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The Value of Higher Education for Women in Utah

The critical need for college-educated individuals within the state of Utah has become an ongoing discussion in a variety of settings. In fact, a newly released study commissioned by the Utah System of Higher Education (USHE) found that 99 percent of Utahns sampled believe that higher education is important; 82 percent say it is “very important.”¹ Yet, in 2008 only 29 percent of Utahns 25 years and older held bachelor’s degrees or higher.² Although the number of students getting degrees has slowly increased over the last several decades, Utah now falls behind the national average in terms of having an educated citizenry. Only 50 percent of high school students in Utah attend college the fall semester following graduation. One of the most recent concerns is that the number of women in the USHE is significantly below the national average. National statistics show that more women (57 percent) enroll in college than men.³ However, in Utah approximately 49 percent of higher education students are women, with the lowest percentages enrolled at the University of Utah (44) and Utah Valley University (43).

The USHE-commissioned study found that Utahns believe that both men (75 percent) and women (71 percent) should have a college education. However, they believe that men should have more education than women. Findings showed that while 49 percent of Utahns sampled believed that the minimum level of education a male should receive is a four-year degree or higher, only 39 percent believe that females need this same level of education—a 10 percent difference of opinion. These expectations may, in part, explain the lower enrollment of women in the USHE, particularly if Utahns in this sample are those who influence young women (e.g., parents and teachers). It is noteworthy that expectations of male and female Utahns sampled are similar. Only 35 percent of women believed females should get a bachelor’s degree or higher, while 44 percent believed men should attain that level of education—a 9 percent difference. Interestingly, a higher percentage of males feel that women should have at least a bachelor’s degree (39 percent), while 49 percent stated that men should have the same credentials—a 10 percent difference.

When Utahns were asked why they believed college was important, 80 percent related its importance solely to economic outcomes (job and professional opportunities, future income, and economic success), while only 17 percent stated its importance in terms of other kinds of development (benefiting society, making one “well-rounded,” thinking critically, and helping people to understand the world). These data suggest that Utahns may not be aware of the broad array of critical benefits beyond economic outcomes a college education provides to women. Therefore, this Research and Policy Brief has been written to assist Utahns in looking more broadly at the benefits of higher education for the overall development of women in the state. Whether or not a woman chooses to work outside the home, it is important that she is aware of the growth opportunities that college can provide that will assist her to reach her potential and significantly contribute in her home, community, and workplace. This report outlines various aspects of the broad value of higher education (e.g., health and wellbeing, civic and community engagement, parenting, self-development, intellectual and cognitive development) and concludes with a review of data regarding societal benefits and personal economic outcomes that a college education provides.

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Health and Wellbeing

On average, better-educated women live longer and are more likely to enjoy healthier lives than their less educated peers. Researchers have found that “with the exception of black males, all recent gains in life expectancy at age 25 occurred among better-educated groups.”⁴ This is due primarily to an overall healthier lifestyle. College-educated individuals tend to smoke less, exercise more, and maintain a healthier diet. More educated women are less likely to be overweight or obese.⁵ Other studies report that educated individuals have lower alcohol abuse-dependency, lower cholesterol levels, and higher dietary fiber intake.⁶ One study found that “each additional year of schooling past high school seems to prolong life by 0.4 percent, or nearly 2 percentage points upon graduation from college.”⁷ Interestingly, not only do more educated women live

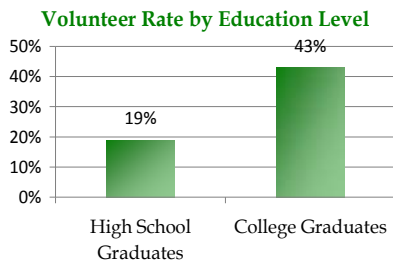
longer, but Fox News recently reported that their spouses live longer as well.⁸

In the book, *How College Affects Students*, the authors summarized hundreds of studies and concluded: “The evidence is also quite clear in suggesting that education attainment has positive net impacts on dimensions of life that, in turn, increase one’s sense of life satisfaction or overall happiness.”⁹ The enhanced quality of life linked with college-educated women contributes to their ability to be more resilient when faced with stressful situations. Communities that have a well-educated citizenry have fewer incidences of depression and suicide.¹⁰

In addition to being more informed about medical and mental health issues, educated women typically have the resources to pay for their family’s wellbeing. These resources include employer-provided health insurance and discretionary savings. Educational attainment has also been linked with more extensive social-support networks.¹¹ These associations are typically positive and can provide comfort and assistance when needed, which can help reduce the effects of stressful circumstances and contribute to good mental health. Overall, college-educated women are more likely to live longer and happier lives than those who did not attend a higher education institution.

Civic and Community Engagement

Women with college degrees demonstrate increased participation in civic and community involvement. Not only does higher education prepare a more ethically aware and contributing member of the community,¹² but college graduates are more likely to vote than high school graduates by a 2:1 ratio.¹³ The College Board reported that in 2006 college graduates had a volunteer rate of 43 percent compared with 19 percent of high school graduates.



In fact, the median number of volunteer hours appears to increase with levels of education.¹⁴ This includes a National Health Interview Survey finding that college graduates are even more likely to donate blood.¹⁵ These trends, in part, can be explained by the finding that higher levels of education provide students opportunities to apply what they have learned in non-profit organizations and other community-based settings through internships¹⁶ and course-related service learning. Overall, more education

clearly translates to a more prepared and conscientious civic participant and community volunteer.

Parenting

There are many reasons why a college education contributes to better parenting. First, educated mothers are more likely to give birth to healthier babies, since they are less likely to consume alcohol or smoke, choices that set the foundation for the child’s future. Numerous researchers have found that there are increased risks of developmental and health problems for low-weight babies. One group of

researchers found that children born below average weight had lower reading and math scores; however, “the independent net effect of maternal education appears to far outweigh the effect of MLBW [moderately low birth weight] as a predictor of children’s test scores.”¹⁷ Second, by elementary school, children of educated mothers are more prepared academically and more involved in extracurricular activities.¹⁸ In fact, academic preparation begins early. Women who earn college degrees spend more time reading to

their children, and this activity has been found to contribute to academic success.¹⁹ More educated mothers also pay more attention to creating healthy lifestyles for their children. Third, more educated women who want/need to work part-time or full-time, can typically find employment that gives them higher salaries along with increased autonomy and flexibility. This allows them more opportunities for family-friendly work schedules, arrangements, and locations, which, in turn, can increase a working mother’s time with her children.

Finally, one study found that 39 percent of high-achieving high school students said their mothers were the “greatest influence in their lives,”²⁰ and a mother’s educational background is foundational to her influence and expectations, as well as the aspirations her children form for their own educational and career goals. Research has shown that a mother’s expectations about the “eventual educational attainment of her children” are related to the children’s actual attainment.²¹ Children whose parents are college educated enter postsecondary institutions with higher degree aspirations, less self-doubt, and more knowledge of college enrollment and life. In fact, students of parents who have graduated from college are less than half as likely to withdraw before their second year.²² Education truly perpetuates education.

Self-Development

College institutions historically seek to influence and promote self-understanding of individuals through targeted development of independence, interpersonal relationships, and leadership training. Most institutions provide opportunities for students to confront dogma and prejudice, which allows students to examine and develop the moral and ethical standards needed for occupational preparation. Research shows that higher education delivers sustained

Children are more likely to attend college if their mothers have postsecondary degrees.

changes in psychosocial development as well as in attitudes and values.²³

First, college introduces psychosocial change in areas of academic and social self-concept and self-esteem. Students develop a better sense of independence and feeling of control over their lives, which influences their interpersonal and leadership skills.²⁴ Students who persisted into the upper-division years or continued on to graduate work received the greatest benefits of psychosocial change. The students who pursued graduate education exhibited lower levels of stress compared to college seniors. Most notable is the sustainability of the psychosocial change. In fact, nearly a decade later, the effects of college on self-concept were still apparent and personally integrated.

Second, studies of college's effects on student attitudes and values fall generally into the following categories:

- sociopolitical dispositions,
- civic and community involvement,
- racial-ethnic attitudes,
- gender roles,
- religious attitudes and values,
- interest in culture and the arts, and
- educational and occupational values.²⁵

Researched evidence confirms that college attendance impacts students' sociopolitical attitudes and values as well as civic and community engagement, as mentioned previously. The demonstrated change is sustainable well into the adult years and typically continues into old age. Studies have also shown that college helps individuals increase awareness, dialogue, and involvement in racial understanding, openness to diversity and gender-role attitudes, and certain aspects of the political process. College education abates prejudice and promotes increased interest in world affairs and social issues.²⁶ In addition, longitudinal studies clearly identify the positive, principled moral reasoning advantages of higher education during college and beyond.

College graduates also find occupations and lifestyles that offer greater intellectual stimulation than those with only high school diplomas. Through education, students seek and obtain personal and job competence in problem solving, judgment, and interpersonal skills.²⁷ In summary, the Carnegie Foundation reports that the benefits of higher education include "the tendency for postsecondary students to become more open-minded, more cultured, more rational, more consistent and less authoritarian; these benefits are also passed along to succeeding generations."²⁸

Intellectual and Cognitive Development

Intellectual and cognitive development is a positive by-product of higher education for women. Today's students are preparing for jobs that may not currently exist. In order to succeed in a complex global work environment, women need the training and skill base of a strong education in

order to respond effectively to the dynamics of changing technologies. A broad educational experience provides the communication skills as well as creative and critical thinking skills necessary to perform in an economy that demands its workers develop habits of lifelong learning.²⁹ One report from the American Association of Colleges and Universities stated that this type of "education is the best and most powerful way to build students' capacities to form reasoned judgments about complex issues."³⁰ Importantly, reasoned judgment is not only a critical competency women need in the workplace, but also a skill needed for effective contributions in politics, communities, churches, and homes. Research also shows that women in particular receive valuable development opportunities in the areas of verbal and writing skills, interpersonal and teamwork abilities, quantitative and analysis skills, critical thinking, reflective judgment, principled moral reasoning, integrating ideas and concepts, gaining content knowledge in various fields, and learning effectively on their own.³¹

College graduates also have a considerable advantage in comparison to high school graduates when it comes to factual knowledge. College graduates are much more likely to engage in activities that add to their knowledge base after graduation. Students who continue their education select interests and activities—such as serious reading or continued education—that enhance learning.³² Incoming freshmen increased their functionality in core areas from the 50th to 60th percentile after only two years of college.

Further estimates reveal that the net effects of college in mathematics, science, English, and social studies range from "about 60 percent to 75 percent of the simple freshman-to-senior difference."³³ Intellectual growth continues to develop

The wide range of benefits a woman receives from a college education is passed along to succeeding generations.

at the same rate after college and appears to continue through adulthood. In the areas of mathematics, science, and reading comprehension, the evidence indicates an "intergenerational impact of parental exposure to postsecondary education on sons' and daughters' learning."³⁴

Studies have reported that the ability to comprehend and adequately present both sides of an argument or controversial issue is significantly improved after attending college.³⁵ Under controlled studies that consider age and verbal and mathematical ability, postsecondary educational exposure produces a positive effect on evaluating the strength or weakness of arguments with gains in one's ability to use reason and evidence in making judgments about controversial issues. College seniors have a measurable improvement in the skills of reasoning and critical thinking. Compared to incoming freshmen, they are able to address sophisticated problems and provide solutions that encompass greater complexity.

Societal and Economic Outcomes

The positive impact on society as education relates to economic stability cannot be underestimated. Societies that have higher levels of education are safer and have less poverty. For every year of increase in the average schooling level within a community, there is a 30 percent decrease in murder.³⁶ According to the 2009 American Human Development Project, “Education is the single most important factor in the determination of a person’s poverty status: almost 24 percent of the adult population without a high school diploma is poor, compared to 11 percent of those who are at least high school graduates and only 3.6 percent of college graduates.”³⁷ Education provides the avenue out of poverty and encourages individuals who are less prone to commit criminal behavior and more likely to participate in civic activities.³⁸

Over the last 25 years the economic benefits of higher education have been growing.³⁹ The earning gap between college graduates and non-college graduates is expanding.⁴⁰ Education also has an impact on earnings, occupational status, and career mobility.⁴¹ Adults with education have access to better job opportunities that include high-quality health insurance and pension plans. A College Board report explains that education lowers unemployment rates and provides income increases of over 60 percent for a four-year degree.⁴² In addition, occupational prestige is noted more often in positions where advanced education is required.⁴³ Overall, adults with bachelor degrees can expect to make over a million dollars more in their lifetime career than adults with high school diplomas.⁴⁴

Women who have associate, bachelor, or graduate degrees specifically tend to get jobs with better benefits⁴⁵ and earn average incomes as much as 81 percent higher than women who have no postsecondary education.⁴⁶ Utah’s Workforce Services economist, Lecia Parks Langston, reports that Utah has the “largest gap between the share of men and women with college educations of any state.” The education gap between men and women in Utah correlates with women’s lower wages. Langston notes that Utah women “tend to cluster in lower-paying occupations.” Conversely, Utah men are ranked 24th in the country for wages, falling short of the national median by slightly less than \$500. When both incomes are added together, Utah

arrives at 15th in the nation with a single household annual income of \$56,633.⁴⁷

A high school education is no longer adequate to obtain work with an income that can support a family in Utah and within the current competitive global economy. Around the world, educational attainment rates within many countries are beginning to surpass the achievements of the United States.⁴⁸ Considering that the fastest-growing populations include minorities and those in poverty, progress must be made to improve the delivery of education in Utah and within the United States. The economic and societal impact is clear: to ensure a healthy society and provide the means to sustain a satisfying life that meets expectations and aspirations, education is crucial.

Education Level (25+ Years)	Yearly Salary
Less than a high school diploma	\$23,348
High school graduates, no college	\$32,240
Some college or associate’s degree	\$37,804
Bachelor’s degree and higher	\$57,460

U.S. Bureau of Labor Statistics, News Release, July 21, 2008, Earnings and Education in the Second Quarter of 2008. Retrieved from <http://www.bls.gov/opub/ted/2008/jul/wk3/art01.htm>

Conclusion

A college education is more than a gateway to an affluent lifestyle. Earning a college degree has implications far beyond the workplace. The non-tangible benefits of receiving a college degree are, at minimum, equivalent to the monetary ones, and they extend from individuals to families and communities.

Although many of the findings reported in this brief discuss benefits for both women and men inside and outside the state, we believe that Utah women, in particular, as well as those who influence them (e.g., parents, high school teachers and counselors, community and church youth leaders) would benefit from looking more broadly at the overall worth of a college education. Formal postsecondary education is a critical foundation for Utah girls and women of all ages to be able to fully develop themselves toward reaching their inherent potential.

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References and Endnotes

¹ Buhler, D. (2009, October). An analysis of research conducted by Dan Jones & Associate for the Utah System of Higher Education.

² Utah Foundation (2009, October). *Education attainment: Utah falling behind national trends*. Utah Foundation Research Brief. Retrieved from http://www.utahfoundation.org/reports/?page_id=532.

³ Leonard, W. (November 10, 2009). Utah women lag behind nation in higher education. *Deseret News*, A1, A5.

- ⁴ Meara, E. R., Richards, S., & Cutler, D. M. (2008). The gap gets bigger: Changes in mortality and life expectancy, by education, 1981-2000. *Health Affairs*, 27(2), 350-360, p. 350.
- ⁵ American Human Development Project. (2009). *Goals for the common good: Exploring the impact of education*. Retrieved from http://www.measureofamerica.org/file/common_good_forecaster_full_report.pdf.
- ⁶ Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research*. San Francisco: Jossey-Bass.
- ⁷ Hossler, Braxton, & Coopersmith (1988), as cited in Cabrera, Alberto F., Na Nasa, Steven M., & Burkum, Kurt R. (2001). *Pathways to a four-year degree: The higher education story of one generation*. Report: (Contract No. 00-107). Retrieved from <http://www.wiscap.wisc.edu/calendar/edpolicies/pathways.pdf> (p. 1).
- ⁸ Fox News. (October 07, 2009). *Study: Choose an educated wife for a longer life*. Retrieved from <http://www.foxnews.com/story/0,2933,561563,00.html/>.
- ⁹ Pascarella & Terenzini (2005, p. 553).
- ¹⁰ Thomson Healthcare. (2007). *Ranking American's mental health: An analysis of depression across the states*. Washington, DC: Thomson Healthcare. Retrieved from http://www.mentalhealthamerica.net/files/Ranking_Americas_Mental_Health.pdf.
- ¹¹ Washington State Department of Health. (2004). *Suicide. The health of Washington State: 2004 supplement*. Retrieved from <http://www.doh.wa.gov/HWS/doc/IV/IV-SUI2007.pdf>.
- ¹² Association of American Colleges and Universities. (2005). *Liberal education outcomes: A preliminary report on student achievement in college*. Retrieved from http://www.aacu.org/advocacy/pdfs/LEAP_Report_FINAL.pdf.
- ¹³ American Human Development Project (2009). *Goals for the common good: Exploring the impact of education*. Retrieved from http://www.measureofamerica.org/file/common_good_forecaster_full_report.pdf.
- ¹⁴ Baum, S. & Ma, J. (2007). *Education pays: The benefits of higher education for individuals and society*. New York: Retrieved from http://www.collegeboard.com/prod_downloads/about/news_info/trends/ed_pays_2007.pdf.
- ¹⁵ Ibid.
- ¹⁶ Humphreys, D. (2009). *College outcomes for work, life, and citizenship: Can we do it?* Liberal Education, Winter, pp. 13-21. Retrieved from http://www.aacu.org/liberaleducation/le-wi09/documents/LE-WI09_Humphreys.pdf.
- ¹⁷ Boardman, J. D., Powers, D.A., Padilla, Y.C., & Hummer, R. A. (2002, May). Low birth weight, social factors, and developmental outcomes among children in the United States. *Demography*, 39(2), 358-368 (p. 366).
- ¹⁸ Baum, S. & Ma, J. (2007).
- ¹⁹ U.S. Department of Education, National Center for Education Statistics (2003). *Reading—young children's achievement and classroom experiences, NCES 2003-070*, by Denton, K., West, J., & Walston, J. Washington, DC: 2003. Retrieved from the U.S. Department of Education, National Center for Education Statistics: <http://nces.ed.gov/pubs2003/2003070.pdf>.
- ²⁰ DYG Inc., and Lake Snell Perry and Associates (1999). *Gaining a foothold: Women's transitions through work and college*. Washington, DC: American Association of University Women Educational Foundation.
- ²¹ Flouri, E., & Hawkes, D. (2008). Ambitious mothers—successful daughters: Mothers' early expectations for children's education and children's earning and sense of control in adult life. *British Journal of Educational Psychology*, 78, 411-433.
- ²² Pascarella & Terenzini (2005); This statistic is specifically for those students in a four-year institution (10 percent versus 23 percent).
- ²³ Pascarella & Terenzini (2005, p. 435).
- ²⁴ Ibid (pp. 213-270).
- ²⁵ Ibid (pp. 271-344).
- ²⁶ Porter, K. (2002). *The value of a college degree*. ERIC Digest. Retrieved from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/1a/84/90.pdf.
- ²⁷ Bean, J. (1983). The application of a model of turnover in work organizations to the student attrition process. *The Review of Higher Education*, 6(2), 129-148.
- ²⁸ Rowley & Hurtado (2002), as cited in Porter, K. (2002, p. 2).
- ²⁹ Humphreys, D. (2006). *Making the case for liberal education: Responding to challenges*. Association of American College and Universities, Retrieved from http://www.aacu.org/leap/documents/LEAP_MakingtheCase_Final.pdf.
- ³⁰ Ibid (p. 7).
- ³¹ Pascarella & Terenzini (2005); Taylor & Merienau, as cited in Allen, J. K., Dean, D. R., & Bracken, S. J. (eds) (2008). Most college students are women: Implications for teaching, learning, and policy. Sterling, Virginia: Stylus Publishing; Association of American Colleges and Universities. (2005). *Liberal education outcomes: A preliminary report on student achievement in college*, 1-20. Retrieved from http://www.aacu.org/advocacy/pdfs/LEAP_Report_FINAL.pdf.
- ³² Pascarella & Terenzini (2005).
- ³³ Ibid (p. 145).
- ³⁴ Ibid (p. 204).
- ³⁵ Pascarella & Terenzini (2005).
- ³⁶ American Human Development Project (2009).
- ³⁷ Ibid (p. 3).
- ³⁸ Cabrera et. al (2001).
- ³⁹ Lumina Foundation (2009). *A stronger nation through higher education: How and why Americans must meet a "big goal" for college attainment*. Retrieved from http://www.luminafoundation.org/publications/A_stronger_nation_through_higher_education.pdf.
- ⁴⁰ Jacobson, L., & Mokher, C. (2009, January). *Pathways to boosting the earnings of low-income students by increasing their educational attainment*. The Hudson Institute and DNA. Retrieved from <http://www.hudson.org/files/publications/Gates%2001-07.pdf>.
- ⁴¹ Pascarella & Terenzini (2005).
- ⁴² Baum, S. & Ma, J. (2007).
- ⁴³ Lin, Y., & Vogt, W. P. (1996). Occupational outcomes for students earning two-year college degrees: Income, status, and equity. *The Journal of Higher Education*, 67(4), 446-475.
- ⁴⁴ Utah Foundation (2006, February). *Lifetime value of a college degree*. Utah Foundation Research Brief. Retrieved from http://www.utahfoundation.org/reports/?page_id=311.
- ⁴⁵ Campaign for Gender Equality (2009). *Women and healthcare: Why reform needs to happen*. Retrieved in email from info@campaignforgenderequality.org.
- ⁴⁶ Troumpicis, P. (2004, July 1). Women reap more benefits from higher education, study finds. *Black Issues in Higher Education*. Retrieved from http://findarticles.com/p/articles/mi_m0DXK/is_10_21/ai_n6145365/.
- ⁴⁷ Gorrell, M. (September 28, 2009). Utah's male-female income gap is wide. *The Salt Lake Tribune*, Salt Lake City. Retrieved from http://www.sltrib.com/utahpolitics/ci_13439899.
- ⁴⁸ National Commission on Accountability in Higher Education. (2005). *Accountability for better results*. Retrieved from <http://www.ed.gov/about/bdscomm/list/hiedfuture/2nd-meeting/better-results.pdf>.