

# **The Relationships between Creativity, Wellbeing and Learning and their implications for students in Higher Education**

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## **Introduction**

There are a number of claims in the literature that by increasing creativity and creative learning, it may be possible to improve student wellbeing and learning and academic performance (e.g. Robinson & Aronica, 2016). To evaluate this claim, it is first important to consider the contested relationship between wellbeing and creativity and then to consider the implications of these findings for student wellbeing, learning and performance.

## **Creativity and Wellbeing**

There are essentially two competing views of the relationship between creativity and wellbeing.

The first, believes that creativity and illness (particularly mental illness) are closely related. Creative people, in this view, are more likely to experience psychological problems, those who experience poor mental wellbeing are more likely to be successfully creative and a significant degree of stress, trauma or pain is required to produce truly creative work.

The opposing view states that this is a complete misreading of the evidence. In fact, this view argues, people who engage in creativity regularly have better wellbeing, good wellbeing is more conducive to creativity than illness and most people who experience poor mental wellbeing are not creative while ill.

## **Creativity = illness and pain**

The view that creativity is closely related to illness, pain and in particular, poor mental health, has long antecedents, stretching all the way back to the Ancient Greeks. However, current conceptions of this notion largely spring forth from the philosophy of the romantic movement of the early 19<sup>th</sup> Century. The romantics rejected the bourgeois ideal of happiness as something soft and worthless and posited that true art, that is art that was meaningful, was born of suffering. To put it another way, they believed that the artist must be in a state of torment and turmoil and that it was from this turmoil that creativity appeared.

This narrative or conceptualisation of creativity has had a powerful hold over the popular imagination and has been supported by hugely successful novels, plays, operas and films that have portrayed artists and the artistic life as tortured and tortuous. The most famous of these may well be Murger's, *The Bohemians of the Latin Quarter*, which became the opera *La Boheme*; but such portrayals have also been found in works such as, George Gissing's, *New Grub Street*, Jack Kerouac's *On The Road* and the film, *My Left Foot*.

These have been supplemented by real life tales of writers, artists, comedians and musicians who have demonstrated creative brilliance but also experienced mental illness, such as Sylvia Plath, Amy Winehouse, Spike Milligan and Vincent van Gogh.

A number of researchers have also attempted to draw links between creativity and a vulnerability to mental illness (e.g. see Carson, 2013). Claims have been made for links between creativity and psychosis, bipolar disorder and mood disorders. These studies have taken a variety of approaches, including analysing groups of individuals registered as part of artistic groups (e.g. a writer's group), analysing a group of successful creative artists or population studies of groups of individuals who have been diagnosed with a specific mental illness. Researchers leading these studies claim that mental illness occurs in a greater prevalence among those who are more creative and that those in creative professions are over-represented in people receiving a diagnosis of mental illness.

This, it is proposed, demonstrates a clear link between creativity and illness; that there must be some overlap and therefore, creativity must be linked, in some way, to mental pain and suffering.

### **Creativity = good wellbeing and health**

However, many of the studies supporting this view have attracted significant criticism for being methodologically unsound. Rothenberg (2006), for instance, in a summary of his work in the *Lancet*, identified a number of weaknesses in research that purported to have demonstrated a link between illness and creativity. These include absent or poor controls, investigator bias, unreliable testing tools and poor definitions of both creativity and mental illness.

He has suggested, for instance, that the fact that someone has chosen to belong to a writer's group does not prove that they are any more or less creative than the average member of the population.

Rothenberg's own studies with Noble Laureates found no propensity towards mental illness among highly successful creative individuals. In fact, he found, instead, strong, flexible, healthy and sophisticated thinking and practice.

Research has also shown that even among creative individuals who have experienced ill health, their periods of creativity do not correspond to periods of illness or distress. Illness, bereavement, poverty and hunger instead appear to reduce creativity and productivity. While recovery from illness can improve creativity and achievement. Jackson Pollock, for instance, achieved his creative breakthrough and success after he had recovered from mental health problems, not while he was ill.

Other studies have shown that good mood and good health is more conducive to creativity than low mood and poor health. Large scale studies have also shown that regularly engaging in creative acts improves subjective and objective wellbeing (Dolan & Metcalf, 2012). Whilst it is undoubtedly true that some eminent artists have had difficulty with their psychological wellbeing, the list of successfully creative people who have had largely balanced and healthy lives is far greater (e.g. Henry Moore, Jane Austen, Anton Chekhov, John Milton, Johann Sebastian Bach and Paul McCartney).

It is also the case that, anyone visiting the psychiatric wards of any major hospital, is unlikely to encounter many works of creative genius being assembled there.

## **Diverge, Converge and Flow**

A staple theory of creativity is that it involves two consecutive processes – divergence and convergence.

Divergence (or divergent thinking) involves expanding thoughts and ideas, making new connections and opening up multiple possible areas for exploration. During divergence, individuals explore many options and may consider unlikely connections between previously unconnected ideas to generate new thoughts and possibilities. It is this phase that is most frequently thought of when people think about moments of creativity – it is during divergent thinking that ‘newness’ appears and inspiration strikes.

Rothenberg suggests that it is misunderstanding divergent thinking, that leads some to mistake creativity and illness as being in some ways similar. Individuals who experience mental illness (particular anxiety or psychosis) can appear to perform highly on tests of divergent thinking. However, healthy, creative, divergent thinking is deliberate, practised, fulfilling and devised towards some specific end (the solution to a problem or the creation of art). The divergent thinking produced by illness can create imagined futures or connect unconnected ideas but is unwished for, uncontrolled, often emotionally distressing and does not usually result in the production of something useful. (Of course some people can exhibit both types of divergent thinking).

Creative divergent thinking is the product of functioning cognition, practice, effort and disciplinary training. Despite conceptions of creativity being something that descends magically, it is in fact rooted in disciplinary knowledge that requires effort and energy to acquire. Writing a sonata on the piano is much more difficult if you haven’t learned to play the piano, read music and don’t know what a sonata is.

Convergent thinking is the process that follows divergent thinking, as possibilities are evaluated and then pared down, weaker ideas eliminated and problem solving is refined. It is the process that turns idea into substance. Csikszentmihalyi (2013), like Rothenberg studied creativity in highly successful creative individuals. The subjects in his work point out that in the convergent phase, realising an initial idea and turning it into something that exists in the world, outside of the imagination, requires long hours of focussed, hard work. This is not something that is easy to achieve if the creator is ill, tired, hungry or in pain.

Csikszentmihalyi is also the originator of the idea of ‘flow.’ Flow is a state of complete concentration or absorption. When an individual is in a state of flow their awareness of other concerns drops away and they are completely immersed in the activity before them. Being in flow creates a sense of fulfilment and heightened wellbeing and Csikszentmihalyi’s work has identified flow to be allied to intrinsic motivation and improved wellbeing and happiness. Achieving flow requires a balance of skill and task, healthy motivation, energy, endurance and cognitive structure. Creativity is a flow state.

## **Creativity and wellbeing conclusion**

On this basis then, we can see that creativity is more closely associated with good wellbeing. It is easier to be creative when healthy, intrinsically motivated and in a positive mood and regular creativity benefits wellbeing.

Despite this preponderance of evidence, the creativity illness connection persists in culture and the media. A number of authors have suggested that some of the attention on the concept of the 'mad genius' may be caused by the fact that, for some people, their experience of their symptoms may produce a particularly original way of viewing the world – much like the theory that, Monet's later paintings were the result of seeing the world through cataracts. This originality causes their work to receive greater attention, so distorting our view of the field.

Or perhaps the story of the tortured artist is just a better story than the one involving the writer, who is creatively successful and happy.

### **Creativity and Learning in Higher Education**

Creativity, innovation and enterprise have been subject to increasing attention in higher education, albeit with considerable ambiguity and uncertainty about the precise distinction between these terms.

There are strong arguments for assuming that at university level, learning and creativity should be obvious bedfellows. Each moment of learning can be considered an instance of mini 'c' creativity, an act of personal change and growth. It is the appearance (the creation) of a thought, realisation, or understanding that did not previously exist (at least in the mind of the student). Many of the insights and understandings of the world that have been developed within universities have come about through creative practice.

However, concern has also been expressed by a variety of writers and commentators, that education systems around the world have been moving away from a culture in which creativity is comfortably viewed as part of a student's education (e.g. Robinson & Aronica, 2016). These writers raise concern that schools particularly and universities in their wake, have become increasingly focused on final examination results to the detriment of the broader learning and education of their students. Evidence from around the world demonstrates that a culture of performance management based on exam results can change teaching practice and pedagogy in ways which are arguably unhelpful. For instance, numerous reports detail activities not directly connected with exams being squeezed out of the curriculum, to focus on test performance, including sport, music, drama and dance. This, despite strong evidence that sport and engagement in the arts improves learning and educational performance (see Hughes & Wilson, 2017).

This argument posits an opposition between two ways of viewing learning and the purpose of education. In the exam centric view, education is linear and transactional. Children go to school to acquire qualifications via exams and other assessments, which will in turn allow them to enter university or the workplace. At university students acquire grades via assessments, which results in them being awarded a degree that in turn will ensure they can get a graduate job and career. This view

focusses on education as a process of inputting relevant and valuable knowledge and skills, to equip the student to be successful in later life.

In opposition to this view is the argument that learning is not linear or predictable and that education should focus on broadly developing the whole of the individual. Creativity, sport, social skills, self-regulation and developing a social conscience are important elements of a broad based education for their own sake and because they improve learning and academic performance generally. Helping children and then students develop their creativity and encouraging regular creative practice is more beneficial than the production of a satisfactory grade. A number of researchers have also shown that as this rise in exam focus occurred, thinking skills, resilience and the ability to generate new ideas among students and graduates has fallen. As a result, it is argued, the exam focussed approach is actually reducing the ability of school leavers and graduates to succeed in the workplace and in their lives.

### **Learning and Student Wellbeing**

Equally important to this argument is the apparent effect on the wellbeing of children and students. As the narrowing of educational focus has occurred, increasing pressure on students to maximise performance in a small number of assessments, student mental health and wellbeing appears to have significantly reduced. Reports in a range of studies, using varied methodology, indicates significant increases in students and young people experiencing higher levels of mental illness, including anxiety and depression and greater demand for psychological support within universities.

A complex phenomenon, such as an increase in student mental illness, is unlikely to have one cause. There are however strong evidential and theoretical reasons to suggest that changes in education may be a partial cause. Some of these reasons also have clear links to theory and evidence in the field of creativity.

For instance, learning at its most pure can be seen as a 'flow state.' As with other flow states, learning is at its most optimal when there is a balance between student skill and pre-knowledge and the task they have been set. When there is just the right degree of stretch in this balance, the student can become completely absorbed in their work and learning is maximised.

As Csikszentmihalyi identified, flow generates from intrinsic motivation. Individuals who are intrinsically motivated have better wellbeing overall. Exam grades and awards are by their nature extrinsic motivators. In this conception, then, it can be seen that a pre-occupation on grades acquisition over holistic learning will move the focus of students from healthy, intrinsic motivations to anxiety inducing, extrinsic motivations.

This is supported by studies in the field of education that identify that students who engage in deep learning outperform and have better wellbeing than those who engage in surface learning (e.g. Postareff, 2016).

Deep learning is characterised by a deep commitment to and absorption in the subject. Deep learning students are focussed on building understanding and learning more due to their passion and engagement with the subject. They are less

concerned with grades and how to achieve them. Deep learners are found to be psychologically healthier and to be more satisfied with their learning experience

Surface learners are more focussed on assessment outcomes and doing only what is necessary to gain the required grade. They often strategically chose to commit the minimum of effort and do not seek fulfilment from learning itself but only from external outcomes. Surface learners have lower wellbeing, are particularly more prone to anxiety and are less satisfied with their learning experience.

Deep learners are intrinsically motivated. Surface learners are extrinsically motivated.

### **Other positive associations between wellbeing and learning**

Wellbeing itself is found to have multiple effects on learning. Physical health and healthy physical behaviour, for instance, has been shown to have positive impacts on academic performance. This has been shown in numerous studies on a range of issues including sleep, diet, exercise, hydration, sunlight and access to green space (see Hughes & Wilson, 2017).

Social health has also been shown to have positive and negative effects on cognition, memory, learning and academic performance. Loneliness, in particular, has been shown to reduce learning and performance.

Finally, psychological wellbeing can both boost and reduce learning – students who experience anxiety, low mood and/or psychosis have been shown to underperform against their matched peers in numerous studies.

### **Creativity and virtuous cycles**

In response to this evidence, a number of writers, including the author of this chapter, have proposed that by taking a creativity based approach to education, it may be possible to exploit the virtuous relationships between creativity, wellbeing and learning (Hughes & Wilson, 2017).

In a creativity based pedagogy, education would be rooted in subject discipline to support mastery but would also include ongoing meta-learning (learning about learning). This meta-learning would ensure that students can acquire necessary skills in a scaffolded manner and understand the process of learning, value of deep approaches, flow, divergence and convergence.

This, proponents claim, would provide a curriculum that can help students to develop intrinsic motivation and deep learning; it would provide students with a clear understanding of their own underlying physical and emotional needs and ways by which these needs can be met to boost learning; it would support student socialisation and help students to develop new, more empowering narratives about themselves, their ambitions and their place in the world. Above all, such a curriculum would eschew grade gathering in favour of the development of meaning. Creative activity such as drama, painting and music, would not be viewed as unnecessary add-ons but as crucial building blocks in a broad education.

In this way, students would be able to develop their own skills and insights, as a natural part of their student experience, so that they can enhance and maintain their wellbeing.

Key to this, would be a move away from the narrative of academic performance, that seeks 'correct' answers and towards an approach to learning that is creative and meaningful. As has already been shown above, active engagement in creative endeavours enhances wellbeing overall. Creativity linked to learning, may, therefore provide an ideal platform on which to improve student wellbeing.

However, while these ideas are gaining ground in the field and in practice, with some suggestion (e.g. in the UK) of a move within educational practise away from judging schools based solely on exams results, these views have not yet been empirically tested or proven to deliver on their hopes. While clear links have been established between wellbeing and creativity and wellbeing and learning and between deep, creative approaches to learning and better wellbeing and performance, no systematic attempt has yet been made to implement curriculum and pedagogy that might exploit these links. This, therefore, remains a contested area of discussion, research and practice.

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