In 2001, President Henry B. Eyring (then Elder Eyring) explained that our BYU-Idaho graduates would one day become recognized for their ability to “…come up with new ideas” and that employers would praise their ability to “…find a better way, and the budget doesn’t go up” (Eyring). This characteristic was part of a list of qualities that President Eyring explained BYU-Idaho graduates would possess. The “ability to come up with ideas or artefacts that are new, surprising, and valuable” (Boden 1) is often referred to as creativity.

A year after President Eyring’s address, President Gordon B. Hinckley shared these thoughts with our students, “You are just simple kids. You are not geniuses. I know that. But the work of the world isn’t done by geniuses. It is done by ordinary people who have learned to work in an extraordinary way…” (Hinckley). Two thoughts occurred to me as I’ve pondered President Hinckley’s remarks. First, the vast majority of our students will not enter the pantheon of creative geniuses whose efforts change the course of human history. Cultivating such geniuses is an exclusive effort and the mission of our University is much more inclusive. Second, our students, many of whom are ordinary kids, need to learn to work in extraordinary ways. I believe this means that they need to learn how to be creative along with learning the other skills so they will be prepared to do extraordinary work. This may not happen as well as we would like until we can actively teach them both what creativity is and how to be creative. I've been contemplating how we can do this and want to share some thoughts.

First, before we can teach our students how to be creative and why it matters, we need to both understand how creativity works and develop a deep sense of its relevance. So, here’s an important thought: drawing is not creativity. I mention this because I often receive the following confession when people learn that I teach art: “I’m not creative. I can’t even draw a stick figure.” Of course drawing—like writing, making music, and other skills associated with the arts—can certainly be used to aid creative exploration and expression. But creativity itself is something altogether different. Creativity can manifest itself in any discipline, including business, mathematics, any of the sciences, or any other field of study where new ideas have instigated a better way. Incidentally, no single department or college on campus holds a monopoly on creative students. Many of my students who have reached a high level of proficiency in the craft of making art struggle to grasp the concept of creativity and the processes for using it in their work. They don't understand creativity, although they have chosen a profession that is requiring...
more and more of it. Consequently, I have felt an urgency to help them gain that understanding.

Again, if we are to teach our students how to be creative, we must first understand it better ourselves. This may seem like a daunting task for many, but I think we are better prepared than we realize. Many of the ingredients required for developing creativity are already integral to a university education. Part of our responsibility might simply be to recognize them as such and then help our students do the same. Here are a few of those ingredients:

**Critical Thinking**

BYU-Idaho recently published a list of University outcomes focusing on what we want our students to be able to do, know, and become as they study here. Number three on that list states that our students are to become “creative and critical thinkers.” We are often in the habit of seeing these two types of thinking as opposed to one another, that when we are engaged in creative thinking we are much less inclined to think critically. But critical thinking is vital to creative effort. How else can one discern the appropriate value of a new and surprising idea?

To demonstrate this relationship, let me describe one of the many processes used by designers to systematically develop creative solutions to various problems. In 2005, the British Design Council introduced what they call the double-diamond design process to articulate how creative work is approached (see illustrations top). This process begins with a discovery phase represented by the two sides of the first diamond expanding outward. During this phase research is conducted, information is gathered, brainstorming occurs, and ideas are captured as sketches. The discovery phase is explorative—meaning judgment is withheld and those participating are open to any information and ideas that emerge.

Once enough information is gathered, it’s time to analyze data and look for real possibilities. This define phase focuses on defining the real problem and articulating the focused efforts of the next explorative push. These two sides of the first diamond converge through critical analysis to a point where they meet at a clearly defined problem to solve. The outcome of this phase is crucial to the success of the final product or service. If the defined problem is inaccurate or incomplete, the final solution will be ineffective.

The second diamond begins by developing possibilities that will potentially solve the previously defined problem. Because this develop phase is also explorative, it is important to set aside critical analysis of any emerging ideas. Editing and assessment curtail questions like “what if...” because they are looking for final solutions, not possibilities, and in their haste to do so might scuttle great ideas before they have had a chance to fully develop.

However, once sufficient exploration has taken place, critical thinking provides the necessary final step. Many of the solutions generated during the develop phase will be
Many of the solutions generated during the develop phase will be impractical, cliché or simply not applicable in their current form.

impractical, cliché, or simply not applicable in their current form. The deliver phase of the second diamond is full of editing and refining effort—critically thinking about each aspect of the proposed solution until the final product or service perfectly solves the problem defined.

The double-diamond process is an oversimplification of the actual efforts required in any creative endeavor. However, it effectively illustrates the back-and-forth relationship between exploration and critical thinking that is required of creativity.

Exposure to New Knowledge

We are accustomed to referring to any creative effort as “thinking outside the box.” The phrase is so common that I wonder if it has lost its metaphoric value. A quick search for the phrase in our University library database returns more than 16,000 results. Thinking outside the box is occurring in studies on social interaction and sports medicine, biology, geology, business, engineering, and even the arts. If everyone is moving their thought processes outside the box, are we simply building another box? The more important question might simply be: what is a box?

Boxes in this sense represent containers of organized information we have collected about the world through both experience and study. They are little bundles of assumption, based on accumulated knowledge, which allow us to interact with the world and with others with some degree of confidence and automation. Boxes are useful. They provide a framework for learning (as in history books and mathematical formulas). They promote understanding by providing a common language to work within (as in music scales or other measurement systems). They also truncate thought processes, thus freeing up cognitive bandwidth. Taken as a whole, they represent our conceptual scheme of the world. The only time boxes become problematic is when they impede growth or when problems arise outside the boundaries of our boxes.

Each box is filled with other boxes. Interesting things happen when the contents of one box get mixed with those from another. James Webb Young famously stated, “… an idea is nothing more than a new combination of old elements” (Young 10). This process of combining previously unrelated box contents to form new boxes accounts for many (if not all) of the important inventions throughout human history. Filmmaker Kirby Ferguson offers Johannes Gutenberg’s printing press and Henry Ford’s Model T as two examples of this process (Ferguson). Each grew from new combinations of previously existing technologies and concepts. It seems that being able to hunt for and recognize interesting new combinations between previously unrelated boxes is an important creative quality. With this in mind, Jack Foster articulates the value of accumulating boxes as follows: “If a new idea is ‘nothing more than a new combination of old elements,’ then the person who knows more old elements is more likely to come up with a new idea than a person who knows fewer old elements” (Foster 68). Simply put, the more we know, the more raw materials we have to creatively work with. In this regard, a university education can prove invaluable to creative development as our students are exposed to a broad range of knowledge.
Deep Knowledge and Broad Knowledge

Another valuable contribution that a university education provides for creative development involves the concept of a T-shaped education. Tim Brown, CEO of the creative firm IDEO, explains that a T-shaped person possesses a deep body of knowledge in one area of expertise (represented by the vertical stem of the T) along with a broad, although not necessarily deep knowledge of many other things, as well as a respect for other disciplines (the horizontal cross bar of the T) (Brown 27). A person’s deep knowledge provides a standard of measure concerning what constitutes quality and what it takes to produce something of substance. Our students begin this development within their major field of study. They also begin the process of developing a wide crossbar of knowledge as they are both exposed to a broad range of topics through their foundations experience and develop a respect for other areas of study.

Curiosity

Perhaps the only ingredient necessary for creative development that isn’t programmatically built into a university education is the fostering of curiosity. While curiosity is deeply connected to inquiry, its processes are often at odds with contemporary education practices. This is because curiosity is an intrinsic quality; it suffers under extrinsic reward systems, environments that produce anxiety, and too much structure. Although these traits are not mandatory for formalized education, they often develop when standardization and grades become the objective over learning. Of course an individual can be intrinsically motivated. Even when extrinsic motivation is present, they can experience both curiosity and anxiety, and they can find ways to explore even in a highly structured environment. This will be more apt to happen for our students if we first help them understand the value of curiosity in their creative development and then teach them how to foster their own curiosity.

Why Here?

You may wonder, as I have, how BYU-Idaho graduates will develop the uniquely creative attributes President Eyring discussed when any university student at any university is exposed to more or less the same ingredients. What makes BYU-Idaho uniquely qualified to teach students
about creativity? Two thoughts come to mind. First, despite our cultural fascination with the lone creative genius, I have learned that creativity flourishes best in a collaborative environment where sharing isn't hampered by egos. The gospel of Jesus Christ fosters qualities like trust, humility, and good will. Although these qualities can be found throughout the world, they manifest themselves in abundance on this campus. These qualities provide fertile soil for creative endeavors to thrive, especially when we recognize them as such.

Second, our students are encouraged to cultivate a relationship with the Holy Ghost. Creativity really is more about discovery than about originality. Inspiration plays an important role in that discovery process. I often remind my students that, although artists in our culture revere originality, the concept of being original doesn't completely jive with our doctrine. If Heavenly Father is omniscient, then we won't be coming up with any ideas that He doesn't already know. Also, contrary to many religious thoughts about the origin of the world, we don't subscribe to the concept of creation ex nihilo or creation out of nothing (see Abraham 3:24). New ideas won't come out of nowhere. Our students must understand that the Holy Ghost will enlighten our understanding, allowing us to discover both ideas that we had never before considered and ways to combine the things we already know about into something new, surprising, and valuable. We are truly blessed to be able to teach the role of revelation in creativity, both clearly and consistently, at BYU-Idaho.

I believe that if we, as faculty at BYU-Idaho, engage in the process of understanding the value of creativity and discovering how it really works, we will be able to help our students realize their creative potential. They will therefore, more consistently become the graduates President Eyring prophesied they would become.

References