Inspiring Learning

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It is a joy to be with you this morning. There is something about the beginning of a new school year that brings hope and optimism. Perhaps it is the chance to start out fresh—no matter how challenging the prior semester has been. Perhaps it is the promise that fall, with its crisp air and changing leaves—and, for me, football season—will soon arrive. Hopefully for all of us it is the thrill you feel in being involved in the intellect-expanding, soul-refining, celestializing endeavor in which we are all engaged.

This last year has brought many successes and a few challenges. Since we last met in this setting, more than 7,700 of our students graduated and moved on to the next phase of their lifelong learning process. During their stay here, many accomplished great things, ranging from receiving a Truman Scholarship to temple marriage. Others excelled as they represented the university in various settings.

The BYU Ballroom Dance Company won the Blackpool competition in modern formation, a feat they have accomplished every time since 1989 that their three-year cycle has taken them back to England. They also took first place in

Latin American formation—another repeat championship. The men's volleyball team, the men's rugby team, and the women's rugby team all competed in their respective national championship games, all on the same day. Hopefully you can identify and celebrate other successes in your areas. They are evident all around us.

Improvements have also been made to our campus infrastructure. We completed fundraising for the new Engineering Building, and construction is now underway. Expansion of the Harman Building has begun, in large part to expand the online learning environment here on campus, and the new Marriott Center Annex, housing our men's and women's basketball teams, is nearing completion. My thanks to all those involved in these and numerous other projects on campus.

We have also faced challenges in this past year—challenges that give us opportunities to improve. As I am sure you are all aware, we are examining in depth the reporting process for our students and other aspects of the way we handle sexual assault cases. It causes us deep sorrow to know that members of our

Kevin J Worthen, president of Brigham Young University, delivered this university conference address on August 22, 2016.

community would be victimized in such a devastating way. We are anxious to help them.

A group of faculty and administrators have worked tirelessly during the summer to help us know how best to do that. We anticipate that this fall the advisory council will present their recommendations to the President's Council. We will then address the topic with the campus community more in depth. In the meantime, let me emphasize that the top priority in this extensive effort is the safety and well-being of our students, especially those who have been the victims of sexual assault. Efforts will continue until sexual assault is eliminated from our campus environment.

Learning at Brigham Young University

I think by now you know me well enough to correctly predict that my message today will somehow focus on the mission statement. I continue to be impressed with how the language in this three-decade-old document sheds clarifying light on many of the new situations, new challenges, and new opportunities we encounter. I believe there was inspiration in the creation of that document and that inspiration will come from continued reflection on its principles.

So, as we reflect on this year's conference theme, which reminds us that "the Lord requireth the heart and a willing mind," I hope that what occupies a good portion of our hearts and minds is the role we are to play in assisting our students "in their quest for perfection and eternal life." The mission statement makes it clear that our primary role in that process is to help our students learn. We are to provide them "a period of intensive learning." That phrase describes the rigor of the learning experience our students should have. Other portions of the mission statement describe the content and outcomes of that learning.

In terms I hope are now familiar to all of you, the mission statement indicates that, above all else, our students should learn "the truths of the gospel of Jesus Christ."⁴ In addition, they should experience learning that is "broad"—learning that enables them to

think clearly, communicate effectively, understand important ideas in their own cultural tradition as well as that of others, and establish clear standards of intellectual integrity.⁵

Our students should also experience learning "in the special fields of their choice"— learning that will enable them to compete "with the best in their fields." In addition, they should experience learning that renders them

not only . . . capable of meeting personal challenge and change but . . . also [of bringing] strength to others in the tasks of home and family life, social relationships, civic duty, and service to mankind.⁷

The aims document effectively boils all these down to four main points: we are to provide learning that is "(1) spiritually strengthening, (2) intellectually enlarging, and (3) character building, leading to (4) lifelong learning and service."

Notice how each aim is directly connected to specific portions of the mission statement. The spiritually strengthening aim links to specific portions of the mission statement. The intellectually enlarging aim links to other portions, as does the character building aim. Other sections of the mission statement explain the lifelong learning and service aim. And there are even more links.

These convey the truth that one cannot fully understand the aims unless one fully understands the mission statement. While the aims may be easier to remember—I venture to guess that more people can recite the aims than can provide a word-for-word rendition of the mission statement—they are not independent and freestanding ideas that supplement the mission statement. They derive directly from the mission statement and provide a shorthand description of its key learning principles.

The Term "Inspiring Learning"

Perhaps out of a desire to simplify things as much as possible—and perhaps as a result of a diminishing capacity to remember even four things—but largely in an effort to succinctly explain what we are about in a way that allows people to easily remember, I have tried to simplify the core learning goals even more while still emphasizing that a full understanding requires a return to the mission statement. After discussions with many of you in many settings, I have concluded that one two-word description that achieves that end is "inspiring learning." Note again that one cannot understand the full meaning of the term "inspiring learning" without a full understanding of the mission statement. Just as the aims document is a summary and not a replacement for the mission statement, the two-word description "inspiring learning" is a summary and not a replacement.

Inspiring is an interesting word. It derives from the Latin term inspirare, which means "to breathe into" and, more specifically, "to breathe life into." Inspiring is both a noun and an adjective. The noun can be defined as the act of inspiring or motivating. In this sense, the term "inspiring learning" describes actions that inspire or motivate students to learn. As an adjective, inspiring is a modifier. In this context it describes a kind of learning: learning that inspires—or, more precisely, in our setting, learning that leads to inspiration or revelation.

When I use the term "inspiring learning," I have in mind both meanings of the word *inspiring*. I hope we inspire our students to learn. And I hope that learning leads to inspiration. When both things happen, inspiring learning occurs, and we can then know we are on the right track to achieve the core goals set forth in our mission statement.

While the term "inspiring learning" may not be familiar to you, my guess is that many of you are familiar with the phenomenon. Inspiring learning occurs in many of our classrooms for many of our students on a regular basis. Indeed, it may happen so often that we fail to appreciate how exhilarating it can be. We grow used to it. Sometimes it takes someone from outside the university to point it out to us. Here is one example.

This past January, New York University professor of journalism Jay Rosen came to campus as a guest lecturer. Let me share with you what he posted shortly after his visit:

This was the scene a few days ago when I gave a guest lecture at Brigham Young University, which of course is a Mormon school. . . .

A most unusual thing happened before I was introduced. Unusual for me, normal at Brigham Young. Dale Cressman, who organized the event and guided me around campus, asked a student to begin the event with a prayer. The student stood and prayed for help in "feeling grateful for the opportunity to learn." I wish more college students felt that way and expressed it as well as she did.

I found the BYU students a joy to teach. They were extremely engaged. With good humor they tolerated me asking and reasking them the same question ten times, answering in a slightly different way each time, which allowed me to make a new point in response. After the talk, at least a dozen of them thanked me, and each one shook my hand, looked me in the eye, and made a personal connection. "Grateful for the opportunity to learn" . . . that wasn't just words to them.

It was one of the best experiences I have had in 30 years as a professor.¹⁰

That is an example of inspiring learning. And classrooms are the central places in which that kind of learning occurs. I hope we can make each of our classrooms a place of inspiring learning, a place in which students become excited about learning and in which that learning leads to revelation.

Learning by Experience

While it is essential that our formal classrooms be sites of inspiring learning, that by itself will not completely fulfill our mission. Let me return to the mission statement, this time to the second paragraph:

All instruction, programs, and services at BYU, including a wide variety of extracurricular experiences, should make their own contribution toward the balanced development of the total person.¹¹

Note "all instruction," including "a wide variety of extracurricular experiences." Some of the most important inspiring learning opportunities occur outside the formal classroom setting through experiences that are, in that sense, extracurricular. And, without implying either that we have fully perfected classroom instruction or that we are going to emphasize classroom instruction less, let me suggest that one way we can enhance the quality of inspiring learning at BYU is to expand both the quantity and quality of the kind of learning that occurs outside the formal classroom—the kind of instruction that many call "experiential learning." Just like classroom learning, experiential learning can produce the kind of inspiring learning that our mission statement challenges us to provide.

Experiential learning has become somewhat of a buzzword in academia in recent years. However, for us there is a deeper, even doctrinal reason for pursuing learning by experience in a systematic way. We are all quite familiar with the scriptural injunction that we "seek learning, even by study and also by faith." That describes two key ways by which we learn important truths: by study and by faith. But those are not the only ways by which we learn essential knowledge and skills. Gospel teaching instructs us that we learn by study, we learn by faith, and we learn by experience.

Learning by experience is a central purpose of our mortal journey. As Elder David A. Bednar once observed, "Learning by faith and from experience are two of the central features of the Father's plan of happiness." We could not have simply memorized celestial laws in our

premortal life and declared ourselves fit for the celestial kingdom. We needed to come to this mortal existence to experience certain things we could not experience in our premortal life and to learn from those experiences. Experience is a key part of our mortal learning process.

Similarly, students cannot learn all they need to learn by memorizing or even discussing principles in a classroom, as exhilarating as that may be. Experience connects theory with application and deepens our understanding of the principles and truths we learn.

And, in my view, experiential learning can be inspiring learning in both senses of that term. It can both inspire students to deeper learning and be the type of learning that leads to inspiration.

There is ample evidence that experiential learning can inspire and excite students to learn in ways that have a deep and long-lasting impact. Describing the results of his study about student learning at Harvard, Professor Richard J. Light observed:

I assumed that most important and memorable academic learning goes on inside the classroom, while outside activities provide a useful but modest supplement. The evidence shows that the opposite is true. . . . When we asked students to think of a specific, critical incident or moment that had changed them profoundly, four-fifths of them chose a situation or event outside of the classroom. ¹⁴

Likewise, in a 2008 study, George D. Kuh, the founding director of the widely used National Survey of Student Engagement (NSSE), identified ten teaching and learning practices that have especially high impact on students. Five of those—including such things as internships, service learning, and undergraduate research—involved activities that would easily fit into the category of experiential learning.¹⁵

Other studies underscore the point. A 2014 survey of approximately 30,000 college

students conducted by Purdue University and the Gallup Poll evaluated the relationship between various college experiences and subsequent success at work and overall life well-being. The survey sought to correlate high measures of work engagement and well-being with various college experiences.

The results were telling. Workplace success did not correlate with the size of the university attended, large or small, or with whether the university was private or public. But other factors did seem to matter. Specifically, the study found that the chances that individuals would thrive at work—the highest measure of work engagement—doubled if during college they "had an internship or job where they were able to apply what they were learning in the classroom, were actively involved in extracurricular activities and organizations, and worked on projects that took a semester or more to complete." The first two clearly involve experiential learning; the third may as well.

Evidence from our own campus also illustrates the ways in which experiences outside the classroom can inspire students to learn. Let me cite as one example the Phage Hunters program in the College of Life Sciences. This program enlists students early on—sometimes as freshmen on their very first day of class—to begin original research. The students collect soil samples and for the next two semesters work to isolate and identify a bacteriophage that has never been seen before.

One project involved students working under the direction of Professor Sandra Hope, who was searching for a viable way to treat a disease that affects honeybee hives. Notice in this video the involvement of the students. [A video presentation was shown.]

As noted, the student most prominently featured in the video, Bryan Merrill, signed up for the Phage Hunters class as a sophomore. After completing the class, Bryan was hired as a TA and worked as a research assistant and mentor to other students in the class. By the time he

graduated from BYU with his master's degree in molecular biology, Bryan had already published (or copublished) eight research articles and had worked on twenty-three genome sequences. He is currently pursuing a doctoral degree in microbiology and immunology at Stanford University. Bryan's initial experience with phages clearly inspired lifelong and career-enhancing learning.

I believe such experiential learning activities can also help students learn to be inspired. Given the nature of the phenomenon being measured, there are no academic studies—at least none that I could find—that address the impact that experiential learning may have on a person's ability to receive inspiration or revelation. But there is other evidence that, at this unique institution, is at least as persuasive.

We are all familiar with the Book of Mormon account of Lehi's sons going back to Jerusalem to obtain the plates of brass. In a sometimes overlooked portion of that account, Lehi noted three times that the Lord commanded him that he should send his sons back to get the plates, ¹⁷ thereby making it clear that Lehi was not supposed to do this himself.

Having been the father of sons who were the ages of Nephi and his brethren at the time, I have some sense that had Lehi been given the simple direction just to go get the plates, he would have attended to the task himself. It would have been simpler and easier. That is how it is with teenage boys sometimes. However, the Lord made it clear that Lehi was to send his sons.

Why? I suggest that at least part of the reason is that the Lord wanted Nephi and his brethren to have an experiential learning opportunity. It may have been easier and faster for Lehi to get the plates himself, but God was not interested just in getting the plates. He was also interested—more interested—in helping Lehi's sons in their quest for perfection and eternal life. And He furthered that process by providing those sons with a learning

experience that caused at least one of them, Nephi, to receive inspiration.

When Nephi returned to the camp after that learning experience, he came back not only with the plates but with a greater faith in God and a greater understanding of how inspiration comes. He had experienced inspiring learning.

Nephi's experience in obtaining the plates or, more precisely, Lehi's experience in facilitating that experience—demonstrates an important truth about the kind of inspiring learning that comes from experience. It requires that the teacher have great patience and a clear understanding of the larger purpose involved. Perhaps as a result of God's commanding him multiple times that he should send his sons, Lehi came to realize that, as important as the plates were—and they were of great importance, as demonstrated by the fact that Nephi took Laban's life to obtain them—securing their possession was not the main object of the experience. The main purpose was to refine Lehi's children, who were also God's children.

Similarly, as important as our research may be—and some of it is of enormous importance, some of it life-changing, even lifesaving—it is, in the long run, not as important as the eternal development of our students. I applaud and admire the way so many of you pursue both of these ends with full purpose of heart and mind, without sacrificing either. But it is hard work.

Again, one illustration will stand as proxy for numerous others that might be provided. [A video presentation was shown.]

Taking students, especially undergraduate students, into such projects as the Antarctica study of nematodes requires a great amount of perspective and faith. In an email, Professor Byron J. Adams explained:

Supporting a single human being in Antarctica is the most expensive, most difficult, and most precious part of doing research down there. If

something happens and a single slot opens up . . . , we have [to select] a person best suited to help with the project. . . . Most of the time that means bringing down other famous scientists, or post-doctoral fellows [who] are highly skilled in a single area. However, on several occasions I've been able to justify bringing students down because I can train them very well . . . on exactly what they need to do. And because my students have always been exceptionally awesome (hard working, skilled, fun to be around), my colleagues are happy to have them on the team.

So far, six different students have accompanied Professor Adams to Antarctica, three of them undergraduates. This coming year he will take two other graduate students. And while there are risks, there are also enormous rewards. Professor Adams reported:

The first undergrad I brought to Antarctica is now a faculty member in another department in my college. The second one is a faculty member at the University of California, Riverside. The third is just beginning his medical residency in OB/GYN. The first grad student I brought down is now a geneticist at a USDA research center; the rest are still in my program working toward graduation.

Enhancing Inspiring Learning at BYU

Inspiring learning requires faith both by the students and by the faculty member. It is not an easy task, but it is an inspiring one.

So we might ask ourselves: What can we do to enhance the impact of these kinds of inspiring learning experiences at BYU in the coming year and in the coming years? Let me make three simple suggestions.

First, we can expand the number of students who have a meaningful experiential learning opportunity. We can, for example, look for ways to provide more faculty mentoring opportunities for them. The impact of faculty mentoring can be enormous. In a report summarizing a large number of academic studies,

clinical psychologist and professor of psychology W. Brad Johnson said:

Compared to nonmentored individuals, those with mentors tend to be more satisfied with their careers, enjoy more promotions and higher income, report greater commitment to the organization or profession, and are more likely to mentor others in turn.¹⁸

The impact is even greater at a place like BYU, where we are interested in more than academic or temporal success. Because we challenge faculty members to be leaders in their fields of research and because we also ask them to be faithful in the gospel, BYU faculty members provide living examples of the power of learning by study and by faith. Students can first see, then work with, and eventually emulate role models who have demonstrated that they can excel in both their fields and their faithfulness. Experience of that kind is truly inspiring in both senses of the word.

However, there is a limit to the number of faculty mentorship opportunities we can provide. As good as they are, our faculty have only twenty-four hours in a day, and they are already stretched almost to the limit. Fortunately, other experiential learning opportunities can also promote inspiring learning. Internships, study abroad programs, fieldwork, service learning opportunities, and even oncampus work are all experiences that, when properly structured, can provide opportunities to both inspire students to learn and help students learn to be inspired.

To increase the number of students who can have such experiences, this year the university provided substantial additional funding to each college, with the central stipulation that the funds be directed to students to facilitate a structured experiential learning opportunity. Because the calendar year is not yet complete, it is too early to measure the overall impact of this increased funding in terms of the number of students having such opportunities.

However, anecdotal reports from every college indicate that the funds have allowed numerous students to have an experiential learning opportunity that they otherwise would have had to forego for economic reasons.

The results have been encouraging—enough that we are working to provide additional funding again in 2017 and to make securing even more funds one of the top fundraising priorities for the university.

Second, in addition to increasing the number of opportunities for inspiring learning experiences, we can work to make the opportunities have even more impact by being more purposeful and intentional about what happens in those activities. While traveling in a foreign country can be a life-changing experience, through careful and thoughtful planning, the impact of the experience can be magnified severalfold. Similarly, internships provide insights into the skills required to succeed in an occupation, but increased planning and foresight can make the experience considerably more meaningful by ensuring that certain kinds of activities occur and that there is adequate opportunity for reflection. I challenge all involved in such activities to make sure we are maximizing the amount of good that can result from them.

Finally, we can increase the number of inspiring learning moments for our students if we recognize that both experiential learning and classroom learning are enhanced by the quality of the relationships we develop with our students. Research has shown that "high impact [learning] practices are powerful in part because they are relationship rich."¹⁹ The 2014 Gallup-Purdue survey I mentioned earlier found that one of the key factors that correlated with success in both work engagement and overall well-being was a high-quality relationship with a faculty member. According to that data, a graduate's chances of thriving at work and in life doubled if the student "had a professor who cared about them as a person,

made them excited about learning, and encouraged them to pursue their dreams."²⁰

BYU should be a leader in this regard. Our mission statement provides that

all relationships within the BYU community should reflect devout love of God and a loving, genuine concern for the welfare of our neighbor.²¹

If our students feel this, they will be inspired to learn, and they will learn to be inspired in profound ways.

Let me share one example. Four years ago one of our graduate engineering students, Shannon Zirbel, received a \$100,000 fellowship from NASA to work on a project with laminate-compliant mechanisms in space. She received a lot of attention, and we used her success in our fundraising efforts for the new Engineering Building. People resonated with the idea that their donations might help bright students like Shannon be involved in cutting-edge work. She was very articulate and very gracious to share her time in informing people about her work as part of our fundraising effort.

It was only some time later that I learned the more complete story of her BYU experience that led to the fellowship. I share portions of her account with her permission:

When I graduated from high school, I went to [Georgetown] University.... I had a misconception about BYU—I thought girls just came here to get married,... so I didn't even apply to BYU.... Two years later I went on a mission. During my mission I served with several companions who were students at BYU, and my opinion of BYU changed entirely. When I came home from my mission, I applied to and was accepted at BYU....

I'm not brilliant. But I work hard, so I know I can accomplish good things, and hard things. But I need ready reassurance. Maybe it's because I'm a [woman]. A [woman] in a male-dominated field, surrounded by men who, by nature, think

differently than I do. Do you know how hard that is sometimes?

One of my biggest concerns about staying for a PhD was the qualifying exams. Just prior to my taking them . . . , Dr. [Larry] Howell gave me a blessing. Being able to receive a priesthood blessing from my advisor was one of the highlight experiences of attending BYU. Every morning of the exam week I went in to get "words of encouragement" from Dr. Howell.

On Wednesday morning (before the dynamics exam), as I was leaving his office, I said, "I'll try to make you proud."

He replied, "You already have."

Can I tell you how much of a difference that made for me? I went into the exam feeling blissful, feeling like I didn't have anything I needed to prove. I just had to do my best, and that was going to be enough. He couldn't have said anything more perfect. I've had many experiences like that with professors at BYU, where they have shown such genuine concern for me.

Inspiring learning will be greatly enhanced if those with whom we interact feel Christ's love for them through us.

Our efforts to enhance inspiring learning the kind of education for eternity described in our mission statement—can have an enormous impact on all of our students. But it need not and should not end there. You will shortly hear from Elder Kim B. Clark about a new global initiative in the Church Educational System an effort to provide learning to Saints and others throughout the world. This initiative is inspiring and will give us the opportunity to magnify the impact of what we do here. However, I believe we can best accomplish that by focusing on our principal and boarddirected role, which is to enhance the learning experience of our students in all the ways described in the mission statement. We need not alter or change our focus; we simply need to do well—to do better—what we are already doing and then look for new ways to share.

The mission statement succinctly sums up how we can best help in words that, though written nearly thirty-five years ago, seem somehow to have this initiative specifically in mind:

In meeting these objectives BYU's faculty, staff, students, and administrators should also be anxious to make their service and scholarship available to The Church of Jesus Christ of Latter-day Saints in furthering its work worldwide.²²

We should be anxious to make our service and scholarship available to the Church in this exciting worldwide endeavor, but we can best do so by meeting the objectives set forth in the mission statement.

Our mission is clear and simple. It can, in one sense, be captured in the phrase "inspiring learning." But it is more accurately and more fully described in our inspiring and inspired mission statement. As we face the opportunities and challenges of the coming year, I urge you to return to that mission statement often and to contemplate what your role is in carrying out that mission. I promise that as you do so, inspiration will come. It will come to you and it will come to your students.

You are not here by accident and they are not here by accident. Our coming together will allow God's work to go forward, both in our own individual lives and in the lives of others on this campus and throughout the world. I so testify, in the name of Jesus Christ, amen.

Notes

- 1. Doctrine and Covenants 64:34.
- 2. The Mission of Brigham Young University (4 November 1981).
 - 3. Mission of BYU.
 - 4. Mission of BYU.
 - 5. Mission of BYU.
 - 6. Mission of BYU.
 - 7. Mission of BYU.
- 8. The Aims of a BYU Education (1 March 1995).

- 9. Oxford English Dictionary Online, s.v. "inspire," etymology, oed.com/view/Entry /96990?redirectedFrom=inspire.
- 10. Jay Rosen, Facebook, 16 January 2016, facebook.com/photo.php?fbid =10153157675541548.
 - 11. Mission of BYU.
 - 12. Doctrine and Covenants 88:118.
- 13. David A. Bednar, "Seek Learning by Faith," *Ensign*, September 2007.
- 14. Richard J. Light, *Making the Most of College: Students Speak Their Minds* (Cambridge, Massachusetts: Harvard University Press, 2001), 8; quoted in Peter Felten, John N. Gardner, Charles C. Schroeder, Leo M. Lambert, and Betsy O. Barefoot, *The Undergraduate Experience: Focusing Institutions on What Matters Most* (San Francisco: Jossey-Bass, 2016), 26.
- 15. See George D. Kuh, High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter (Washington, DC: Association of American Colleges and Universities, 2008); cited in Felten, Undergraduate Experience, 20–21.
- 16. Gallup and Purdue University, Executive Summary, in *Great Jobs, Great Lives: The 2014 Gallup-Purdue Index Report,* 6, luminafoundation.org/files/resources /galluppurdueindex-report-2014.pdf.
 - 17. See 1 Nephi 3:2, 4–5.
- 18. W. Brad Johnson, *On Being a Mentor:* A Guide for Higher Education Faculty (Mahwah, New Jersey: Lawrence Erlbaum Associates, 2007), 4; quoted in Felten, *Undergraduate Experience*, 53.
- 19. Felten, *Undergraduate Experience*, 48; citing Jayne E. Brownell and Lynn E. Swaner, *Five High-Impact Practices: Research on Learning Outcomes, Completion, and Quality* (Washington, DC: Association of American Colleges and Universities, 2010).
 - 20. Gallup, Great Jobs, Great Lives, 6.
 - 21. Mission of BYU.
 - 22. Mission of BYU.