical nature of students playing in the schoolyard. Creative behavior in schools, however, is more than students painting swirls in bright colors and role-playing with imaginary friends. Creativity must include both - novelty and utility - and it can occur in adult work situations when teachers collaborate with colleagues, across subject domains, as they solve important problems within the school.

A quick look inside a school, through a vignette, helps situate creative moments as teachers work together with the purpose of increasing student knowledge and their creative potential. Jillian is a teacher who works in a school that has a reputation for being highly creative. As you read the vignette, think about how the school climate stimulated and supported novel ideas, which resulted in authentic learning activities that engaged students as they encountered and struggled with complex questions and carefully designed tasks. This vignette is based on an actual interview with Jillian.

The Star of India, the world's oldest active sailing ship, rocks gently side to side on the San Diego Bay. This ship became the center of a project in which students learned across curriculums and now that our students' projects are exhibited in her galleys below, I feel inspired and proud. Months of creative planning with four and more teachers, we worked collaboratively so that our students could embark on a voyage of the imagination and to engage with our maritime instructors, raising sails, loading cargo and protecting the vessel from "pirates" while navigating their way. As I sit upon a worn leather stool, gazing out of one of the many copper and bronze portholes, I sense my commitment to this job growing stronger with each project because I have the freedom to choose which project I will teach. Motivated by freedom, our forefathers sailed on this ship and some paid their lives for freedom.

Voices rise and meander down the hatchway to where our students' exhibition waits for curious tourists. Our students from math class made sextants and learned position-fixing techniques between celestial bodies. In addition, our students researched and assumed a character for their humanities class and while in character, wrote in their log journals in math and created original math problems to help solve problems they would have encountered on their ships. We sailed San Diego Bay as our students worked the halyards and helm. While some students navigated the ship, others measured depth of the ocean and reefs we sailed between, calculated weight of cargo, length of masts and sails needed, knots of wind and water. Our students helped to raise 7000 square feet of sail to explore the cross-curricular content, like the physics of sailing while mastering practical knots and maneuvering a 100-ton vessel. During the three-day sailing trip, students snorkeled and collected plankton for the city biologists "it was amazing".

We became so excited about this project that many of us spent our weekends, on site, preparing for our voyage. Our students helped paint the walls in stripes, the art teacher spent a lot of time with our students in

conducting research on the era and style of the period-it was a phenomenal exhibit and the kids were so, so proud of it. Because of our creative ideas, our students were immersed intellectually, physically and emotionally in all the shipboard activities, which included hoisting barrels and sails, riding a boatswain's chair, singing chanteys, standing night watch, and swabbing the decks. As teachers, we gather the collective wisdom of each other's ideas, "how we're going to get this done?" "What I am going to do?" and feeling free to ask, "what do you think?" and "what are the holes I haven't thought of?"

The beauty of working at our school is that the teacher doesn't need to know how to do everything. We're willing to help each other persevere through challenging problems and I can really rely on our team members. You have partners that know things that are specific to their subject area and we balance workloads because we trust the other to pull their weight. It's exciting! Every time you do a new project, you're taking a risk and that's what I love about my job.

Our school expects creativity at least on the part of the teacher and student and that is important. Without those high expectations, the Star of India would never have been built by people on the docks at Ramsey Shipyard - in the Isle of Man in 1863 - because iron ships were experiments of sorts back then, with most vessels still being built from wood. Creativity also means we will fail from time to time, yet there are lessons in failure. That's part of the learning experience and the kids need to learn from us by looking back and learning from their failures.

People, including our school leaders, who came to see the ship gave teachers and students so much recognition for their great exhibit, they loved it and we heard often "Thank you that was so helpful", and for me that's the reward, spreading good work. One teacher from another school loved the character profiles the students created depicting the life aboard that was especially hard on the emigrants. There is no "competitive thing" among the teachers, I said yes to all her requests "I really like the project you did, can I have it, or do you have any rubrics I can use?" The Star of India was not only our student's exemplary exhibit, but was a challenging adventure that brought out the best in the teachers, where we collaborated while we designed, shared, and learned together.

The Climate can be Sunny or Dreary

The high school work-climate, described in this vignette, stimulated teachers to generate creative outcomes by maximizing intrinsic motivation and minimizing impediments such as organizational red tape. The organization expected teachers, in the collective, to design novel and useful student learning activities, which originated from teachers' personal passions rather than from mandated curriculum. Jillian reported having a large amount of autonomy and a high degree of freedom to choose and carry out her work projects, feeling safe to risk and fail, viewing top management as supportive and interested, and receiving necessary resources for her work projects. She especially enjoyed teaching students how to find and solve practical problems using operations involved in calculus. Just as important, Jillian took great delight in working with her teaching partners when designing and facilitating student project-based learning. Jillian reported that she and her colleagues came alive under these creative-enhancing forces and were continuously invigorated. In turn, they became better practitioners because their personal and creative efficacy increased and their attitudes improved.

Creativity is highly volatile to contextual influences, but the same management practices, organizational motivation, and resource allocations that stimulated

corporate employee creativity - stimulated teacher creativity in this school. Surely, one must speculate: The school facility, formal leaders, and teachers must have been unusual and remarkable. However, this was not the case. The day-to-day processes in this school were far from perfect. The school was located in the direct flight path for departing commercial jet planes and peoples' conversations were regularly interrupted by the noise. The school facility was converted from a former military training center and was sandwiched between other commercial buildings leaving little space for trees, grass, and fields on which to play. Along with challenges caused by the physical work-environment, there were problems with the psychological environment.

Teacher interactions were negative at times. Teachers perceived unnecessary politics and harsh criticism from senior staff as an obstacle. This, in turn, caused some teachers to feel competitive and protective of their ideas and territory. As well, they reported negative perceptions about how organizational impediments and workload pressures impeded their creativity. Not surprising, most teachers reported the need for more time to accomplish their work. Additionally, when teachers perceived important management behaviors missing such as the provision of recognition and fair evaluation, they reported negative perceptions and their passion

for work and their self-leadership suffered. Despite some negative perceptions, most of the other contextual and social influences contributed to a work environment that stimulated and supported creative ideas and innovations; the kind of work place teachers and students need for learning and teaching the Common Core.

Knowledge and Creative Potential

The new Common Core Curriculum insists on closing the achievement gap by increasing student knowledge and it further directs attention to increasing students' extended thinking skills, including their creative potential. School practitioners, who fully realize and embrace this new reform policy, will shift their attention toward deep learning and problem solving across curriculum domains and away from a light touch on several topics in a narrowed curriculum. Just as important, practitioners must realize that creativity is killed more often than it is encouraged and leader and teacher behaviors must be perceived as responsive to human needs.

Perceptions of the Climate

Behaviors, feelings, and attitudes distinguish life in an organization in that "each organization member perceives that climate, and can describe it in light of his or her own perceptions". At the individual level of analysis, the concept is called psychological climate. At this level, the concept of climate refers to the individual perceptions of patterns of peoples' behaviors. When aggregated, the concept is called organizational climate. According to contextual theories of organizational creativity, it is the psychological meaning of environmental events that largely influences creative behavior. The theoretical issue of interest is to increase the degree to which an environment is able to stimulate people to make a choice to be creative; a conscious act that requires a leap from the known to alternatives. Psychologists suggest that the work-environment produces the organizational outcomes and supervisor behaviors are highly important.

Leaders Make a Difference

Ekvall's, (1996) findings suggest that leadership behavior is the single largest determinant and the variance in many of his studies suggest leader behavior accounts for 40 to 80 percent of the reason creativity exists in an organization. A creative school requires a unique leadership approach—one that may not be currently captured by traditional views of leadership. Shalley & Gilson (2004) suggest that organizations already create climate, whether deliberately or not. Because many leadership models have characteristics parallel to teacher directed instruction, interactions are geared toward either insisting on or persuading people to do something outside their own volition. Innovation in schools lives or dies based on the leader's skills and wisdom to create a supportive learning environment by

balancing peoples' interests with organizational or classroom goals.

Leaders need to operate with the use of influence, trust, and paying attention to others. Leaders of creative work environments must serve as the gatekeepers of ideas - backing those ideas that may be most successful for the team and organization. They must talk-the-talk and walk-the-walk because when school leaders are perceived as good work role models, others become more intrinsically motivated to engage with them and each other. When human needs are tended to and goals are clearly explained, teachers and students perceive their work as challenging and important, and they will give their best efforts to perform better. Lastly, a creative work-climate within school organizations flourishes when individuals and groups are provided with fair, constructive judgment of their ideas, the organization has mechanisms in place for developing new ideas, and there is an active flow of ideas and a shared vision.

Counting on the Collective

Since most creative work that is accomplished in schools is by two or more people working together, it is essential for school leaders to create a creative work climate that supports a diversely skilled work group in which people communicate well, are open to new ideas, constructively challenge each other's work, trust and help each other, and feel committed to the work they are doing. Creativity is enhanced in school organizations where risk taking is encouraged and supported and where there is an organic organizational design to encompass open information flow to solve school-wide problems. Encouraging new ideas, knowing there will be failures are essential because high risk-taking yields new bold initiatives and breakthroughs. Extended thinking skills, including creativity become the genesis of breakthrough moments that provide incredible insights for solving problems presented at the classroom level and extend to the building level. The question now becomes: What are the definitions for creativity and innovations?

Creativity and Innovation

Creativity involves the generation of high quality, novel, and elegant solutions concerning procedures and processes appropriate to organizational problems and goals. A creative idea is bound by two constraints, it must be original and must be useful or appropriate for the situation in which it occurs. In other words, novel ideas must actually be put to some use. Amabile's Theory of Creativity and Innovation in Organizations describe the individual's role in the creative process through three domains: expertise and resources in the task domain, creativity skills and management practices, and task motivation and organizational motivation to innovate. Moreover, organizational creativity most

frequently occurs when both individual and collective creativity are present.

Creativity is often used interchangeably with innovation. Although innovation and creativity are theoretically and empirically linked, each is a distinct concept. Creativity is the generation of new and valued ideas whereas innovation is a process whereby a group seeks to achieve desired changes. Innovation is the intentional introduction and application of processes and products that change boundaries, job descriptions, and work flow that increase job effectiveness. Innovative outcomes bring about benefits from new ideas and may include different distribution of economic resources, personal growth, increased job satisfaction, improved group cohesion, and productivity gains such as an increase in students' abilities to solve complex problems. Innovation is, therefore, the introduction of new and improved ways of doing things in a school. "Innovative schools are organizations where group creativity is the main driver of new knowledge and innovation".

The group in which individual creativity occurs establishes the immediate social influences on individual creativity. Proponents of group creativity acknowledge that group creative efforts are best suited for complex organizational problems with multiple parts that span several domains. In addition, group creativity is influenced by: group composition (e.g., diversity); group characteristics (e.g., cohesiveness, group size); group processes (e.g., problem-solving strategies; social information processes); and, contextual influences stemming from the organization.

We are Well into the 21st Century

In summary, scholarly research on creativity is proliferating and creativity researchers hope to address a myriad of problems facing our schools and medical facilities, our cities and towns, our economy, our nation,

and the world. However, research on creative outcomes in public school has been slim, which suggests that creativity has been placed at the bottom of the educational agenda. This body of knowledge needs to grow because we are responsible for stimulating individuals who work in groups when designing better schools. These future oriented schools will embrace creative ideation, especially when innovations are aligned with specific missions, beliefs and goals. Until now, most research has focused on the private sector, citing needs within a highly competitive global market. Rather than producing better and less expensive products that satisfy customers' discriminating demands, schools help form young, impressionable people who deserve more than being sorted and selected by their ability to acquire knowledge.

After over a decade of focusing on increasing student proficiency on criterion-referenced tests, the time has come to open another door. School practitioners seem ready to move to a new place where joy and the love of learning are restored. While skeptics may worry about the whimsical nature of novel behavior, teachers like Jillian, who use novelty to increase productivity will prepare the next generation to flourish in a world by expanding their knowledge and creative potential as they solve problems in a world Friedman (2007) describes as becoming increasingly flat.

All this implies that we need to embrace the Common Core, have common discourse, with new, common skills dedicated to the expansion and sustainability of creativity in the classroom, across the school, and throughout the organization. Because we are well into the 21st Century, there is a sense of urgency to provide modern schooling experiences for practitioner and students and the first step is to create conditions that stimulate creative ideation.

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