Play, creativity, and the regional university

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Abstract

This paper surveys literature on creativity and play to suggest the kinds of advantages that creativity, when combined with play, can bring to a regional university. Play is seen as intrinsically linked to learning, and as enhancing motivation, while creativity is understood as something that can be developed in individuals, that is part of all human endeavour, and that encourages mastery of whatever domain in which it is experienced. These characteristics suggest that play and creativity be integrated into approaches to teaching and curriculum in order to address the specific challenges of reaching and retaining the student cohort at regional universities. The advantages are also felt by teachers and at an institutional level.

Introduction

The theme for this issue of *Studies in learning, evaluation, innovation and development* is "Play and creativity: Educational provision and possibilities in contemporary regional and rural communities".

A search of university websites reveals that almost every university in Australia includes creativity in its list of graduate attributes. Businesses and governments seek and celebrate innovation, and countries, cities and communities want to become "creative". (See Brien in this issue.) This paper frames the issue by sketching, in broad strokes, the kinds of advantages that creativity, when combined with play, can bring to a regional university. In particular, the integration of play and creativity into approaches to teaching and curriculum can address the specific challenges of reaching and retaining the student cohort at regional universities. The advantages are also felt by teachers and at an institutional level, and reach into the community.

Regional students

While not wishing to generalise—for surely there are differences among regional universities—the student cohort in regional universities has particular needs. A profile of Central Queensland University's (CQU's) 11,580 domestic students in 2006 is revealed through statistics:

- A large proportion—60%—are female. Of those women, 42% are from rural areas, and 3.2% are from isolated areas.

- Of the male students, a smaller but still significant percentage (24%) are rural, while 1.9% are from isolated areas.
- Of the female students, 28% are of low socio-economic status; 24.8% of the males are of the same group. A further 60% of female students and 56% of males are of medium socio-economic status.
- Indigenous students make up 2.6% of the domestic student numbers.
- Significantly more than half (55.8%) are over 24 years old; that is, these older students have not entered university straight out of high school, or even after a one- or two-year break.
- A large proportion are the first in their family to go to university: 45% of female students, and 39.6% of male students.

While these figures apply only to CQU, the general trends could probably be seen in many regional universities. Fgures from the Australian Bureau of Statistics confirm the likelihood that regional or remote students have disadvantaged backgrounds: "[T]here is a proportional over-representation of disadvantaged CDs [Census Collection Districts] in remote areas. Only 2.7% of Australians live in remote or very remote areas but 13.7% of these are in disadvantaged CDs compared with 5.1% of people in major cities" (2006).

Furthermore, many of the students could be considered non-traditional students, that is, from groups who have not traditionally completed university studies because of economic reasons, distance, lack of access to the appropriate educational background, or lack of family or cultural support. Students who are the first in their family to attend tertiary education are likely to be tentative and unsure about their direction, especially in the face of regional attitudes toward such studies. The large proportion of older students suggests many students are people who didn't consider tertiary studies when they finished high school, or were unable, immediately, to enter a university.

Interestingly, domestic student numbers at CQU are only 45% of all enrolments, the rest being fee-paying overseas students. It would be interesting to find out the percentages of those students who are from rural areas in their home countries, and are the first in their family to go to university, and so on. The language and cultural difficulties these students face may actually overlie additional issues of disadvantage shared by the domestic students.

Whether or not this is the case, it can be argued that all students at CQU can benefit from an approach that supports their education in a nurturing environment that helps them discover a passion for learning.

What is play? Why is it good?

Play, according to an article in a management journal, is delightfully described as "messy, ambiguous and sometimes non-rational activities" (Heracleous & Jacobs, 2005, p. 19). In spite of—or perhaps because of—their "messiness", these activities—as the authors continue—"can stimulate the development of cognitive and interpretative skills and engender an emotional sense of fulfillment."

These aspects of play reflect claims by the National Institute for Play, a Californian not-for-profit organisation dedicated to expanding "the clinical, scientific knowledge of Human Play as well as projects which will translate the knowledge of Human Play into practices and training programs to deliver the benefits of play

to all segments of society" (National Institute for Play, 2006a). Their website lists the following characteristics of play:

- It is fun, that is, "uniquely and intrinsically rewarding". Jamison, in *Exuberance,* describes play as "enthusiastic", "ebullient", "high-spirited", "zestful" and "joy and bounce" (2004, pp. 43–63).
- It motivates: Play "makes perseverance fun [and] leads to mastery" (National Institute of Play, 2006b). Furthermore, "[w]hen students have fun at learning, they continue to pursue it for its own sake" (National Institute for Play, 2006c).
- It is important throughout life: Although as children we play with "abandon and joy" (National Institute for Play, 2006d), play is also crucial for adults. "At any age, play acts to retain and enhance meaningful context, and optimise the learning process" (National Institute of Play, 2006c).
- It is social: Not only is play "contagious" (Jamison, 2004, p. 57) but it also "fosters empathy and promotes a sense of belonging and community" (National Institute of Play, 2006b). This community-building aspect of play is connected to "[b]eing capable of generating, recognising and acting on the play signals of others", which, claims the Institute, "is the first step in trust, safety and adaptation to the unexpected or complex" (National Institute for Play, 2006d). Or, to put it another way, play "is inherently community-oriented, contributing to the development of shared language, identity and social practices" (Heracleous & Jacobs, 2005, p. 19, paraphrasing Johan Huizinga).

Jamison adds an extra dimension:

- It encourages people to venture beyond the safe and familiar: "Play is about learning how to learn. It is a kind of controlled adventure, an exploration of both new and familiar worlds. Play and curiousity are inevitably linked" (2004, p. 60).

The recognised value of purposeful play can be seen in the way it is embedded in children's education in Queensland. The introduction of the Preparatory Year of schooling was announced in a media release in which Education Minister Rod Welford explained the importance of play in the curriculum. "Prep is based on a 'play and inquiry' approach to learning," he said. "Children learn when they play because they are making decisions, solving problems, communicating and developing thinking skills" (Queensland Government, 2006).

What is creativity?

Creativity has been romanticised as the province of the "creative genius" touched by a muse, but recent research supports the view that it is "more like athletic ability—it is something anyone can display, but some individuals are shaped both by nature and nurture to be more successful in that domain" (Haring-Smith, 2006).

But what is it, exactly? In a strictly de-romanticised definition, two central theorists of creativity have written that it "is the ability to produce work that is both novel (i.e., original, unexpected) and appropriate (i.e., useful, adaptive concerning task restraints)" (Sternberg & Lubart, 1999, p. 3). Richard Florida, equally unsentimentally, quotes Webster's dictionary: "the ability to create meaningful new forms" (2002, p. 5).

Runco and Sakamoto write that it "is among the most complex of human behaviours", and also importantly state that "it manifests itself in different ways in a variety of domains" (1999, p. 62). That is, creativity is not confined to any one discipline—or to the arts—but is found in all areas of human endeavour, including everyday life.

For the purposes of this article, however, what seems important are the personality attributes that are emerging as being connected to creativity. After surveying research literature, Sternberg and Lubart note:

- "self-efficacy and a willingness to overcome obstacles";
- a willingness to "take sensible risks" in order to forge into new areas;
- a willingness to "tolerate ambiguity";
- a willingness "to stand up to conventions if one wants to think and act in creative ways";
- and joy in the area in which one works, and a focus on that "rather than on the potential rewards" (1999, p. 11).

Many of these qualities reflect research presented by Florida. Far from being effortless, creativity demands "time, and enormous effort" and "a strong commitment to the domain" (citing Boden, 2002, p. 34). He writes that creative people must have "healthy self-respect" to take the kinds of risks involved in breaking through the conventional (2002, p. 1).

Intrinsic motivation is the foundation of creativity. Teresa Amabile, a Harvard Business School psychologist who has written widely on creativity in organisations, states: "There is abundant evidence that people will be most creative when they are primarily intrinsically motivated, rather than extrinsically motivated by expected evaluation, surveillance, competition with peers, dictates from superiors, or the promise of rewards" (1997, p. 39).

Also, like play, creativity is social: "in the last analysis, it is the community and not the individual who makes creativity manifest" (Csikszentmihalyi, 1999, p. 333).

How do play and creativity connect with each other?

The connections between play and creativity sometimes seem the stuff of urban legend. Take the Google campus, for example, where the workers are surrounded by toys, food is free and employees were given a budget to decorate their offices— most of which was spent on "pirate flags, actions figures, t-shirts with funny sayings, leis…" (Chang, 2006). But just how do creativity and play overlap?

Jamison notes that research into children's play shows that it increases creativity by promoting flexibility and originality in thinking (2004, pp. 62–63). Similarly, adult creativity is connected to play, as suggested by Albert Einstein's explanation of his work as "combinatory play" (Florida, 2002, p. 31). Creative people make their work into play; even when the work is challenging, they are motivated to find new ways around the difficulties.

The potential of the combination of play and creativity is borne out by the work of Dr Stuart Brown, the founder of the National Institute for Play. His research into "highly creative individuals" connects their "success and well-being" to an

attribute of playfulness that is central to their approach to life (National Institute for Play, 2006e).

In fact, a 1995 exhibition, *Invention at play*, mounted by the Smithsonian's Lemelson Center for the Study of Invention and Innovation, explored exactly these links in the areas of science and technology:

Invention at play is a highly interactive, engaging and surprising travelling exhibit that focuses on the similarities between the way children and adults play and the creative processes used by innovators in science and technology. It departs from traditional representations of inventors as extraordinary geniuses who are "not like us," to celebrate the creative skills and processes that are familiar and accessible to all people. Visitors of all ages experience various playful habits of mind that underlie invention (Lemelson Center for the Study of Invention and Innovation, n.d.).

Examples of the deliberate bringing together of play and creativity are numerous and diverse. Michael Schrage's book *Serious play: How the world's best companies simulate to innovate* is built around the belief that "Serious play is about innovative behaviour" (2000, p. 1):

> The essence of serious play is the challenge and thrill of confronting uncertainties …. Serious play is about improvising with the unanticipated in ways that create new value. Any tools, technologies, techniques, or toys that let people improve how they play seriously with uncertainty is guaranteed to improve the quality of innovation. (2000, p. 2)

Schrage's concepts can be seen in action in many ways. For instance, the Lego Corporation has developed a play-based international consultancy "to enhance innovation and business performance", in which participants "play" with Lego blocks (Lego, n.d.). The World Bank, in September 2006, held a seminar titled "Serious play and urban planning: Introducing educational games in capacity building", which covered themes such as Disaster Risk Management, City Development Strategies, and Urban Services to the Poor (World Bank Group, 2007).

The term "serious play" was used in the context of schooling much earlier by Lloyd P. Rieber (1996). His paper, "Designing learning environments that excite serious play", flags benefits for academic learning: "I am interested in those times when a person chooses to devote tremendous effort and emotion to a task" (2001, p. 1). He contrasts this type of commitment, focus and satisfaction with "regimented, homogeneous" school learning, which is "based more on rewards and threats than curiosity and interest." He has, he writes, concluded that learning and motivation are interconnected, and that, furthermore, motivation has greater value: "It is not enough just to suggest that learning and performance have been demonstrated, but also that students are emotional and passionate when it comes to their learning. This creates a lasting feeling of commitment and ownership" (2001, p. 2).

He emphasises that "serious play" has "a purpose equally negotiated between learner and teacher" (2001, p. 4), and his article explores three current projects in order to demonstrate that this happens whether the learners are primary-school children, college students or intellectually and behaviourally challenged adults

(2001, pp. 5–8). In all these, "serious play" involves the students in challenges that provoke imaginative, novel—that is, creative—responses.

Suzanne De Castell and Jennifer Jenson, in their article "Serious play", look at computer games as a method of teaching school children. The goal of their "Ludus Vitae" project is to connect "learning" and "playing", and, with that in mind,

> to create a [computer-game] resource in which centralised and dispersed design and development, face-to-face and computer-mediated interaction are interwoven in lived cultural practices—a resource that creates new digital network…a place to meet and work and imagine and create. (2003, p. 660)

Part of the resource encourages student creativity by giving groups (students and teachers) the opportunity to build "their own custom-built curricular units … to invite and enable users to become partners in the design and development of their own educational resources, as well as contribute to the larger 'community' of the game" (De Castell & Jensen, 2003, p. 660).

One example of the approach at work in higher education is a board game, "The research road to success", that has been used for three years to teach research skills to undergraduate nurses. The game, based on a road race, "uses repetition, group dynamics, peer collaboration, and questioning to promote active learning" (Lever, 2005, p. 470).

Another example is Eric Melbye's 2004 article, "Serious play: Creativity in composition and pedagogy", in which he describes his experiments with college students. He writes honestly of his more and less successful experiences when he introduced creative writing and literature students to "serious play", which he defines as "a habit of reading, thinking, and writing that combines a curious, childlike sense of play with serious critical inquiry and reflection." His conclusion identifies the way that serious play encourages students to "actively engage in the process of thinking through an issue rather than focusing on the issues resolution", which leads students to "explore possible resolutions to an issue rather than searching for a single, pre-existing solution."

What is the value of creativity-and-play in a regional university?

The conjunction of creativity and play in a regional university has benefits for students, teachers, the institution and the community. There are obstacles, too, of course.

To begin with students. Students who go to regional universities tend to be starting from behind in a range of different ways. One result is that they are not confident—about their own abilities, about their place in the wider world, about the value of study itself, about their choice of direction. Norman Jackson's extensive research into creativity in higher education says that "[o]ne of the most important messages to come out of the research we have undertaken so far is that creativity lies at the heart of a student's own identity" (2006). When creativity is connected with play—with a passionate immersion in a field, with intrinsic motivation—it eases tentative students into the demands of study and thus makes university less daunting. Thus begins a process of building confidence about learning, which is particularly

relevant for students who may be the first in their family to go to university, or who may be in some other way challenged by their life circumstances.

In turn, personal confidence combined with a growing mastery of the field enables risk-taking in combining ideas or approaches—directly connecting with creativity and innovation.

An assured student who has immersed him- or herself in the field is also able to develop skills not just in generating ideas, but also in analysing them and rejecting the less productive ones, fully confident of being able to come up with more ideas to replace those rejected. As Nobel-winning scientist Linus Pauling said of himself, "the route to creativity was having a lot of ideas and discarding the bad ones" (cited in Nakamura & Csikszentmihalyi, 2001, p. 339). Furthermore, if students' learning experiences are positive and full of "joy and bounce" (to use a phrase from Jamison, 2004, p. 43), there is every chance that they will become assured, enthusiastic, lifelong learners.

In facilitating students' growth in this way, universities are preparing them to take their place in the world as members of Florida's "creative class". Haring-Smith has noticed parallels between Florida's creatives—"the leaders of the twenty-first century"—and "those students we all love to teach" (2006). As the author explains, both sets of people are "intelligent, open-minded risk-takers who have self-confidence, enjoy tackling challenges, value domestic and global diversity, and engage in synthetic, flexible, and creative problem solving." This is echoed by Csikszentmihalyi, who stresses the flexibility of students whose creativity has been nurtured: "It takes creativity not to be blinded by the trappings of stability, to recognise the coming changes, anticipate their consequences and thus perhaps lead them in a desirable direction" (2006, p. xviii).

Teachers benefit from creativity and play. The process of working with students who are motivated and engaged learners—who have learned to enjoy learning—is itself satisfying. But in order to reach that point, teachers are themselves challenged to bring play and creativity into their classrooms.

Institutional benefits arise from the transformation of the regional university into a vibrant environment, with motivated, committed staff and students, and a reputation for truly giving students something of worth. With teaching approaches that acknowledge and respond to regional students' needs, it is possible that more local students would be attracted, and it is certain that those who were enrolled would be more likely to be retained.

In addition, the transformation of regional universities would help to address ambivalent attitudes to higher learning that research has identified in rural areas. There is potential to bring university and community closer together through innovative projects and partnerships integrating "real life" and learning. Florida specifically looks at the important role that universities play in regional communities, by playing "three interrelated roles that reflect the 3T's of creative places—technology, talent and tolerance" (2002, p. 292). For Florida, community is crucial: "The bottom line is that cities need a *people climate* even more than they need a business climate" (2002, p. 283; *emphasis in original*). He writes of "the potential to combine innovation and economic growth with authentic community and a better way of life … able to balance openness and tolerance against a strong sense of community" (2002, p. 282).

However, there are some problems to be overcome. As Florida himself warns, creativity "is not a 'commodity'". Any institution that wants to profit from creativity or innovation should heed his warning:

> Creativity comes from people. And while people can be hired and fired, their creative capacity cannot be bought and sold, or turned on and off at will….Creativity must be motivated and nurtured in a multitude of ways, by employers, by people themselves and by the communities where they locate. (2002, p. 5)

Given also that play is "messy" (Heracleous & Jacobs, 2005, p. 19) and creativity "unruly" (Goleman, 1998, p. 100), there will always be stresses between the creative process and the organisation in which it takes place. Danaher and North in this issue both probe these tensions, which are as true in the corporate world as in higher education. Following her study of an electronics company, Amabile drew up a list of organisational obstacles to creativity: organisational culture of "internal political problems, harsh criticism of new ideas, destructive internal competition, an avoidance of risk, and an overemphasis on the status quo", and workload issues such as "extreme time pressures, unrealistic expectations for productivity, and distractions from creative work" (1997, p. 49). These are all, sadly, conditions commonly found at regional universities—and in schools. De Castell and Jenson's exploration of "serious play" in schools has ramifications for tertiary education, as they note that "serious play and schooling are frequently at odds" (2003, p. 662), because the school environment:

> insists on timed activities (no room for 'losing track' of time by being absorbed in reading a book or solving a mathematics problem); curriculum is designed mostly to "survey" a subject area, with little opportunity to study one or two subjects in depth; and goals and immediate feedback (both punishment and rewards) are often held back from students in institutionally sanctioned power struggles between students and teachers. (2003, p. 662)

It takes enlightened organisations, and true commitment to play and creativity, to hold their nerve—and their commitment—in the face of demands for fiscal conservativism, accountability and measurable outcomes. There is breathtaking irony in the fact that, at exactly the same time that universities enshrine creativity in their graduate attributes, the climate of higher education is one of financial pressures, and government surveillance and control.

Yet in the corporate world—on which universities are supposed to model themselves—some inspired leaders have found ways of giving more than lip service to the idea that, for true creativity to happen, people must be given permission to fail. Dealing with creative experiments that don't pan out, one corporation choses a 'mistake of the month', while another, in the spirit of shared learning, asks people who have had a failure to address the rest of the workers about what went wrong (Ranii, 2006). Sadly, universities aren't in the same financial position as one corporate boss, to whom an employee tendered his resignation after making a $1-million mistake. "You think I'm letting you go?" the manager said. "I just paid a million dollars for your education" (Ranii, 2006).

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