## Citizenship, Research, Teaching: The BYU Way

## CECIL O. SAMUELSON

Brothers and sisters, colleagues and friends, it is always a pleasure to meet together in the BYU Annual University Conference. Each summer at BYU has been for me—and I hope for you as well—a season for both reflection and refreshment. Not that it is entirely free time, because it is not. Life, with its many attendant responsibilities and tasks, goes on, and we go along with it. However, it is a time when some of the pace of fall and winter semesters slackens just a little and we—figuratively, at least—gird up our loins for the expectations and excitement of another academic year.

Our theme this year comes from Psalm 36:9: "In thy light shall we see light." It is a fitting reminder that the "light" that "proceedeth forth from the presence of God to fill the immensity of space" is also "the same light that quickeneth your understandings" (D&C 88:11, 12).

It is the light we each seek in all we do at Brigham Young University—including especially how we learn; how we teach; and how we inquire, create, and research.

I'll return in a few minutes to this idea of inquiring, creating, and researching in the light of the gospel. It is foundational to our BYU mission and our trusted common stewardship

to accumulate and contribute understanding and knowledge both personally and institutionally. In addition, we have the clear charge to share what we learn and know with our students and with each other.

Each university—and BYU is no exception in this regard—is held somewhat captive by environmental conditions both internal and external to the institution. Externally, for example, is the concern all of us in the American academy have for our students with respect to the seeming crisis in student loan availability. Hopefully some remedies and solutions will be forthcoming soon, but American higher education is watching the situation carefully. Likewise, the shaky economy and this political campaign season—with the prospects of significant changes in our governmental leadership at multiple levels—are examples of issues of interest and concern found on virtually every campus.

An external environmental matter rather specific for BYU and her sister institutions is the reality of the emergence of the prophetic

Cecil O. Samuelson was president of Brigham Young University when this address was given at the BYU Annual University Conference on 26 August 2008.

fulfillment concerning our sponsoring organization, The Church of Jesus Christ of Latterday Saints. You will remember the promise of the Lord given in the preface to the Doctrine and Covenants that power would be given to His servants "to bring [the Church] forth out of obscurity and out of darkness" (D&C 1:30).

Most of us believe BYU has had and will have a significant role in this. While I have been tempted to say more about this, I'll defer most of these comments and feelings for another time. I will say this much: Just as Charles Dickens began his famous novel *A Tale of Two Cities* with these phrases—about another place and era—for us this is also "the best of times" and "the worst of times."

This is the best of times because BYU has never been stronger or enjoyed such positive recognition for its quality, its students, and its faculty. Through BYU Broadcasting, for example, we are able to do more than ever before to get the message of our university and its sponsoring organization out to the world, and it is only the beginning.

It is the worst of times, in a way, because as a people and as an institution our legitimate weaknesses, foibles, and flaws are more visible than ever before. Also, the vitriol, unfair and misleading miscommunication, and criticism about our sponsoring Church and its members have reached levels in some quarters that seem to rival the dark days of the 19th century. Happily, we are in a better position than ever before to respond, and BYU has a key role in providing solid, credible, data-based responses and defenses.

Notwithstanding the many additional concerns affecting us that we might discuss today, I would like to focus my comments on an issue that is in some respects general across the academic landscape but also quite specific and unique to Brigham Young University. It is a topic we have mentioned before, and I'm confident that the discourse should and will continue. I am speaking about the institutional

and individual concerns, feelings, fears, and expectations that are represented among us with respect to our university citizenship, our efforts and responsibilities in the sphere of our creative and research activities, and what our stated primary focus on teaching and learning at BYU really means.

However, before I speak further on our conference theme, let me briefly update us on a few topics of ongoing campus interest. Our list today is neither comprehensive nor mentioned in any particular order or priority. Across this large, complex, and busy campus, many important initiatives and efforts are always underway. But developments such as those within BYU Broadcasting, our changing and maturing physical campus, our BYU institutional accreditation, and our special emphasis on integrity at BYU are issues that reach across campus to affect every one of us. Let me mention each briefly in turn, starting with BYU Broadcasting.

As I hope you know, BYU Broadcasting—and particularly BYU-TV—has become increasingly important to our academic mission and to the Church. We are growing rapidly and cover the entire United States, Latin America, and much of the rest of the world. Recently, for example, BYU-TV came on air in Tonga and has a tremendous following of BYU alumni, Church members, many friends, and also the frankly curious folks who are looking for wholesome and educational offerings.

Construction will shortly begin on our new BYU Broadcasting building to be located east of the Marriott Center and north of the Bean Museum. The construction costs will be covered by generous donors, and the Church has signaled its commitment to increased quality and quantity in our broadcast programming. By next year at this time you will be witnessing very significant progress on the new facility and also in our offerings.

Our physical campus, already very beautiful and functional, will continue to improve

and be wonderfully refined to meet challenges and opportunities in our changing world. New buildings are not our primary goal or focus, but they are the accompaniment of the continued progress that will be necessary to meet our prophetic destiny. You will notice significant developments in the new Office of Information Technology building currently under construction on the west side of the campus, and we expect, again with the generosity of supportive donors, to have an expansion of the Bean Museum in the near future.

With increasing demands for student housing, you will soon see the construction of a ninth building in our Helaman Halls complex. We are watching very closely the changing demographics and housing situation in our broader university community. Many of you have witnessed the ground shaking and the noise associated with the continuing expansion of our utility tunnel system, which will greatly reduce the interruptions and emergencies related to deterioration in our aging systems across campus.

The southeast quadrant of campus will be receiving great attention in the not-too-distant future. You will recognize that the Knight Mangum Building has been taken down after a long and multiuse career. We have tremendous needs to become more current in our facilities for life sciences and engineering and technology, and there are also a number of practical and aesthetic issues that require our attention.

This list is by no means comprehensive. Our beautiful campus has never been really finished in the technical sense, and I believe this will continue to be the case for the foreseeable future.

In July 2008, the secretary of education and the U.S. Department of Education convened a national summit on higher education. As part of the summit, BYU was one of 15 institutions across the country invited to share at the "best practices" showcase. Dr. Gerrit Gong represented BYU so very well in the activity. The

"best practices" we were asked to share were our student learning outcomes wiki site and the video our students made about student involvement with learning outcomes.

To date, our https://learningoutcomes.byu. edu wiki site has received some 272,000 visits by 54,000 unique visitors. Web visits to our site come from every time zone across the world. So, three cheers for each and all who are continuing to align student learning objectives, evidence, and ongoing improvement for each of BYU's 267 degree programs!

This coming year will see continuing campus conversations at various levels about how we best inquire, teach, and learn in a religiously based university. We are, of course, not unique in a tradition of pursuing inquiry, scholarship, learning, and teaching in an environment where learning is sought by study and also by faith and where our core identity reflects diversity, tolerance, and community. As always, we respect and sustain our BYU Board of Trustees, including the policy guidelines they set and the important principles they teach by which we are entrusted to govern much of what takes place here on a daily basis ourselves.

In recent devotionals, annual university conferences, and other settings, I have talked about "the BYU way," the BYU Honor Code, and the importance of integrity. On occasion I still meet a male BYU student who I suggest should visit closely with either Brother Gillette or Brother Schick. On occasion I still meet a female BYU student who is apparently wearing a little sister's T-shirt or who I wish would remember sacred guidance about adjusting clothes to garments and not vice versa.

But in general, I commend and thank all of you within the BYU community for your personal commitment and example as we help our students understand and abide by their signed Honor Code commitments. Whether in athletics, academics, housing, or other aspects of what we do, we try very hard to say what we

mean and mean what we say with respect to personal integrity.

Virtually every comprehensive American university gives at least lip service to the triad of citizenship, research, and teaching. Most of us have been to other institutions or are familiar with the different interpretations found throughout the academy about what particular meaning each of these actually has.

In my own academic discipline, which we do not have at BYU, a majority of the most highly regarded universities consider research to be king. It is understandable, if not fully defensible, to see why this is so. Let me share some of the most obvious reasons.

First, in many circles the external reputation for excellence is highly correlated with the success and prominence of its research faculty and enterprise.

Second, for the very successful researchoriented institutions, these activities can be very lucrative. Enormous grants and contracts from the various agencies of government and from wealthy foundations often represent a very significant percentage of the financial support of the university. In addition, spinoff companies, licensing agreements, patents, and the like also generate tremendous dollar benefits for successful sponsoring organizations.

Given these considerations, which are not really secrets to anyone, it would not be surprising to recognize that someone who generates enough money for the university might be considered a "good citizen" exclusive of any other contributions or considerations. Likewise, such a valuable faculty member bringing in lots of money and recognition might be excused by some for being a poor teacher or even be excused from teaching altogether. We all know this is not the BYU way.

Other institutions—such as many liberal arts colleges, community colleges, and emerging universities that focus their efforts primarily at the baccalaureate level—do not emphasize or even support research on the part of the

faculty. High teaching loads and significant teaching expectations are the norm. Our sister institutions, BYU–Idaho and BYU–Hawaii, largely fit into this framework.

Brigham Young University fits neither the model of the clearly research-first institutions nor the model of the large cadre of nonresearch schools. As we all know, we have been defined by our board of trustees as a primarily undergraduate teaching university with some graduate programs of distinction and high quality. Likewise, research of superb quality is an important part of our mission with the intent that it supports and enhances our primary responsibilities in teaching and learning.

Perhaps an example from my previous careers might be a little helpful in understanding how I see some of this. After 20 years in academic medicine, including responsibilities for a university hospital, I made a major professional shift and took a leadership position with a health-care system where I had responsibilities for more than 20 community hospitals. One of the hospitals, LDS Hospital in Salt Lake City, was one with which I had a long history. I was born there, although I don't remember much about that. As a medical student, I worked evenings as an employee in labor and delivery for one year and took some medical school electives there. On occasion I also did consultations and conducted teaching rounds there.

It was interesting to me that, at least superficially, LDS Hospital did exactly the same things that the University Hospital did. That is, each institution was involved in patient care, teaching, and research. Each facility had faculty and staff who were involved in all three missions and some other folk who were involved in only one or two. What was different was not so much the ownership—with one being a private, not-for-profit entity and the other a state-owned entity—but rather the highly different emphases or priorities of the operations. While not particularly obvious to

outside observers or even to the patients being served, the interests and basic motivations of the two places were quite different.

The University Hospital, as a direct component of a university, is primarily interested in educating prospective physicians, nurses, and other health professionals and also conducting clinical and basic research. It provides excellent clinical care, but that aspect of the mission is justified because it is necessary to provide this care in a laboratory setting established to support the educational and research missions.

LDS Hospital, and others, are primarily committed to superior patient care. They also are involved in medical education and research because their leadership believes these activities greatly enhance the quality and scope of the clinical treatments offered to their patients.

Thus, while both are doing fundamentally the same things, the emphasis and rationale at each institution are quite different. Both hospitals and their staffs clearly understand their priorities, and while each strives for and largely achieves excellence in all three spheres, their primary motivations are significantly different, even though in both cases the three activities are largely synergistic for each facility.

In a similar vein, BYU does roughly the same things as other large comprehensive universities, but the emphases and motivations may be quite different in some important respects. At BYU, our primary and major focus has been and must be on our teaching and learning responsibilities. This is true with respect to both our academics and our spiritually strengthening activities. If we are asked to choose between the interests of our students and anything else, there is really no choice. We do research, serious inquiry, or creative work because it enhances the learning and teaching environment for our students. We do not look at these efforts to provide financial support for the university generally, although we do compete for grants and strive to have these activities be largely selfsustaining. Thus we see these efforts to create or identify new knowledge and to enhance scholarship on the part of the faculty as supportive of, rather than competing with, our involvements with students.

I hope all members of our faculty are clearly aware of the tremendous support they and the university receive from the Church. I think we are. This is not just because our leaders are generous, as they certainly are, but because they wish us to completely and fully understand and support our mission priorities. An important component of our mission is the teaching of and learning about advancing the frontiers of knowledge and understanding in each of our disciplines. It is our conviction that without our faculty members being personally involved in their own continued learning and investigational activities, they cannot be the best possible teachers, mentors, and models for the outstanding students who come under their influence at BYU.

Some have guestioned whether or not it is reasonable or even possible to accomplish excellence in teaching, inquiry, and citizenship all at the same time. Admittedly this can be and often is daunting. Candidly, it is also being demonstrated as possible by more than a few of our terrific faculty members. Certainly we should not, and do not, have exactly the same quantitative standards for our people as another institution might have for its faculty who have little or no other responsibilities. In this, our BYU-wide productivity does not surprise us. On the other hand, we cannot, and must not, compromise on the qualitative aspects of the creative work that we do here. It must also be acknowledged that accurate assessment of the quality of creative and research work is not possible without sufficient quantity to judge.

As President Jeffrey R. Holland and others have said, we will not do everything at BYU, but what we do, we will do superbly well. Because you are heavily involved in teaching

and mentoring, we will perhaps not see as many journal articles or books published each year as we might see at another excellent university—but the significance of the contributions must always be in the first rank. In almost all of our disciplines it is generally possible, with considerable agreement, to reach some consensus on what constitutes real quality and what observations really contribute.

A matter of some persistent concern to me, my colleagues in the administration, and I'm sure for the vast majority of you, is that our level of sophistication, including indices of both validity and reliability, in evaluating the quality of our teaching often lags behind what we are accustomed to seeing in our research and creative activities. I believe we are making modest progress in teaching evaluation, although I think we all agree that student evaluations and ratings—a legitimate component of our information gathering—will never be the end all in our efforts to evaluate our teaching objectively and fairly. I'm grateful to all of you who are working with us on these matters and plead for your continued efforts and thought. If there is any place in the world that ought to be at the cutting edge in identifying, assessing, and describing the best in teaching and in creating a productive learning atmosphere, it should be BYU.

If our premise that learning and teaching for both students and faculty are enhanced and promoted by developing and supporting an environment of processes of shared discovery and creative productivity, then how do we facilitate a transition from the more familiar model that views teaching as merely the transmission of known information from the teacher to the student? Again, some of you are moving in this direction wonderfully well in significantly diverse ways and in markedly different disciplines.

Likewise, in the BYU-specific case, how do we best accomplish this while incorporating

our clear mandate to make all that we do also spiritually strengthening?

Our April 2008 President's Leadership Retreat focused on notions surrounding "The Best BYU Can Be in 2018" by identifying current trends and trajectories across the university and projecting where they might take us if followed for a decade into the future. Our intent was not to draw any particular conclusions. In fact, we specifically avoided doing so.

Rather, we wanted to see where we are and may be heading with respect to (1) campus buildings and physical facilities, (2) student advisement and our enriched environment, (3) technology as it may interact with campus learning and teaching, and (4) accreditation and other key issues of how BYU deals with developments in our larger, external environment.

With the coordinating leadership of Gerrit Gong and John Tanner, we gave each department chair and director, each associate dean, dean, managing and executive director, and President's Council member an electronic clicker. We invited honest, nonbinding, anonymous responses to a number of broad questions. These questions were not rigorously controlled. We did not perform systematic statistical analyses, but we did ask the current BYU leadership for a general sense of their perceptions of our likely future and priorities.

For example, the first question asked: "What's your favorite flavor of ice cream among the following flavors?"

You will be interested to know that chocolate garnered 31 percent of cast preferences, followed by rocky road (21 percent), vanilla (18 percent), and butter pecan and French vanilla tied at 15 percent each.

Another question was "How many more years do you plan to work at BYU?"

Please remember that the responses were anonymous and nonbinding. Interestingly, 31 percent of our current campus leadership say they plan to work one to five more years, possibly until 2013. Another 27 percent said they plan to work six to 10 more years, possibly until 2018. This suggests a strong majority (58 percent) of our leadership colleagues may retire in the coming decade. This is a wonderful reminder of how important each year is in our individual and collective seasons of stewardship and contribution.

I express great gratitude to each of you for all you do to make BYU what it is and continues to become. My reflections on your accomplishments have been inspiring and encouraging to me.

Where our preferences for ice cream flavors understandably distribute broadly and rather evenly across a sample of popular flavors, we see a much clearer pattern of response to the question "What is the feasibility of including inquiry, creativity, and research in an institution primarily characterized as an undergraduate teaching university?" To that question, 99 percent responded it is "possible"; 92 percent responded it is "practical"; and 100 percent responded it is "desirable."

The 100-percent affirmation that inquiry, creativity, and research are desirable at an institution primarily characterized as an undergraduate teaching university is nicely supported by a 99-percent response that such is also possible. And the 92-percent response that such is practical is, I believe, an honest recognition that we need to continue working together to make what we believe to be desirable and possible into practical reality.

Related are three other areas of broad interest and consensus we considered. You may recognize the statement attributed to an Irish poet that "education is not the filling of a pail but the lighting of a fire." A majority (53 percent) of our campus leadership say they would like to see more emphasis on "fire"—the fueling of an "aha" curiosity and inquiry for our students.

As we discussed some of these issues, it was encouraging to me to sense very strong

support for continued movement in this direction. Such support is also coupled with a high level of confidence that we can reach the heights and stature we have been challenged to achieve as we fulfill the prophecies of our prophet leaders regarding BYU. You are familiar with them, but it seems useful to reflect on two or three before moving forward.

President Kimball spoke at BYU often and had obvious love and high expectations for this university. Let me read a couple of paragraphs from his landmark "Education for Eternity" address:

In all the world, the Brigham Young University is the greatest institution of learning. This statement I have made numerous times. I believe it sincerely. There are many criteria by which a university can be judged and appraised and evaluated. The special qualities of Brigham Young University lie not in its bigness; there are a number of much larger universities.

It should not be judged by its affluence and the amount of money available for buildings, research, and other facilities. It should not be judged by prestige, for there are more statusful institutions as the world measures status.

The uniqueness of Brigham Young University lies in its special role—education for eternity— which it must carry in addition to the usual tasks of a university. This means concern—curricular and behavioral—for not only the "whole man" but for the "eternal man." Where all universities seek to preserve the heritage of knowledge that history has washed to their feet, this faculty has a double heritage—the preserving of knowledge of men and the revealed truths sent from heaven. [Spencer W. Kimball, "Education for Eternity," pre-school address to BYU faculty and staff, 12 September 1967, 1–2]

President Kimball also said, "Many of us have had dreams and visions of the destiny of this great Church university" ("Education for Eternity," 12). He then went on to quote President John Taylor, who said in 1879:

You will see the day that Zion [including BYU] will be as far ahead of the outside world in everything pertaining to learning of every kind as we are today in regard to religious matters. You mark my words, and write them down, and see if they do not come to pass. [JD 21:100 (13 April 1879)]

Incidentally, it was the same President John Taylor who said the following to the founders of what is today known as Snow College: "Whatever you do, be choice in your selection of teachers. We do not want infidels to mould the minds of our [students]" (*JD* 24:168–69 [19 May 1883]). In this I think we have been faithful, currently and historically.

Recently President Henry B. Eyring mentioned his strong belief, and that of the Brethren, that the most important thing we do at BYU is to attract, recruit, and retain the right faculty. He opined, and I concur, that the faculty has never been better than what we have currently, and for this I express both commendation and appreciation to all involved in this most important activity for BYU now and in the future.

Another area of broad BYU interest and consensus is that we feel both opportunity and responsibility to help students become "bilingual." As President Spencer W. Kimball, Elder Neal A. Maxwell, and others have so eloquently put it, we want to help equip our students to speak the language of their disciplines and the world while they are learning the language of the gospel as their mother tongue. Our citizenship will always be in the kingdom of the Lord, even though our passports may contain visas allowing travel throughout the world of ideas (see Bruce C. Hafen, "All Those Books, and the Spirit, Too!" BYU Annual University Conference address, 26 August 1991, 2).

A third area of broad campus interest and consensus is related to the first two. It is that a majority (51 percent) say we need to continue aligning expectations and measures of teaching, scholarship, and citizenship. Where and how do we define each, measure each, and take each into account in decisions made, for example, with respect to faculty rank and status? Some of the most difficult decisions we make relate to rank and status. While each case is individual, and we of course do not comment on individual cases, let me simply say again: At BYU we value teaching. We value scholarship. We value citizenship. We consider each and all to be essential for BYU to achieve the lofty goals established for this special place.

We are not asking or suggesting that accomplishments should be the same or look the same for everyone. This cannot and should not be the case. But we hope that our entire university community will embrace these values as well.

This, then, is our context. We want to help students kindle curiosity and the fire of inquiry and to become "bilingual." And we would like to identify, define, and elaborate a desirable, possible, and practical role for inquiry, creativity, and research integral to learning and teaching at our primarily undergraduate teaching and learning university.

If you are tracking with me, you might at this juncture ask, "We agree with all that has been said. How are we going to contribute to accomplishing what has been envisioned for BYU?" That is a great question, and a part of me wishes that I could give a clear, succinct, and insightful answer that would make further thought or discussion of the matter unnecessary. Happily, the other part of me realizes, as do most of you, that it is in the processes and activities of thinking, deliberating, discussing, testing, trying, changing, working, praying, and listening to each other and the Spirit that we make the heaven-intended progress that we must make. Learning "line upon line, precept upon precept" (D&C 98:12) is more than

a catchy scriptural phrase. It is the process that each of us, and certainly this institution, must go through to reach our eternal goals.

While I don't, and believe I shouldn't, have an exact, undeviating formula to take us where we need to go, I do have great confidence in the process that most of you understand doctrinally as well as I do. The challenge for the great majority who intellectually and even spiritually understand the process is still the hard work of actual application.

As a youth, I was never accused of being one with an unusual command of scriptural quotations. In that, at least, I have been consistent throughout my entire life. I do, however, remember vividly a Mutual theme that we all memorized as teens. It has stayed with me for frequent recall ever since. You all know these words of Nephi:

I will go and do the things which the Lord hath commanded, for I know that the Lord giveth no commandments unto the children of men, save he shall prepare a way for them that they may accomplish the thing which he commandeth them. [1 Nephi 3:7]

Taking the words of the prophets seriously, as we all do, I'm convinced that we have been "commanded" to do our part in causing BYU to become what it must become to reach its manifest destiny. It was a wise and doctrinally correct Church leader who said something to the effect that it is the responsibility of prophets to prophesy and the responsibility of the rest of us to see that the prophecies are fulfilled.

As a young missionary, one of the first scriptural passages I memorized was this well-recognized and oft-quoted scripture:

Trust in the Lord with all thine heart; and lean not unto thine own understanding.

*In all thy ways acknowledge him, and he shall direct thy paths.* [Proverbs 3:5–6]

Over the years I believe my understanding of this passage has improved without lessening the comfort or confidence it brought to my young heart and mind. The need to trust in the Lord without reservation or qualification is clear. What I perhaps did not appreciate initially as well as I do today is that we are not to exclude our own understanding. It is absolutely necessary, as a couple of other passages point out, but we do not lean on it or give it precedence over the direction that comes from God in the context of revelation or inspiration.

Remember the Lord's rebuke to Oliver Cowdery on this point and also understand that the principle is much more broad than only scriptural translation:

Behold, you have not understood; you have supposed that I would give it unto you, when you took no thought save it was to ask me.

But, behold, I say unto you, that you must study it out in your mind; then you must ask me if it be right, and if it is right I will cause that your bosom shall burn within you; therefore, you shall feel that it is right.

But if it be not right you shall have no such feelings, but you shall have a stupor of thought that shall cause you to forget the thing which is wrong. [D&C 9:7–9]

I would humbly suggest that these doctrinal and scriptural insights have direct application to our work at this university, particularly in dealing with issues like the relationships between teaching, appropriate inquiry or research, and citizenship that may seem to be paradoxical, oxymoronic, or the stuff of conundrums.

We might profit by considering five principles of gospel foundation that relate inquiry, creativity, and research within an environment of lifelong learning, teaching, and service.

First, we see the relationship of knowledge and the gospel as very broad, very deep, and very inclusive. We believe all real knowledge is part of the gospel, even while we also caution, as Professor Henry Eyring, the famous chemist father of our current President Henry B. Eyring, related his own father's advice: "In this Church you don't have to believe anything that isn't true" (in Henry Eyring, "My Father's Formula," *Ensign*, October 1978, 29; also in Henry Eyring, *Reflections of a Scientist* [Salt Lake City: Deseret Book, 1983], 6–7).

Second, we are enjoined to "seek learning, even by study and also by faith" (D&C 88:118).

Third, we see reason and revelation as compatible, complementary, and often mutually self-reinforcing.

Fourth, we recognize that our greatest teachers, the prophets, are also our greatest learners—by definition those who bring forth new understanding of greatest worth. Those who have learned how to inquire properly of the Lord, when appropriately authorized to do so, share what they learn. They teach with great clarity, fervor, testimony, and skill.

Fifth, we see inquiry, creativity, and research at the heart of an eternal plan where individuals learn by their own study and experiences as part of their relationship with a loving and all-knowing Heavenly Father.

At BYU there are specific applications of these foundational principles of inquiry, creativity, and research.

First, knowing that light and knowledge from all fields come from God, we therefore try to establish a focus. As Elder Dallin H. Oaks once put it:

We are concerned with behavior and consider personal worthiness an essential ingredient of our educational enterprise. This concern stems from our knowledge that we learn best when we are in harmony with the commandments of Him who is the source of all truth. ["The Formula for Success at BYU," BYU devotional address, 11 September 1979]

This character-based model of inquiry, creativity, and research rewards diligence, faith, study, and devoted effort when included in all aspects of our own learning and teaching and of those of our students as well. This is also why we place such emphasis on ecclesiastical worthiness and endorsement for new and continuing students, faculty, and staff. It is a direct link between the BYU mission, aims, and Honor Code.

As you are well aware, against the backdrop of general trends in higher education in this and other countries, part of what makes BYU unique is our determined efforts to keep learning, teaching, and moral values connected and tied to religious faith.

In a recent conversation with a senior government official of another nation, I was asked what makes BYU different from other American universities. He knew of our excellent academic reputation but also admitted to concerns about his perceptions of America's "liberal" or "overly permissive" society. He expressed appreciation for America's remarkable achievements in research and would like to adopt them in his own nation, but he also expressed the strong desire to not lose their own culture and values.

My efforts to summarize briefly a lengthy conversation on what is unique about BYU in the world of American higher education led me to the explanation I gave to my new friend. I reported that we are established on and absolutely committed to some basic values that do not change at BYU. In addition to those values shared with this man regarding such things as integrity, respect for the importance of family in society, and the necessity of the rule of law is that continued learning for everyone forever is a basic tenet we follow and one we gain from our sponsoring institution, The Church of Jesus Christ of Latter-day Saints. He seemed pleased with the answer and could see the tremendous value of always learning, always trying to

improve, always trying to find a better way, and yet never abandoning the bedrock values and truths that have stood the test of time.

In an earlier age, the phrase "a gentleman and a scholar" (or "a lady of refinement and education") was meant to praise individuals who appropriately combined societal grace and etiquette with learning. Derek Bok, the former president of Harvard, observed:

Until the Civil War, colleges in the United States were linked to religious bodies and . . . were deliberately organized to pursue two important objectives: training the intellect and building character. [Our Underachieving Colleges: A Candid Look at How Much Students Learn and Why They Should Be Learning More (Princeton: Princeton University Press, 2006), 12–13]

We at BYU do not seek to keep the linkage between learning and moral character as merely a matter of tradition. We believe the best learning and teaching are linked causally, not casually, with the foundational principles that infuse inquiry, creativity, and research in the most open and free learning and inquiring environments. Each are means and ends and are ultimately mutually supportive.

Second, we are based on firm foundational principles and therefore are quite pragmatic in our commitment to prepare students for a vast and rapidly changing world. We want each student to be firmly anchored in enduring gospel values even while they learn to tack with constantly adapting skills and information to meet changing discipline, professional, family, and community demands in a rapidly transforming world.

Third, we recognize and value the need for academic discipline mastery, the accretive or accumulation process of understanding. Much learning is layered on previous understanding and comes "line upon line, precept upon precept" (D&C 98:12), while most epiphanies come only as a result of the discipline of hard

work. Yet we all know that simply learning facts and figures, essential as they are, is also not enough.

Thus I also want to suggest that each of us considers placing an even greater emphasis on shifting our focus from the transmittal of knowledge to enhanced learning and teaching by active involvement in both the discovery and creation of new knowledge. This builds from a double truth.

On the one hand, there is no single formula for personal inquiry. Each of us will inquire, create, and research in our own way. Yet, on the other hand, all successful personal inquiry involving knowledge revealed from God reflects the same source of truth. The approaches may be somewhat different, but the ultimate source of understanding is the same for all. One of the great missions of this university is for each of us to model in all we do every day with students and others the truth that we must do all we can to inquire, create, research, learn, teach, manage, and serve knowing our best efforts may be rewarded with inspiration and knowledge from God.

What infuses all of this is also our understanding that inquiry, creativity, and research are ultimately not zero-sum competitive universes. Indeed, they are constituent, component, mutually supportive, and reinforcing parts of learning and teaching.

Some of this will be enhanced by emphasis on cross-disciplinary, synthetic thinking. This includes integrative, critical, and deep analytical thinking. This becomes sound reasoning and the cultivation of that rare but highly prized quality of good judgment.

What might be some of the programmatic manifestations of our emphasis on inquiry, creativity, and research as integral to our commitment of appropriately balanced teaching, scholarship, creative works, and citizenship here at BYU?

First, we recognize that each member of the faculty, staff, administration, and student body has the obligation to learn from those who have gone ahead and to then add to that knowledge. This is the process where we each accumulate and we each contribute. We should not reinvent that which has been done already, even as we recognize in the seemingly familiar, new dimensions or perspectives.

Second, it is logical and also prophetic that the Latter-day Saints should contribute in every field based on revealed knowledge. What is true for individuals who learn and teach together is also true for peoples and institutions dedicated to learning and teaching: there is mutual understanding, mutual edification or enlargement, and thereby mutual joy and rejoicing over results (see D&C 50). This is because the gospel encompasses everything, because revelation flows in every field, and because no one individual or people should be more intent on learning and bringing forth increased and new knowledge and understanding than the Latter-day Saints.

Third, the prophecies that the Latter-day Saints will contribute in many fields depend on individuals fulfilling the prophecies and thus making them true. This casts an even greater light on the role of Brigham Young University. Knowing no one generation of scholars will obtain all the light and knowledge the Lord will shine forth as part of continuing revelation underscores the need for us to train each succeeding generation to inquire, create, and research by the light of revelation in addition to their own best efforts.

BYU scholars will broaden and deepen the knowledge base of the world. Of equal significance, however, is that BYU faculty, staff, and administration will also teach by example the next generation—and through them subsequent generations—how to inquire, create, and research in the light of the gospel.

We must not think of BYU as only a teaching institution or as only a learning institution.

We must think of BYU as a multigenerational learning and teaching institution where inquiry, creativity, and research are part of how and what we as learners and teachers ourselves teach and learn.

Fourth, learning to love learning is thus also a key. As Elder Bednar taught at last April's commencement, learning how to learn is part of education for eternity. Here, too, there is an interesting paradox. Great BYU professors are always learning. Our danger is not generally professors who are unprepared; rather it is the relatively few faculty members who are content to believe they already know enough. Happily, I think there are not many who may use the same lecture notes and approaches repeatedly with little reference to how the world or their students may be changing.

You've heard before that it is not what you know but what you know that is no longer true that is dangerous. For most of my life I was sure Pluto was not only a planet but the planet in our solar system farthest from the sun.

Of course, taken at face value, we derive the logical and true notion that the more we know, the more we don't know—making humility the entry to knowledge but also the consequence of ongoing, continuing inquiry, creativity, and research.

Fifth, everyone at BYU can see themselves as a learner and teacher. It is in this spirit that we commend those without formal faculty appointments who help students outside the classroom through work experiences. This includes annually some 13,000 student employees who not only receive more than \$80 million in student wages but who also have the opportunity to learn life skills. No one is doing a job only to get it done, although such is essential. Every interaction with a student is a way for him or her to be trained. Thank you all for being so careful and so caring as you help our young people acquire valuable skills when they thought they were working only for money.

The characteristics of great learners are the same for great teachers. There are "dynamic tensions" or seeming paradoxes that characterize the thinking of great learners, great teachers, and those great at creative works, inquiry, and research. Why don't I dissolve in the bathtub or melt in the sun? Why do babies smile and dogs wag their tails? Why do a few people have perfect pitch or effortlessly wax poetic? Many of us love to teach beginning undergraduates because they often ask basic, seemingly uninformed questions. After they have been "educated" for a few years and become postdocs, the questions more typically come from their reading, which is usually reflective of the thinking already established in the field. In my judgment, one of the marks of the great teacher-learner is the ability to continue to ask the seemingly naïve questions in the face of a store of knowledge that might be very impressive to others.

Sixth, learning, teaching, and research (including creative work and inquiry broadly) at BYU can be self-reinforcing. It includes mentoring not only with students but also between and among faculty members themselves. It may be manifest in student participation in firstrate publications and presentations. It often is demonstrated in new approaches in the classroom where a successful course is made even better with helpful feedback from students and peers. Perhaps the most tangible evidence is the intense satisfaction that comes when one recognizes that she or he has had a role in the tremendous success of a student, knowing that the student, in turn, is likely to continue the multigenerational sequence of substantive learning, teaching, sharing, and inquiry.

How do we really establish effectual selfexamination and self-analysis? Institutionally, we have established processes and procedures for rank and status evaluation and unit reviews. We have made some progress, and all of this must continue to improve. We also must ask ourselves individually how we assess our own performances. We do not want vanity or complacency; we do need self-awareness that is capable of change. This, itself, is a process of self-inquiry. It will require hard work, creativity, and perhaps some detailed, consequential personal research. We are likely to be beneficiaries ourselves from such a process, but we are most likely to succeed if our intent is to benefit our students.

In a broad sense, all of this will be a topic for my fall college visits. Last year I found it inspirational and valuable to hear from colleagues across campus the reasons and accounts of why they and you came to BYU. We heard from members of the LDS faith and from those of other traditions. We heard from those concluding long and productive careers, from those just joining BYU, and from those in between.

In that same spirit, with more details to follow, my hope is that we can as colleagues across campus think faithfully and diligently together about how we can make inquiry, creativity, and research a more effective part of how we not only transmit known information but, more important, how we enhance teaching by participating personally in the process of discovery and the creation of new knowledge. By definition, such occurs whenever real learning and teaching take place—another reason I so strongly believe we are ultimately describing positive-sum additive elements, not zerosum competitive elements. To repeat, we are talking about symbiotic, constituent parts of the same universe, not competing universes.

I end where I began, by thanking you for being part of the great venture and adventure we call Brigham Young University and by looking forward in taking the next steps together as we make ourselves and Brigham Young University the very best we can be.