

Research Report

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Developing Writers

Interviews and Analysis of Writing Practices in Post-Secondary Education







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The mission of Utah Foundation is to promote a thriving economy, a well-prepared workforce, and a high quality of life for Utahns by performing thorough, well-supported research that helps policymakers, business and community leaders, and citizens better understand complex issues and providing practical, well-reasoned recommendations for policy change.

Developing Writers

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Interviews and Analysis of Writing Practices in Post-Secondary Education

There has long been debate as to the purpose of higher education. Some - particularly those in the liberal arts - assert that the purpose is to prepare minds for productivity through character development. Others believe that career development is more important. Students may pursue higher education for one, neither, or both of these goals. Regardless of the goal, Utah's Governor is looking to increase the number of Utah graduates. He has put forth an initiative to push higher education completion rates to 66% by 2020. Success of this goal - if attainable - would likely prepare more students for the workplace with the skills that many employers desire. One of these key skills is writing.

Utah Foundation interviewed administrators at eight of Utah's post-secondary education institutions to examine the development of writing skills. These institutions have adopted various strategies to develop students' skills that employers want and need. This report builds on many of these practices to provide insights into two barriers that prevent writing development. Not surprisingly, resource constraints - both in terms of instructor time and department funding - limit the ability of higher education institutions to offer writing courses. Further, many faculty members' disciplines do not require much writing, focusing instead on other outcomes more central to their disciplines. Some postsecondary institutions in Utah have overcome these challenges by creating writing centers, providing workshops for faculty on how to better to teach writing within the discipline, and implementing student peer review programs.

In addition to these measures, Utah's higher education institutions could use support towards effective writing in the form of policy change. Interviewees asserted that garnering writing-specific funding and resources, increasing administrative emphasis on writing, and implementing writing-enhanced curriculum changes would be most beneficial.

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INTRODUCTION

Do our colleges and universities adequately prepare students for the marketplace? Fortune 500 business executives report a skills gap between college graduates' competence and entry-level position requirements, and tens of billions of dollars are spent each year on job training in both the public and private sectors in an effort to close this gap. Much of this training focuses on "hard skills" (which are job-specific) and fact-based skills, but a good deal of training is also needed in "soft skills" such as team-work, critical thinking, and communication. One important communication skill set is good writing, and this is seen by many as a key graduate deficiency. Employer respondents to a national survey indicated that only a little over one-quarter of graduates were "very well prepared" in writing, while more than one-third were "not well prepared." A survey of employers found that over 80% say that colleges should place more emphasis on "the ability to effectively communicate orally and in writing."

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Figure 1: Best Practices and Policy Options for Overcoming Barriers to Developing Writing Skills

Writing has High Instructional Cost, Time Commitment, and Scalability Issues		
Best prac	tice:	
Peer r	reviewers/student tutors	
Writir	ng centers	
Policy:		
Increase funding and resources for writing programs		
Faculty in Many Disciplines Do Not Teach Writing		
Best practice:		
Effective writing processes and assignments		
Learn	ing communities/professional development	
Policy:		
Comr	nunicate that writing is a priority	
Imple	ment curriculum changes	

Source: Utah Foundation.

This report examines the efforts of post-secondary education institutions within Utah to address the development of writing skills. Utah has six public, four-year universities: the University of Utah, Utah State University (USU), Utah Valley University (UVU), Weber State University, Southern Utah University, and Dixie State University. Utah's private universities include Brigham Young University (BYU) and Westminster College, and its public community colleges are Snow College and Salt Lake Community College (SLCC). Additionally, Utah offers career and technical training through Utah College of Applied Technology (UCAT). Utah Foundation conducted interviews with administrators at eight of these institutions and with the Office of the Commissioner of the Utah System

of Higher Education (responsible for many facets of the state's higher education). These interviews revealed some of the benefits and difficulties with incorporating more writing-intensive courses in post-secondary curricula. The interviews also reviewed best practices and policy options (see Figure 1).

SKILLS GAPS IN THE WORKPLACE

A recent survey of employers across the U.S. examined skill levels of college graduates. ⁴ It found that nearly one-third of employers give colleges a "fair" to "poor" rating with respect to preparing students for the workplace.⁵

Respondent employers complained that job candidates frequently lack written and oral communication skills, experience working in teams, and problem solving capabilities. In addition, candidates did not demonstrate the ability to quickly adapt to the workplace, make decisions, and manage priorities. The McKinsey Global Institute 2011 "US Jobs Survey" further reinforces the notion that skill gaps are prevalent in today's workforce. Nearly two-thirds of employers surveyed reported that many recent graduates of post-secondary institutions are not prepared for the global economy and expressed an inability to find qualified applicants for openings. More than half of these employers are concerned about the resulting impact of this situation on their organizations.

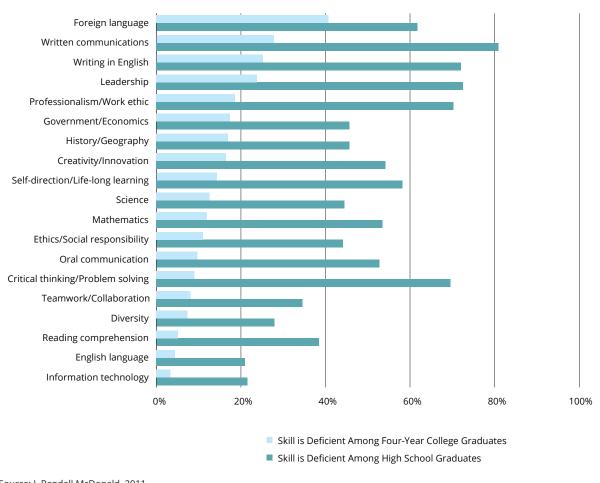


Figure 2: Percent of Employers Who Report Skill Deficiencies Among New Hires

Source: J. Randall McDonald, 2011.

Although employers are willing to use corporate resources to provide training for the development of specialized skills needed in their respective industries, they believe that graduates entering the workforce should already possess basic skills, such as oral and written communication skills.⁸ As highlighted in Figure 2, writing skills are some of the most highly needed, albeit the most commonly deficient, skills among newlyhired employees.

The needs of employers in Utah mirror those nationally. In its 2010 report, the K-16 Alliance Workforce Committee of the Center for Public Policy & Administration at the University of Utah stressed the skills that employers are seeking among Utah post-secondary graduates. Similar to the other studies cited above, verbal and written communication skills were ranked first among more than one dozen skills that employers wish to see in new hires by 2020. Problem solving and interpersonal skills were also listed as "top five" priorities. Eighty-nine employers who participated in eleven focus groups indicated they had noticed a decline in the ability of new hires to interact socially, provide customer service, and resolve conflicts.

According to Professor Daniel Hirschorn of the University of Maryland, writing is becoming increasingly important in the workplace. Documents that lack clarity or are poorly executed can result in serious

ramifications for both the writer and the organization. Writer Leigh Richards posits that effective workplace communications can lead not only to a more successful organization, but also to better relationships with other firms, partners, and employees. 10

HIGH-IMPACT EDUCATIONAL PRACTICES

How do institutions of higher education ensure they are meeting the writing requirements of employers? One way is to ensure they are performing the types of educational practices that engage and retain the students so that they realize their full potential. A 2008 study conducted by George D. Kuh of the Association of American Colleges and Universities discussed the importance of widely tested "High-Impact Educational Practices" in increasing student retention and engagement.¹¹ Kuh argues that these practices, as outlined in Figure 3 and detailed in Appendix B, have been shown to effectively challenge students to think and respond in new ways and to increase their understanding of how learning and coursework can apply to the workplace. The more opportunities provided for students to be mentored, build relationships, be exposed

Figure 3: High-Impact Educational Practices to Increase Student Retention and Engagement

First-year seminars			
Common intellectual experiences			
Learning communities			
Writing-intensive courses			
Collaborative assignments and projects			
Undergraduate research projects			
Diversity and global learning courses			
Service and community-based learning			
Internships			
Capstone courses and projects			

Source: Association of American Colleges and Universities.

to diversity, and receive ongoing feedback, the greater their learning will be throughout their post-secondary careers. ¹² These high-impact educational practices enhance student engagement, thereby increasing student success.

Several high-impact educational practices can assist students in developing the written and verbal communication skills that are valued in the workplace. For example, collaborative assignments and projects allow students to build team-oriented skills as they assume various roles within a team. Capstone courses and projects provide students the opportunity to apply what they have learned in their

discipline and throughout their entire undergraduate to a real-world problem or context. A requirement to participate in writing-intensive courses ensures that students will develop their writing skills, establish a writing process, and obtain feedback on aspects of their thought processes and synthesis of evidence and opinion.

Researchers Jayne E. Brownell of Hofstra University and Lynn E. Swaner of Long Island University have highlighted a number of positive effects from these high-impact educational practices. Importantly, such practices help students begin to understand the perspectives of others and integrate and apply information at a higher rate. These high-impact educational practices have been shown to be beneficial to students regardless of background. Brownell and Swaner recommend that students engage in at least one high-impact educational practice per program year. The researchers believe it is key for all students to participate in a minimum of two of these practices during their college careers—one in the first year and another while pursuing their academic major. ¹³

Utah

According to Stan Jones, president of Complete College America, today's college students are much different from those of past decades. Of course there are students of the "traditional" age, but many students are older, and today's students may live off-campus, balance school and jobs, and support families. ¹⁴ In Utah, due to certain cultural and demographic characteristics – young marriage age, young parents, church missionaries

leaving and returning, and several of the urban universities historically being "commuter schools" – some of these national trends have been in place for some time. ¹⁵ The transitioning world of student life poses challenges for the successful implementation of the high-impact educational practices on today's campuses, as do the differences in maturity, work discipline, experience, and technological familiarity. It is considerably more difficult to coordinate activities such as learning communities and collaborative projects and to encourage exploring common intellectual experiences and diversity and worldviews when students are balancing part-time jobs, family life, and part-time education.

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Nonetheless, many Utah institutions of higher education have effectively implemented high impact practices to best serve their student populations. For example, Westminster College and UVU have implemented learning communities to encourage students to feel part of a community, increase student engagement, and promote enhanced delivery of learning among faculty members. ¹⁶ The University of Utah has implemented capstone project courses and opportunities for service learning. ¹⁷ Salt Lake Community College (SLCC) enrolls students in cohorts and encourages involvement in learning communities. ¹⁸

USU students have reported a high level of satisfaction with their high-impact educational practice experiences, which include capstone projects in most majors, writing-intensive courses, and undergraduate research projects. Two-thirds of students take common courses to spur collaboration, share common intellectual experiences, and become more engaged in intentional learning. Students report being more engaged and better able to map their educational careers.¹⁹

At UVU, students can graduate with a service learning designation to illustrate their ability to partner with the community and completion of practical, hands-on projects. Students document their experience through reflective writing and will soon be using electronic portfolios to track their writing.²⁰

Southern Utah University requires an experiential learning experience of every student. The required experience lasts multiple semesters and is meant to demonstrate a student's ability to work with others.

Weber State has been very aggressive with its adoption of high-impact educational practices. In addition to incorporating undergraduate research projects, service learning, and writing-intensive courses into the curriculum, Weber State has hosted national conferences on undergraduate research and American democracy. Students are provided with opportunities to engage with the community to conduct "real-world" surveys of socio-economic issues and to discuss, write about, and present ideas to address these issues.²¹ Weber State also requires capstone projects in nearly all of its programs. Through this requirement, students have an opportunity to write in a professional way and to summarize and reflect on the learning they have gained within their discipline.²²

All of these institutions have encountered obstacles to implementation. Scalability is especially difficult due to the labor-intensive, costly nature of many of the high-impact educational practices. In many cases, a program becomes a "boutique program" that services only a small number of students.²³ Some institutions find that students simply do not have time to become more engaged. Because Utah has the highest rate of volunteerism in the nation, many students are already engaged in some sort of service learning or community service and find it difficult to take on additional activities.²⁴

Although most institutions see the value of high-impact educational practices, they are simply not all cost-effective, scalable solutions.²⁵ Writing is a key example of the difficulty of scalability. Grading multiple writing assignments for both writing skill and content is time-consuming, particularly in large classes. This is the case both for faculty who are specifically teaching writing as well as those who are using writing to teach other subjects.

WRITING IN HIGHER EDUCATION INSTITUTIONS

Becoming a capable writer is a long-term, complex process. Writing skills and information literacy skills need to be developed, including the ability to identify and evaluate sources, synthesize information, and correctly cite references. To achieve information literacy, students need to practice finding information quickly and effectively, assess sources and information critically, and utilize the information ethically. To this end, librarians on all Utah campuses are highly involved in delivering information literacy instruction. At USU for instance, librarians are integral to teaching digital library tools to students enrolled in English 1010 and 2010. Further, departments within the university promote the development of writing skills within their programs. Two overarching approaches are "Writing in the Disciplines" (WID) and "Writing Across the Curriculum" (WAC).

WID utilizes writing as a way of developing knowledge within a discipline by integrating the relationship between writing and acquiring content knowledge. Writing assignments reflect those that occur in the discipline or in the disciplinary research.³⁰ Students who are exposed to WID are better able to analyze and critique literature within the discipline and are better understand the processes, procedures, and methods used within the discipline.³¹

WAC refers to the practice of using writing as an instructional tool in general education or in teaching across disciplines. Teachers utilizing writing "as an instructional tool in their teaching" in traditionally non-writing classes.³² Nationally, over half of colleges and universities report having WAC programs, which most often include writing centers, though only about a third of community colleges include a WAC program.³³ The programs focus on the writing proficiency of students and on developing faculty capabilities.

A recent study conducted at Middlebury College in Vermont examined whether WAC and WID programs elevated students' writing transition throughout their college career and whether students progressed from being high school-level to college-level thinkers.³⁴ Although the majority of writing objectives were met by students during their college careers, there was only marginal improvement in some skills such as thesis formulation, evidence gathering and analysis, and development of insightful conclusions until the fourth year of study; fourth-year papers were more likely to include these components.³⁵ The study found that capstone courses and projects need to be on the list of high-impact educational practices to ensure that students are provided the opportunity to reach this level of writing success.

Utah

The development of WAC- and WID-type writing skills is a priority for most colleges and universities in Utah. At Westminster College, disciplines must demonstrate that they are aligned with learning goals, such as writing skill development.³⁶ At BYU, the development of writing skills is considered a high priority and many disciplines offer advanced writing courses.³⁷

In 2012, UVU created a committee to review aspects of writing-intensive courses, including the number of writing assignments, the portion of the course grade attributed to writing assignments, the length of writing assignments in terms of words and pages required, and the revision and feedback process for writing assignments. Recommendations generated by the committee included cross-institution coordination, specific criteria for writing-enriched courses based on the review, and increased focus on writing in the disciplines. The university's Office of Academic Affairs determined that the variation in writing courses across schools and colleges was better served through decision-making at the individual college level. However, the UVU writing center supports faculty across the institution in their efforts to develop writing-intensive courses and assignments.³⁸

Although no documentation cites writing as an institutional priority, writing is one of the learning outcomes determined by the University of Utah's General Education Council.³⁹ In 1984, the University of Utah implemented one of the first writing programs in the nation and has introduced a new writing major to accompany the 22 established majors and 27 minors.⁴⁰ At USU every graduate must take two upper division "communications intensive" courses which must incorporate individual writing, collaborative communication, multiple drafts and revisions, feedback on writing assignments, and multiple media for writing and presentation. In addition, courses are expected to include significant opportunities for oral communications, as well as include the use of technological tools.41

In addition to introducing a popular master's degree in professional communications two years ago, Weber State has revamped its freshman and sophomore writing program. Students are required to take writing courses where they address topics in proposed majors or areas of interest. Students who have earned Presidential Scholarships are expected to continuously improve communication skills through service learning, book reviews, and open admission honors classes that include very intensive writing courses. 42

There are two multistate initiatives with the express purpose of fostering writing success in Utah institutions. The Western Interstate Passport Initiative engages faculty from Utah and four other states in written communication, oral communication, and quantitative literacy. This initiative is based on the Association of American Colleges and Universities' "Essential Learning Outcomes" and strives to solidify transfer agreements among institutions, thus easing students' ability to transfer among institutions in the Intermountain West. This saves money and improves student graduation rates.⁴³ These "Essential Learning Outcomes" (see Figure 4) include a set of "intellectual and practical skills" such as written and oral communication, quantitative literacy, and information literacy.⁴⁴ Utah is also participating in the Multi-State Collaborative to Advance Learning Outcomes Assessment initiative, which assesses writing and math skill development in higher education institutions in nine states across the nation. Some institutions are also assessing critical thinking skills.⁴⁵ This initiative is also based on the "Essential Learning Outcomes" and aims to develop methods of presenting assessment results in narrative so that the public understands exactly which learning outcomes are achieved by students and at what level of depth.

WRITING ASSIGNMENTS TO DEVELOP WRITING SKILLS

Figure 4: The Essential Learning Outcomes

Knowledge of Human Cultures and the Natural and Physical World Through study in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts Intellectual and Practical Skills Inquiry and analysis Critical and creative thinking Written and oral communication Quantitative literacy Information literacy Teamwork and problem solving Personal and Social Responsibility Civic knowledge and engagement—local and global Intercultural knowledge and competence Ethical reasoning and action Foundations and skills for lifelong learning Integrative and Applied Learning Synthesis and advanced accomplishment across general and specialized studies

Source: Association of American Colleges and Universities.

Writing assignments in post-secondary institutions generally differ significantly from those assigned in high school. While Advanced Placement and International Baccalaureate programs often require research papers, high school assignments typically involve only literary analysis and essays. On the other hand, upper division college coursework requires students to master numerous genres, such as lab reports, literature reviews, and research papers. These genres require significantly more time, thought, and organization. 46 Not only must college students understand new genres of writing, they must also incorporate concepts from their discipline, presenting and evaluating research in a systematic and articulate deliverable.⁴⁷

Within the social sciences, concept-driven writing is prevalent. Students begin with a concept, formulate a hypothesis or theory, and apply the concept to the data, study, or content that they are analyzing. In contrast, data-driven writing (common in humanities programs) begins with the data or literary analysis, which is then used to formulate a theory or support a conclusion.⁴⁸ Traditionally, both the social sciences and the humanities place a heavy emphasis on writing; that emphasis decreases in some of the science, technology, engineering, and math (STEM) disciplines.⁴⁹

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The National Survey of Student Engagement (NSSE), together with the Consortium for the Study of Writing in College (CSWC), found that writing assignments that incorporate interactive activities such as peer review and discussion, instructor feedback, and writing center support provided a deeper learning experience for students. In addition, requiring students to synthesize information and focus compositions for a specific audience improved information literacy.⁵⁰

Utah

Higher education institutions in Utah are taking increasing advantage of newer knowledge, tools, and technologies to vary the types of writing assignments available to students. Westminster College attempts to provide students with a formula for composition and encourages reflection on the writing process itself. Similar to the SLCC program, instructors at Westminster are encouraged to assign "scaffolded" assignments that provide opportunities for students to receive feedback on each step of the writing process and on several drafts of a final composition from both peers and instructors. Scaffolding utilizes a series of small assignments that build to a final composition allowing students to receive feedback throughout the process, from either the instructor or peers. Students first submit a topic proposal, a proposed bibliography for research, and illustrate how they will use data or cite sources. Other assignments may require students to discuss and evaluate academic writing and how previous scholars have made and support arguments using multiple sources. Through these step-wise assignments, students become more aware of and begin to incorporate the writing process.⁵¹

SLCC has been a leader in the "ePortfolio" initiative, which has also recently been implemented by Westminster. This initiative provides students an opportunity to demonstrate their mastery of defined learning objectives. A version of an ePortfolio is developed by each student at both the mid-point and completion of their college program to illustrate mastery of all program-learning goals.⁵²

At BYU, all disciplines require that students complete a major communications deliverable, which may include a research paper or capstone project coupled with an oral presentation.⁵³ In the National Survey of Student Engagement (NSSE) survey, BYU ranks highly for smaller (up to five page) assignments, but ranks below many other colleges for longer writing assignments (greater than 25 pages).⁵⁴ One key challenge for instructors at BYU is the large class size, which averages 80 students. As a result, it is difficult for instructors to grade interim assignments or provide timely feedback on draft compositions, especially for those assignments that are of greater length.

At the University of Utah and USU, each discipline develops writing assignments that are appropriate for the needs of the discipline. Common assignments include research papers, lab reports, proposals, and oral presentations, though the mix of these reports will vary upon discipline. Fine arts students will most likely write critiques and analyses on performances and visual arts, while business students frequently analyze and assess case studies in a team environment. Poster sessions—which require both research and technical writing—are common in the sciences. In all situations, the goal is to develop writing skills that are above and beyond those required within the major.⁵⁵

In an effort to further develop writing skills, USU's College of Engineering hired its own English teacher and added extra writing requirements to its major since writing does not occur naturally in these courses.⁵⁶

Also at USU, faculty teams in all general education areas have worked out rubrics that spell out the sort of writing that must be taught. This has been a bottom-up effort because faculty recognize their responsibility to prepare students for success at the next level of education; faculty are willing to work on the problem despite large class sizes and other impediments.⁵⁷

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REQUIREMENT OF WRITING-INTENSIVE COURSES TO GRADUATE

One method of promoting the development of writing skills in post-secondary institutions is to mandate the completion of writing-intensive courses. Such courses use academic writing to develop students' clear presentation of data, arguments, and verifiable conclusions. Another important part of learning how to write is the academic feedback students receive.⁵⁸ These writing-intensive courses provide the foundation upon which graduates can build in their careers.

A longitudinal study of Harvard University college students followed more than 400 students of the class of 2001 as they progressed through their college careers. Students reported writing as many as 20 papers and lab reports in their freshman year, with humanities and social science students producing more such deliverables than those students in science disciplines.⁵⁹ Students responded that writing papers provided them with the opportunity to explore a topic in-depth, think for themselves, and experience a connection between writing and learning. They gained the confidence to "speak back to the world" and to express their opinions and disagreements with specific course topics. More than 70% of the students found that writing helped them apply course concepts, become more engaged with course content, and feel involved with the academic discipline. However, despite the pride they felt in their accomplishments, many did express that writing-intensive courses left them with less time and less sleep. In contrast, students commented that courses without a writing component did not require that course content be "digested" and that information could simply be repeated on exams.⁶⁰

There are a number of alternatives to academic writing that instructors can employ to promote writing within their courses. Instructors can request that students conceptualize or arrange academic arguments in new ways or use alternative formats or methodologies. Alternative media, such as blogs, imagery, multimedia, and e-mail can also be used to enhance writing skills.⁶¹ In addition, instructors can request that students write in formats that promote problem-solving skills as well as writing skills. Some of these genres include business plans, feasibility or project reports, marketing plans, project or technical proposals, and memoranda. To promote both empirical inquiry and writing skills, laboratory or research reports, posters, presentations, and articles can be creative ways for students to emulate real-world deliverables.⁶²

Utah

Most of the institutions interviewed by Utah Foundation require the successful completion of two writing courses for graduation. Institutions under the Utah System of Higher Education (USHE) umbrella – of which there are two research universities, four regional universities, and two community colleges – offer English 1010 and 2010 to partially satisfy this requirement. USHE students may be placed into English 1010: Introduction to College Writing, which provides students with a foundation in information literacy, rhetoric, and academic research and writing. English 2010: Intermediate Writing provides an opportunity for students to hone their writing and rhetoric skills while working in teams and integrating digital media, reading, and writing.

The University of Utah offers more than 100 upper division courses with a "College Writing" designation. These courses utilize a rubric designed by the Association of American Colleges and Universities and are reviewed every five years to ensure that they are aligned with learning outcomes.⁶⁵

In addition to the mandatory general education writing courses, two upper division communications-intensive courses have been required for graduation from USU since 1997. These courses are screened by a committee and incorporate oral communication requirements as well as writing. Every major provides them, and they often incorporate a capstone experience. At Weber State, the focus of the writing program is on execution and how best to instruct and develop writing skills. Writing courses are available both across the curriculum (WAC) and within each discipline (WID).⁶⁶

At UCAT, writing skills are developed within each discipline. All requirements are determined at the discipline level and are partially determined by employer needs at the regional level.⁶⁷

Private universities in Utah also place a high priority on writing. Westminster College requires both a freshman composition and introduction to literature course. However, as a "bottom-up" organization, it offers many additional senior-level courses within the various programs and disciplines.⁶⁸ Westminster College indicates that teaching writing within the discipline is indeed teaching the content of the discipline and is key to being successful in the discipline.⁶⁹ At BYU, a writing course is required in both the freshman and junior years. The junior-level course is completed within the discipline. A senior-level writing course is also required and is typically a capstone project.⁷⁰

Although these mandatory requirements ensure that students receive some exposure to the writing process, they do not guarantee mastery. Students may be able to improve their writing skills in one or two semesters, but additional and continual practice and feedback is critical to become truly competent.⁷¹ At BYU, curriculum committees at each college discuss strategies for teaching writing and have requested that the writing center provide and instruct on the use of rubrics.⁷² At USU communications skills are considered central to all degrees and are overseen by the University-wide General Education Subcommittee of the Educational Policies Committee of the Faculty Senate.

OVERCOMING BARRIERS TO WRITING INSTRUCTION WITH BEST PRACTICES AND POLICIES

With all the emphasis on writing, why do writing deficiencies persist? As has been discussed before, there are key barriers to successful, higher education writing. The way past these barriers is with stakeholder involvement in implementing best practices and effective policies.

Numerous stakeholders are involved in this issue of writing. There are the higher education institutions themselves, which must work with the skills students bring to them – skills which may be deficient. These institutions are obviously accountable to the students, but also to other stakeholders such as governing boards and policy-makers. These stakeholders have roles to play in bolstering the success of writing proficiency of graduates.

This report next examines two key barriers to effective graduate writing. The first is that writing instruction is time intensive. The second is that many faculty members simply do not require writing within the discipline.

Writing has High Instructional Cost, Time Commitment, and Scalability Issues

Nearly all the institutions interviewed by Utah Foundation state that the manual intensity and time commitment involved in reading and providing substantive feedback on written compositions is a large barrier to effective writing instruction. Due to the necessity of human interaction to ensure learning, effective writing courses are extremely difficult to scale, although many general education writing classes continue to have as many as 80 students.⁷³

Due to the workload associated with writing-intensive courses, many institutions augment teaching staff with adjunct professors or teaching assistants. Inherent problems with these practices include teaching assistants not being well-versed in writing instruction or providing inconsistent feedback. Some departments do not have graduate student teaching assistants to call upon to assist.⁷⁴ Similarly, adjunct faculty, like the teaching staff themselves, frequently may not be able to allocate enough time to ensure that students are prepared for higherlevel classes. They may not be paid to provide it, and may not be given offices in which to meet with students.⁷⁵

Best Practice: Peer Reviewers/Student Tutors

To relieve some of the workload from writing instructors, BYU has successfully implemented a peer tutor model whereby students are trained to review the work of their peers. 76 USU has a similar program using Writing Fellows (formerly known as Rhetorica Associates) and Undergraduate Teaching Fellows. These individuals are typically college seniors paid to assist students in writing-intensive classes that they themselves have already completed. Writing Fellows and Undergraduate Teaching Fellows review student papers prior to submission to a professor, providing additional and timely feedback. In addition, they assist professors with logistical issues such as tracking peer reviews and managing assignment submissions.⁷⁷

Best Practice: Writing Centers

Most universities have funded writing centers to support students in their efforts to develop writing skills. Writing centers provide one-on-one support to students on a "drop-in" basis and can offer tools and techniques to students to improve their writing.

Despite the fact that many resources—such as workshops and writing centers—are available to faculty, few instructors take advantage of these services.⁷⁸ These resources can teach instructors how to better design writing assignments and provide new ideas and tools for teaching writing within the discipline. According to administrators at BYU, the disconnect between the classroom and the real world remains the main weakness of teaching writing in the discipline.⁷⁹ This disconnect is tied to faculty not using writing centers or professional development opportunities to improve writing.80

The writing centers at BYU employ "writing fellows," who are available to both tutor fellow students in class and assist faculty in developing better assignments.⁸¹ At UVU, peer tutors at the writing center have a national tutoring certification and visit specific classes to provide writing support.⁸² Westminster's writing center supports faculty by helping to determine and assess writing goals. However, writing centers typically cannot replace the important feedback provided by classroom instructors.83

Policy: Increase Funding and Resources for Writing Programs

Most administrators interviewed by Utah Foundation would like to see additional funding directed toward writing programs. Smaller classes would help to ease the workload for professors.⁸⁴ Additional funds would enable institutions to hire more writing instructors and shrink class sizes, which would in turn allow instructors to provide more timely and effective feedback to their students. 85 Funds could also be directed toward professional development, such as in-depth workshops that new and experienced faculty may attend to learn more about how to better instruct writing-intensive courses.

A great deal of funding has been directed toward STEM disciplines. However, despite feedback from employers on how vital communication skills are in the workplace, little funding has been provided to develop writing and speaking skills within the STEM disciplines.⁸⁶

Faculty in Many Disciplines Do Not Teach Writing

Another barrier is that, although there is consensus among faculty and administrators that students must learn to write better, many faculty in the disciplines frequently think that it is the responsibility of the English department to teach writing skills or that first-year general education writing composition classes should suffice.⁸⁷ Faculty may feel (whether accurately or not) that requiring more writing assignments may result in less focus on course content.⁸⁸ Further, faculty in the disciplines may not be comfortable teaching or evaluating effective writing within their disciplines.⁸⁹

Best Practice: Learning Communities/Professional Development

Providing an opportunity for faculty and staff to learn from one another and share best practices may ease the pressure resulting from heavy writing course workloads. Faculty and staff at Westminster College have established learning communities to share information and best practices regarding how departments have incorporated more writing assignments into program curricula. 90

BYU administrators recommend that institutions provide ongoing seminars for faculty throughout the academic year to help them design better assignments and develop fair rubrics and evaluations. Sharing information and tools can promote consistency in teaching approaches across the institution, and surveys of faculty may provide helpful insights, such as how to define and detect plagiarism and how to design better assignments. Other recommendations include providing online training, tools, and materials as resources for effective writing instruction. Administrators also recommend that instructors practice editing and writing to hone their own skills. In addition, by editing the work of colleagues, instructors might see issues in their colleagues' work that they are unable to identify on their own. 92

Several administrators expressed concern about the quality of teaching instruction within secondary and post-secondary writing programs. Some administrators advocate that writing skill be a criterion for receiving tenure, while others recommend that professors be incentivized to gain professional development in writing.⁹³

Best Practice: Effective Writing Processes and Assignments

Faculty and institutions could create an effective writing process for developing compositions and for bridging the gap between writing assignments in the disciplines and the needs for writing in the workplace. He addition, faculty and staff could design bridge assignments through scaffolding that allow for ongoing revisions and a greater amount of feedback. Through the use of rubrics and information literacy tools, students will become more aware of their own patterns of writing and where skill gaps and problems arise. Administrators also advocate for well-conceived assignments that provide clear, concise instructions and appropriate evaluation criteria. Because of the broader variation of writing genres and media today than in times past, instructors could also alter their perceptions of what is a typical writing assignment—yesterday's classic essay may double as today's blog.

In many cases, faculty feel as though they cannot require extensive writing projects because heavy workloads in theirs classes may result in less than exemplary review from students. This is why liberal arts tend to have better outcomes for communication skills; their traditions hold that heavy reading and writing assignments are natural. PResearch suggests that business schools are especially weak in teaching good communication skills. Reaching good communication skills. Reaching campus culture regarding tenure decisions — which are often heavily reliant upon student satisfaction — faculty could provide more rigorous writing assignments, thereby resulting in better writing outcomes.

Policy: Implement Curriculum Changes

Several higher education administrators recommend implementing stronger "writing across the curriculum" and first-year writing programs as preparation for upper level courses. A stronger WAC program would involve additional general education or core classes, more writing resources to support students, and in-depth workshops that address specific writing components.¹⁰² Administrators also recommend sharing best practices across campuses and piloting ideas and programs.¹⁰³

Policy: Communicate That Writing is a Priority

Dr. Michael Carter of North Carolina State University recommends that educators return to a learning environment that focuses on writing and speaking.¹⁰⁴ Both Wegner and HR Policy Association's Jeffery McGuiness recommend that as post-secondary students progress through their college careers, they should become more aware of the skills and competencies they need to be successful in the workplace, as communicated by prospective employers.¹⁰⁵ Educators and employers can promote this awareness by communicating the skills and competencies that are needed from graduates.¹⁰⁶ Students could also do their part by understanding that lifelong learning will be required from them to improve job security.¹⁰⁷

According to administrators, top-down messaging from institutional executives and department leaders regarding the priority of writing skill development would go a long way to ensure bottom-up support for writing initiatives, though only if the proper incentives were in place. ¹⁰⁸ Programs could take responsibility and be held accountable for adhering to college-wide writing goals to supplement writing across the curriculum efforts promoted in general education programs. ¹⁰⁹ One way of initiating the top-down approach is for institutions to further emphasize the importance of the Association of American Colleges and Universities' "Essential Learning Outcomes" in faculties' curricula and institutional goals. As per USHE policy, these outcomes are meant to guide institutions in requiring that course objectives be aligned with specific, defined learning outcomes; additional emphasis would help send the message that writing is a valued skill and priority. ¹¹⁰

CONCLUSION

There is a consensus among employers and higher education institutions that writing is a critical skill for success both in academia and in the workplace. Collectively, post-secondary institutions are developing programs and initiatives to incorporate more opportunities for students to cultivate writing skills and be better prepared for future careers. George D. Kuh's high impact educational practices are designed to accomplish these goals and to make sure that students are engaged and want to complete their education. However, there are barriers and challenges to delivering writing instruction. Communicating that writing skill development is a priority, providing professional development for instructors, and ensuring that instructors have the tools and support they need in the classroom would assist in overcoming these obstacles. Ultimately, allocating additional funding to support these efforts would demonstrate the importance of the initiatives, as well as provide the needed resources to promote writing skill development.

APPENDIX A: INTERVIEW LIST

Institution	Type of Institution	Contact Name	Position/Role
University of Utah	Public four-year	Dr. Maureen Mathison	Chair, Department of Writing & Rhetoric Studies
University of Utah	Public four-year	Dr. Ann L. Darling	Senior Associate Dean, Office of Undergraduate Studies
Utah System of Higher Education	n/a	Dr. Teddi Safman	Assistant Commissioner for Academic Affairs
Weber State University	Public four-year	Dr. Ryan Thomas	Associate Provost & Dean of Undergraduate Studies
Utah State University	Public four-year	Dr. Norman Jones	Director of General Education and Curricular Integration
Utah College of Applied	Public CTE/Certificate	Jared Haines	Vice President, Instruction and Student
Technology	Programs		Services
Utah Valley University	Public four-year	Dr. Maureen Andrade	Associate Vice President Academic Programs
Brigham Young University	Private four-year	Dr. Jeff Keith	Associate Academic Vice President for
			Undergraduate Studies
Brigham Young University	Private four-year	Dr. Brian Jackson	Coordinator of University Writing
Brigham Young University	Private four-year	Dr. Gregory Clark	University Professor of English
Brigham Young University	Private four-year	Dr. Deborah Dean	Associate Chair, English Department
Westminster College	Private four-year	Dr. Christopher LeCluyse	Associate Professor of English and Director, Westminster College Writing Center
Westminster College	Private four-year	Dr. Paul Presson	Associate Provost for Institutional Research & Assessment
Salt Lake Community College	Public two-year	Dr. Christopher Picard	Provost

APPENDIX B: HIGH-IMPACT EDUCATIONAL PRACTICES TO INCREASE STUDENT RETENTION AND ENGAGEMENT 111

- **First-year seminars** bring small groups of students together with faculty and staff to explore writing, information literacy, critical inquiry, and ongoing faculty research. Students utilize these opportunities to develop both intellectual and practical competencies.
- Providing students with a common set of required courses allows them to share **common intellectual experiences** and understand broader themes within a general education program.
- Learning communities encourage students to take courses as a cohort and work closely with professors to examine "big questions" and incorporate learning across course subjects. Through these communities, students explore common topics and literature, and engage in related service learning.
- Writing-intensive courses across the curriculum provide students with the opportunity to develop
 writing skills targeted at various audiences. Courses within disciplines can assist in developing writing
 skills through the use of real-world assignments and final year projects that resemble what employees
 encounter in the workplace.
- There are two main goals that students should strive to achieve when engaging in collaborative assignments and projects. One is to learn to work and solve problems as a team and the second is to improve their own understanding through listening to the insights and perspectives of fellow students. Each student brings a unique background and set of life experiences, which, in turn, brings richness to collaborative team-based and group assignments.
- **Undergraduate research projects** provide students with the opportunity to conduct research and empirical observation and draw conclusions regarding interesting and important questions and issues.
- To explore cultures and new life experiences, students may wish to consider a study abroad opportunity, or another experiential learning opportunity in the community. Students may explore topics that touch on human rights and freedoms, ethnic and gender equality, and other themes regarding **diversity and worldviews** that differ from their own.
- Service learning and community-based learning provide opportunities for students to partner with
 organizations in the broader community. Students apply post-secondary learning in solving real-world
 problems, preparing them better for both citizenship and employment.
- **Internships** provide experiential learning to students in a workplace setting that is related to their future career interests. In some cases, students are able to receive course credit for their efforts.
- Capstone courses and projects allow students to integrate and apply all that has been learned during their post-secondary "careers." The capstone project can take the form of a research paper, a performance, portfolio, art exhibit, or other applicable medium.

ENDNOTES

- McGuiness, Jeffrey C. Blueprint for Jobs in the 21st Century. Washington, D.C.: HR Policy Association, 2011. Mikelson, Kelly S. and Demetra Smith Nightingale. "Estimating Public and Private Expenditures on Occupational Training in the United States." December 2004
- 2 Kuh, George D. "High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter." (Association of American Colleges and Universities) 2008.
- 3. The Association of American Colleges and Universities. Raising the Bar: Employers' Views on College Learning in the Wake of the Economic Downturn. 2010. http://www.aacu.org/leap/documents/2009_EmployerSurvey.pdf (accessed June 23, 2014). The Association of American Colleges and Universities. It Takes More Than a Major: Employer priorities for College Learning and Student Success. 2013. http://www.aacu.org/leap/documents/2013_EmployerSurvey.pdf (accessed June 23, 2014).
- The Chronicle of Higher Education. "The Role of Higher Education in Career Development: Employer Perceptions." 4. American Public Media's Marketplace, December 2012.
- The Chronicle of Higher Education. "The Role of Higher Education in Career Development: Employer Perceptions." 5. American Public Media's Marketplace, December 2012.
- 6. Business-Higher Education Forum. "Forging Strategic Business Partnerships to Develop the 21st Century Workforce." 2013. The Chronicle of Higher Education, 2012.
- Auguste, Byron, Susan Lund, James Manyika, Lenny Mendonca, Sreenivas Ramaswamy, and Tim Welsh. "An Economy 7. That Works: Job Creation and America's Future." June 2011; Peter D. Hart Research Associates, Inc. "How Should Colleges Prepare Students To Success in Today's Global Economy?" December 28, 2006.
- 8. McDonald, J. Randall, 2011.
- 9. Hirschhorn, Daniel. Quick Reference Guide to Major Types of Workplace Writing. The American Jewish Joint Distribution Committee, JDC Europe, 2006.
- 10. Richards, Leigh. "8 Characteristics of Business Communication." 2013.
- 11. AAC&U. High-Impact Educational Practices. 2013. http://www.aacu.org/leap/hip.cfm (accessed December 6, 2013).
- 12. Kuh, George D. "High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter." (Association of American Colleges and Universities) 2008.
- 13.
- Jones, Stan. "Testimony before the United States House of Representatives Subcommittee on Higher Education and 14. Workforce Training ." Complete College America. Washington, July 18, 2012.
- 15. Utah System of Higher Education, Data Books, 2000-2014.
- LeCluyse, Dr. Christopher, and Dr. Paul Presson, interview by Kathryn Zwack. Associate Professor of English and 16. Director and Associate Provost, Westminster College (December 2013). Andrade, Dr. Maureen, interview by Kathryn Zwack. Associate Vice President Academic Programs (December 12, 2013).
- 17. Darling, Dr. Ann L. and Dr. Maureen Mathison, interview by Kathryn Zwack. Director, University Writing Program and Senior Associate Dean, University of Utah (December 20, 2013).
- 18. Picard, Dr. Christopher, interview by Kathryn Zwack. Provost, Salt Lake Community College (December 19, 2013).
- 19. Norman Jones, Ph.D., interview by Kathryn Zwack. Director of General Education and Curricular Integration (January 6, 2014).
- 20. Andrade, 2013.
- 21 Thomas, Dr. Ryan, interview by Kathryn Zwack. Associate Provost & Dean of Undergraduate Studies (January 6, 2014).
- 22. Thomas, 2014.
- 23. Picard, 2013.
- 24. Jones, Dr. Norman, interview by Kathryn Zwack. Director of General Education and Curricular Integration (January 6, 2014).
- 25. Picard, 2013.
- 26. Buzicky, Emily, Diane Forster-Burke, Amy Kelly, Melissa Koerner, Chris LeCluyse, and Jennifer Ritter. "Faculty Handbook on Academic Literacy and Academic Honesty." Salt Lake City, Utah: Westminster, n.d.
- 27. Buzicky et al., n.d.
- 28. Iones, 2014.
- 29. Carter, Michael. "Ways of Knowing, Doing, and Writing in the Disciplines." College Composition and Communication (National Council of Teachers of English) 58, no. 3 (February 2007): 385-418.
- 30. Thaiss, Chris, and Tara Porter. "The State of WAC/WID in 2010: Methods and Results of the U.S. Survey of the International WAC/WID Mapping Project." CCC (National Council of Teachers of English) 61, no. 3 (February 2010):
- Carter, Michael. "Ways of Knowing, Doing, and Writing in the Disciplines." College Composition and Communication (National Council of Teachers of English) 58, no. 3 (February 2007): 385-418.
- Thaiss and Porter, 2010 32.
- Thaiss and Porter, 2010. 33.

ENDNOTES

- 34. Langrock, Adela, and Kathleen Skubikowski. "Assessing Student Progression in Writing in the Disciplines (WID) at Middlebury College." Teagle Foundation, 09 15, 2012.
- 35. Langrock and Skubikowski, 2012.
- 36. LeCluyse and Presson, 2013.
- 37. Keith, Dr. Jeffrey, Dr. Brian Jackson, Greg Dr. Clark, and Deborah Dr. Dean, interview by Kathryn Zwack. Associate Academic Vice President for Undergraduate Studies (December 9, 2013).
- 38. Andrade, 2013.
- 39. Darling & Mathison, 2013.
- 40. Darling & Mathison, 2013.
- USU policy. Criteria for Communication Intensive Courses. http://www.usu.edu/provost/academic_programs/geduc_ 41. univstud/doc/USU%20General%20Education-Communication%20Intensive.pdf (accessed June 23, 2014)
- 42. LeCluyse and Presson, 2013.
- 43. Safman, 2014; WICHE. Interstate Passport Initiative. 2013. http://www.wiche.edu/passport (accessed January 8, 2014).
- 44. AAC&U. "The Essential Learning Outcomes." AAC&U, June 9, 2010.
- Safman, 2014; SHEEO. HEPC 2012 Multi-State Collaborative to Advance Learning Outcomes Assessment. SHEEO. 45. http://www.sheeo.org/resources/presentations/hepc-2012-multi-state-collaborative-advance-learningoutcomes-assessment (accessed January 8, 2014).
- 46. Buzicky et al., n.d.
- 47. Buzicky et al., n.d.
- Olson, Barrie. Academic Writing Across the Disciplines. February 2013. 48.
- 49 Iones, 2014.
- Anderson, Paul, Chris Anson, Bob Gonyea, and Chuck Paine. "Using Results from the Consortium for the Study of 50. Writing in College." NSSE Institute Webinars. Bloomington, IN: National Survey of Student Engagement, July 17, 2009.
- 51. Buzicky et al., n.d.
- LeCluyse and Presson, 2013. 52.
- 53. Keith et al., 2013.
- 54. Keith et al., 2013. Anderson et al., 2009.
- 55. Darling & Mathison, 2013; Jones, 2014.
- 56. Jones, 2014.
- 57. Iones, 2014.
- 58. Safman, 2014.
- 59. Saltz, Laura & Nancy Sommers. The Novice as Expert: Writing the Freshman Year. College Composition and Communication, Vol. 56, No. 1. (Sep., 2004), pp. 124-149.
- 60. Saltz & Sommers, 2004
- Thaiss and Zawacki, 2006. 61.
- Carter, Michael. "Ways of Knowing, Doing, and Writing in the Disciplines." College Composition and Communication 62. (National Council of Teachers of English) 58, no. 3 (February 2007): 385-418.
- 63. Utah State Board of Regents, policy R 470 3.2. http://higheredutah.org/wp-content/uploads/2014/05/R470-04_16.pdf (accessed on June 23, 2014).
- 64. Utah, University of. "WRTG 2010 | Intermediate Writing: Academic Writing and Research." Course Overview. Salt Lake City, Fall 2013.
- 65. Darling & Mathison, 2013.
- LeCluyse and Presson, 2013.
- 67. Haines, Jared, interview by Kathryn Zwack. Vice President, Instruction and Student Services, Utah College of Applied Technology (UCAT) (December 9, 2013).
- 68. LeCluyse and Presson, 2013.
- 69. LeCluyse and Presson, 2013.
- 70. Keith et al., 2013
- 71. Picard, Dr. Christopher, interview by Kathryn Zwack. Provost, Salt Lake Community College (December 19, 2013).
- 72.
- 73. Jones, 2014; Keith et al., 2013; Andrade, 2013; Darling & Mathison, 2013.
- 74. Jones, 2014; Keith et al., 2013; Picard, 2013.
- 75. Jones, 2014.
- 76. Keith et al., 2013.
- 77. Jones, 2014. Writing Fellows information can be found at http://www.usu.edu/raprogram/index.html and Undergraduate Teaching Fellows information can be found at http://www.usu.edu/provost/students/teaching_fellows/ guidebook/section1.cfm

ENDNOTES

- 78. LeCluyse and Presson, 2013.
- 79. Keith et al., 2013.
- 80. Safman, 2014.
- Keith et al., 2013. 81.
- 82. Andrade, 2013.
- LeCluyse and Presson, 2013; Darling & Mathison, 2013; Jones, 2014. 83.
- 84. Darling & Mathison, 2013.
- Andrade, 2013. 85.
- Darling & Mathison, 2013. 86.
- 87. Keith et al., 2013; LeCluyse and Presson, 2013; Andrade, 2013.
- Carter, 2007; Andrade, 2013; Jones, 2014. 88.
- 89. LeCluyse and Presson, 2013.
- 90. LeCluyse and Presson, 2013.
- 91. Keith et al., 2013.
- 92. Safman, Dr. Teddi, interview by Kathryn Zwack. Assistant Commissioner for Academic Affairs, Utah System of Higher Education (January 7, 2014).
- 93. Safman, 2014; Darling & Mathison, 2013; Andrade, 2013.
- 94. LeCluyse and Presson, 2013.
- 95. LeCluyse and Presson, 2013.
- 96. Keith et al., 2013; LeCluyse and Presson, 2013.
- 97. Keith et al., 2013.
- 98. Arum, Richard and Josipa Roksa, Academically Adrift: Limited Learning on College Campuses, University Of Chicago Press, 2010
- 99. Arum, Richard and Josipa Roksa.
- 100. Ehrlich, Thomas, Rethinking Undergraduate Business Education: Liberal Learning for the Profession, Jossey-Bass, 2008.
- 101. Arum, Richard and Josipa Roksa.
- 102. Darling & Mathison, 2013; Safman, 2014.
- 103. LeCluyse and Presson, 2013; Haines, 2013.
- 104. Carter, 2007.
- 105. Wegner, 2008; McGuiness, Jeffrey C. Blueprint for Jobs in the 21st Century. Washington, D.C.: HR Policy Association, 2011.
- 106. McGuiness, 2011.
- 107. McGuiness, 2011.
- 108. Safman, 2014; Jones, 2014.
- 109. LeCluyse and Presson, 2013; Haines, 2013.
- 110. Keith et al., 2013; Andrade, 2013.
- 111. Kuh, 2008.

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