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Creativity: the Fifth Pillar of Liberal Education

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Liberal education is a key component to the skills needed for problem solving and critical thinking. The four philosophical pillars of a liberal education: breadth, connections, critical thinking, and civic engagement, means that creativity is a key component intertwining with each respective pillar. Liberal education is also fundamental to the agenda of universities. A university's purpose is to enlighten and educate students so they can operate as intelligent and engaged members of society. This is opposed to the view that universities should only train students for the job market. I will argue that creativity is a key component to the pillars of liberal education and justify it as being a part of the broader teaching philosophy. Because critical thinking and creativity work together to create effective problems solvers, creativity deserves its own pillar. I will outline the liberal education philosophy and how the pillars intertwine with critical thinking and creativity. Creativity is implicitly apart of the philosophy of liberal education concerning the desired outcome of good citizenship. I will show how creativity is a key component of people who are effective critical thinkers and problem solvers. The western educational system has opted not for liberal education, but for traditional single subject schooling. Through embracing the pillars of liberal education including creativity, students can become civically engaged problem solvers in their communities.

The components of Liberal Education at the University of Lethbridge are the four defined pillars of breadth, connections, critical thinking, and civic engagement. Breadth focuses on the scope of knowledge across a large spectrum of academic disciplines and

their accumulation of knowledge. Through this breadth, students gain an understanding of how these disciplines interrelate and interact with each other. This includes patterns, themes and ideas. Critical thinking is the most important aspect of liberal education. Being able to logically and methodologically analyze arguments and evaluate evidence is a skill that is necessary throughout life. This definition encompasses logical reasoning and the ability to evaluate arguments. It too is used for dealing with approaches to problem solving. You have to be able to find the logical connections between sets of variables to come to a solution that makes logical sense. Then, through the skills gained from mastering the ability to critically think, we can all interact in society as engaged citizens who make rational choices, creating a better overall community. The pillars of Liberal Education that form this learning philosophy are the backbone of how and why Liberal Education matters.¹ It is important to be cognizant of the fact that education is not necessarily the pursuit of knowledge accumulation. Instead, an education is about learning how to learn and how to solve problems. As Robert Scott states, “We can promise to prepare students to learn anything, but we cannot promise to teach them everything.”²

Creativity is both a complex subject and an abstract idea to define. The word has such divergent meanings to that it risks having no discernible meaning at all. A neuroscience, psychological, or philosophical definition would all be different in how they understand

¹ Kara A. Godwin, “The Counter Narrative: Critical Analysis of Liberal Education in Global Context,” *New Global Studies* (2015): 232.

² Robert A. Scott, “The meaning of liberal education,” *On The Horizon* 22 (2014): 32.

this abstract idea. For my purposes, I will utilize Robert E. Franken's definition that "Creativity is defined as the tendency to generate or recognize ideas, alternatives, or possibilities that may be useful in solving problems, communicating with others, and entertaining ourselves and others."³ These ideas and connections are generated through abstract thought and applied to situations and problems. When confronted with problems, we have to think in abstraction and bring new ideas to confront the challenges. Creativity is about taking abstractions and turning them into tangible solutions. It is not simply being able to think freely in abstraction, but to bring the abstraction into a critically thought-out place where powerful ideas are built and tested. As David Oxtoby states "it is a truism that success in the future will involve making new connections and coming up with new ideas..."⁴ This creative thinking can help find solutions to problems that do not have one solution. It requires flexible and adaptable thinking, and a critical rigor to ground the ideas in applicable reality. If problem-solving ability is central to a liberal education experience, then embracing creativity as a pillar of liberal education should be paramount.

The intertwining of the pillars is also key to why Liberal Education is so effective. Being exposed to and understanding a wide breadth of academic disciplines gives us context on how knowledge is acquired. This context gives the ability for connections to be made

³ Robert E. Franken. *Human motivation*, (Pacific Grove: Brooks/Cole Publishing Company. 1994), 396.

⁴ David, W. Oxtoby, "The Place of the Arts," *Liberal Education* 98 (2012): 41.

between disciplines, creating understanding around the areas where knowledge overlaps. Using the ability to critically think about arguments and ideas, civically engaged students can be effective problem solvers for their communities and society. What is missing, but implicitly applied, is that creativity is inherently needed for a liberal education. To find the pathways in between various streams of knowledge, you have to think abstractly and creatively to find paths that are less obvious. Finding a path between math and sociology, or math and arts is not easy for critical thinkers without creative thinking. An example is Fibonacci's number (the golden ratio), a mathematical and geometrical principal that shows up in many disciplines from Fine Arts, Biology, Music, Science, Architecture, and is even found in nature.⁵ Without the ability to take this abstract geometrical relationship and apply it in other areas, we would never know just how prominent this ratio is in everyday life. Scientists who find the golden ratio in natural phenomenon like seashells have found connections of knowledge from the mathematical principal to scientific knowledge. Artists like da Vinci who used the golden ratio to paint the *Mona Lisa*, are taking creative knowledge into abstract ideas and utilizing them in their work. This shows how important creativity is for the application and intertwining of knowledge across diverse disciplines.

Without the ability to think creatively in both abstract and tangible ways, liberal education becomes less effective. Creativity is key to both critical thinking and civic engagement. These two concepts are tied closely together because they teach students

⁵ Daniel Jarvis, and Thomasenia Lott Adams, "Mathematics and Visual Arts: Exploring the Golden Ratio," *Mathematics Teaching in the Middle School* 12 (2007): 470.

how to evaluate arguments, which should lead to more intelligent and civically engaged citizens. While evaluating arguments is important, society needs the ability to propose creative solutions to problems in society. “Creative problem solving is necessary when there is a discrepancy between what exists and the desired situation. It often involves finding a solution that is either unknown or not commonly used.”⁶ The four pillars of liberal education are important and necessary for the philosophy of why we teach liberal education. However, without also fostering creativity, we risk missing the outcomes of the philosophy. To solve complex problems in the world, we have to think creatively. To find new connections between knowledge, we have to think creatively. To be more than critical of arguments, to extend outwards our own critically evaluated answers, we must be creative in our approach to finding new ways to solve problems. Without explicit use of creativity, all the pillars of liberal education may become less effective in their desired outcomes.

Many are now realizing the importance of experiencing a liberal education in order to develop the skills needed to function effectively in society. Knowing facts and gaining general knowledge on subjects are important, as they are the basis for creation and creativity. “One cannot think creatively to go beyond what is known, for example, if one does not have the knowledge to move forward.”⁷ By testing students on analytical,

⁶ Patti Drapeau, *Sparkling Student Creativity : Practical Ways to Promote Innovative Thinking and Problem Solving*. (Alexandria: ASCD, 2014): 117 Accessed October 10, 2016. ProQuest ebrary.

⁷ Robert J. Sternberg, “Wisdom, Intelligence, and A New Model for Liberal Education,” *Liberal Education* 95 (2009): 12.

creative, and practical skills then having them complete a variety of brain challenging tasks, creative abilities have been shown to increase.⁸ Robert Sternberg proposes the WICS model of Liberal education, which stands for Wisdom, Intelligence, and Creativity synthesized. As Sternberg states:

The basic idea is that citizens of the world need creativity to form a vision of where they want to go and to cope with change in the environment, analytical intelligence to ascertain whether their creative ideas are good ones, practical intelligence to implement their ideas and to persuade others of the value of those ideas, and wisdom in order to ensure that the ideas will help achieve some ethically based common good, over the long and short terms, rather than just what is good for them and their families and friends.⁹

This vision of liberal education reflects the teaching philosophy of the Liberal Education program at the University of Lethbridge. Citizens need practical knowledge, which translates to interwoven knowledge of a variety of academic disciplines. Analytical knowledge and wisdom are the same as the ability to critically think and evaluate arguments. Sternberg also ties these skills together to achieve some ethically based common good, or producing a civically engaged citizens. The key difference with Sternberg is that he includes creativity in his ideal model for liberal education. He argues that you need creative skills to help develop ideas on your own which creates adaptability in a changing world. If liberal education is designed to prepare intelligent citizens, creativity as a 5th pillar for liberal education makes sense for those desired outcomes.

⁸ Sternberg, *Wisdom, Intelligence, and A New Model for Liberal Education*, 14.

⁹ Sternberg, *Wisdom, Intelligence, and A New Model for Liberal Education*, 10.

If university is to create informed and educated citizens, liberal education is the means to accomplish this goal. If the pillars of liberal education are to help in this task, they should be expanded upon to explicitly include creativity. The ability to apply critical thinking to new and bold ideas is paramount, but we need the boldness and application creativity offers us. Instead of simply citizens who can critically evaluate arguments, they also must be citizens who can propose critically evaluated arguments to society. “But is critical thinking enough to release creative energy? It takes courage and an ability to accept risk to challenge the sometimes-oppressive ideologies and organizational structures that stifle and contain our creative selves. We may be faced with debilitating conflict eventually leading to ... seek refuge in introspection...”¹⁰ Yale Professor Richard Foster believes creativity is key for human development. He believes that creativity is not just discovery or application, it is about thinking of insightful solutions, which snowball into more solutions.¹¹ Creativity is about finding associations between different fields of knowledge, especially “one that appear radically different at first.”¹² Creativity is both about bridging knowledge across disciplines and building brand new ideas. We must be able to think new ideas to and effectively apply them to the problems around us to fulfill the liberal education objectives.

¹⁰ Clegg Phill, “Creativity and critical thinking in the globalized university,” *Innovations in Education and Teaching International* 45 (2008): 224.

¹¹ Richard N. Foster, “What is Creativity,” *Yale Insights*. February 16, 2015. Accessed on October 12, 2016. URL: <http://insights.som.yale.edu/insights/what-is-creativity>

¹² Foster, What is Creativity, *Yale Insights*.

In conclusion, the skills of liberal education are fundamental aspects of a university degree. The four pillars of breadth, depth, critical thinking, and civic engagement are necessary to be a useful member of society. Creativity is fundamental to all of these pillars. It is needed to understand the breadth of knowledge, and the depth and connections between knowledge areas. To help propose solutions to problems, you must be able to critically think about the issues to judge new and better ways of approaching the problem. Imagination and abstract thinking are needed to find new ways of approaching and understanding societal problems . Without creativity, we miss the ability to find new and unique solutions to everyday problems. If we want to be civically engaged citizens who contribute to society, imaginative solutions are key. Critical thinking becomes more valuable when we can propose carefully thought out ideas to society and become engaged citizens. Creativity is a key component to both problem solving and liberal education. It is implicit to all the pillars and needed for most problem solving skills. This is why there should be five pillars of liberal education, the final one being creativity. With the crisis liberal education has found itself in in western schools, we must embrace new ways of creating engaged students who become experts in learning how to learn. Liberal education will be the pillar of this reinvigoration, and through embracing creativity, we will educate a new generation of intellectual students ready to engage in the world around them.

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