



UTAH WOMEN &
LEADERSHIP
Project

Utah Valley University English 1010 Lesson Plan

“Problematizing a Local Issue and Practical Proposal” Paper

Using the Utah Women & Leadership Project
Research Brief

Utah Valley University English 1010 Lesson Plan

“Problematizing a Local Issue and Practical Proposal” Paper

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DOCUMENT

UWLP Research and Policy Brief, *The Value of Higher Education for Women in Utah*

OBJECTIVES

1. Students will build on the skills of critical inquiry learned in Project #1.
2. Students will write about a local issue, demonstrating that a problem exists.
3. Students will show why the problem is complex and why no easy solution exists.
4. Students will introduce criteria for evaluation and propose a possible solution.
5. Students will become educated about the problem of low rates of enrollment of Utah women in higher education.
6. Students will be better prepared and motivated to complete their college education and to encourage other women, including daughters and/or wives, to do the same.
7. Students will experience engaged learning in the classroom. (UVU Core Theme)
8. Students will experience inclusiveness in the classroom. (UVU Core Theme)

PROBLEM

Utah women are participating in higher education at rates lower than the national average. Nationally, postsecondary enrollment is 57% female; in Utah enrollment is 49% female. Utah Valley University has the lowest enrollment of women in the state with 43%.

ADVANTAGES OF USING THE UWLP RESEARCH BRIEF AS THE PRIMARY DOCUMENT FOR THE “PROBLEMATIZING A LOCAL ISSUE” PAPER

1. Lends itself to a discussion of the complexity of a local issue that has a direct impact on students
2. Provides students with information they need to write an informed proposal
 - a. Students want to do research on the issue for this project so they feel they have enough information to propose a solution.
 - b. As this is the second assignment, students will not have been given instruction on how to do research at this point in the English Department 1010 Assignment Sequence.

Utah Valley University English 1010 Lesson Plan

“Problematizing a Local Issue and Practical Proposal” Paper

Proposed Lesson Outline

(using two 75-minute class sessions)

TEACHER PREPARATION

1. Become familiar with both UWLP Research and Policy Briefs: *The Value of Higher Education for Women in Utah* and *Women and Higher Education in Utah: A Glimpse at the Past and Present*. Available at <https://www.usu.edu/uwlp/research/briefs>
2. View video, Making College a Priority: The Benefits of Higher Education for Women in Utah. Available at <https://www.usu.edu/uwlp/resources/videos>
3. Create small discussion groups that consist of a mix of gender, age, and situation. (You can obtain some of this information through a “get to know you” email the first day of class.)
4. Run off copies of enclosed quiz which will utilize the IF AT’s. (Students should work in pairs)

STUDENT PREPARATION

Assigned reading:

- Read pages 401–11 & 423–26, *The Allyn & Bacon Guide to Writing* (Ramage, Bean and Johnson, 6th ed). Pages 17-19 in the *Little Penguin Handbook, 3rd ed*.
- UWLP Research and Policy Brief, *The Value of Higher Education for Women in Utah* Available at <https://www.usu.edu/uwlp/files/briefs/1-value-of-higher-education.pdf> (Have students print it out and bring it to class.)

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“Problematizing a Local Issue and Practical Proposal” Paper

Proposed Lesson Outline

(using two 75-minute class sessions)

DAY 1

1. Briefly review criteria for Wallowing in Complexity/Critical Thinking
 - Pose problematic questions
 - Analyze all dimensions of a problem
 - Causes, history, personal connection
 - Do research
 - Gather facts and interpret data
 - Imagine alternative solutions and see different perspectives
 - Analyze competing approaches and answers
 - Construct arguments for and against alternatives and choose the best solution
 - Write an effective argument justifying your choice while acknowledging counterarguments
2. Remind students about audience, purpose, and genre.
3. Explain to students that they will be using these skills in this project: “Problematizing a Local Issue.”
4. Show the 10-minute video, *Making College a Priority: The Benefits of Higher Education for Women in Utah*. Available at <https://www.usu.edu/uwlp/resources/videos>.
5. Pair up students and take the reading review quiz using “IF AT” scratch-off forms.
6. Using the **Socratic Seminar Model** discussion question handout, lead a class discussion on the problem of UVU women graduating at lower rates than women nationally. (20–25 minutes)
7. Explain how to articulate the problem using the example essay from *A&B 424*. (15 minutes)

Description of the problem

 - Show that a problem exists
 - Make the problem vivid and real
 - Identify who is affected
 - Articulate the causes, showing the problem’s complexity
 - Discuss why it hasn’t been solved before
 - Explain the negative consequences of inaction
8. Go over requirements of the paper (see project handout).

Utah Valley University English 1010 Lesson Plan

“Problematizing a Local Issue and Practical Proposal” Paper

Proposed Lesson Outline (using two 75-minute class sessions)

DAY 2

1. Ask students to remember some of the main points of the problem of UVU women graduating at lower rates than women nationally.
2. Present information from *A&B* on proposing a solution. (20 minutes)
 - a. Overcoming Challenges of Proposal Writing—Chart on 403–404
 - b. Proposal for a solution
 - Describe the solution in sufficient detail to show how it would work and what it would cost.
 - If you don’t have a solution, generate a planning proposal calling for a committee to propose solutions at a later date.
 - c. Developing an Effective Justification Section—Chart on 404–405
 - d. Justification
 - Show how the benefits of the proposal outweigh the costs.
 - Show why your solution is better than alternatives.
 - Point out why other solutions would not work as well or would be more expensive.
3. Small group discussion (25 minutes)
 - a. Break into pre-assigned groups (see preparation above) and have students use the research brief, *The Value of Higher Education for Women in Utah*, to brainstorm possible solutions to the problem and think of effective justification strategies.
 - b. Ask each group to share their best solution idea with the larger class.
4. Use the chart on 410 and the example essay on 424–26 to illustrate the structure of the paper.
5. Explain how to do parenthetical citations and attributive tags.

Using the Socratic Seminar Model for the Class Discussion on “Utah Women and Education”

Michele Welch and Sheree Bench

The Socratic Seminar Model is learning by inquiry—the process of asking and answering perplexing questions. The main purpose of this model is to help students think for themselves.

Key Points: This teaching model relies heavily on student dialogue and discussion. It allows for acquisition and construction of information along with the linking of new information to personal prior experiences. Examining through a logical progression of questioning helps students acquire a deeper level of understanding. Here are some example questions to use for your class discussion which utilize six cognitive levels of understanding:

1. Questions of Clarification

What is the purpose of the brief, *The Value of Higher Education for Women in Utah*?

Who is the intended audience?

What is the problem?

- a. When compared to national average, Utah is significantly below the national average in terms of female students enrolled in postsecondary institutions. Nationally, enrollment is 57% female. In Utah, enrollment is 49% female.
- b. Utah Valley University has the lowest enrollment of women in the state with 43%.

Do Utahns generally believe education for women is important?

Why do people in Utah seek an education? (For employment, economic reasons)

Why are Utah women behind the national average in college enrollment and graduation rates?

Follow up questions might include: What do you really mean? What exactly are you saying? What is an example of this?

2. Questions of Assumptions

What is the basic assumption of the article?

Why do you think 10% *more men than women* think a woman having an education is important?

Why do you think more educated women have better health?

Follow up questions might include: Is this basic assumption always true? How can you justify this assumption? What other assumptions could we make?

3. Questions that Probe Reasons and Evidence

What do you think the reasons are that more women choose fields such as education over business and science related fields?

Does UVU’s history as a trade school affect women’s enrollment rates at Utah Valley University today?

The article suggests that the percentage of female students enrolled in public education is diminished dramatically at age 22-24 because during this time frame many young men in Utah are returning home from LDS missions, which then increases the male ratio. Is this enough evidence to support the reason for the decrease of women in education during this age? What other evidence (from your own life experiences or those you know) may also be a factor?

What might be the evidence that leads the researchers to suggest that women need to consider more advanced training in carefully selected disciplines?

Why do women put their education on hold? (Employment, marriage, to put husband through school, to start a family) What do you think about the UVU campus Leave of Absence signs: “Leaving?” Male image—soldier, missionary; Female image—pregnancy.

4. Questions About Viewpoints and Perspective

What ideologies espoused by Utah women come into play in making educational choices?

What cultural expectations affect local women’s decisions about attending college?

How do local cultural expectations affect support for women’s college attendance?

How do you people from outside of Utah view the research in this article?

Why is it important to state leaders to change the ratio of female students enrolled in college?

Why do the demographics of Utah make a difference in the research?

Follow up questions may include: What are you implying? What do you believe about ____?)

5. Questions that Probe Implications and Consequences

What role does the economy play in women’s educational choices?

What are the future consequences for citizens in the state of Utah if the situation does not change?

What is likely to happen if the percentage of female college students increases over time to meet the national average? Does women’s increased participation mean decreased participation for men?

What factors bring women back to school after a hiatus? (divorce, widowhood, husband’s unemployment, necessary income, supplemental income, self-fulfillment)

Follow up questions may include: If that happened, what else might happen?

6. Questions About the Question

Why are we examining this research regarding women in higher education in Utah?

Is it a problem that Utah women are enrolling in college rates lower than the national average?

Why is this issue important to Pres. Holland?

Is this an easy issue to understand?

What’s difficult about the issue and how best can it be solved? (Save for small group discussions.)

Pointers for Good Class Discussion

- Frequently ask follow-up questions that require students to reason aloud. Ask them to clarify what they mean or give evidence from the article or from their own life experience to support their comments.
- Be encouraging in your probing as you ask students to express what they think about the topic. Many students at this level are not confident in expressing their opinions.
- After asking a question, wait a period of time until many hands are up. Do not always call on the same people.
- Ask for several people’s opinions before moving on to another question.
- Continue to ask questions allowing others to offer insights or opposing perspectives.
- Don’t rush to step in and provide answers when the students are struggling.
- Help students understand that opposing views can be healthy and can lead to greater understanding and insight.
- The questions should be open-ended and not ones you have specific answers for.

*Be sure to take students through the complex, multiple factors that contribute to women’s decision not to attend or to leave college. The discussion has the potential to focus on the teachings and cultural practices of the LDS Church. Ask students if there is a disconnect between what the LDS Church teaches about the importance of education and what church members actually do. For a discussion of LDS teachings on education see <https://www.churchofjesuschrist.org/prophets-and-apostles/unto-all-the-world/education-is-a-commandment?lang=eng>.

1 Categories and discussions questions taken from Mary A. Gunter, Thomas H. Estes, and Susan L. Mintz, Instruction: A Models Approach. 5th ed. (Boston: Pearson, 2007).

UVU English Instructor, Sheree Bench piloted this lesson plan in her summer 2012 English 1010 course. This handout describes the student responses to this assignment.

Student Responses to Using the UWLP Research Brief, *The Value of Higher Education for Women in Utah*, for the English 1010 Problematizing a Local Issue Paper

After the students turned in their “Problematizing a Local Issue” papers on Utah women and education, I gave them a reflection assignment and asked them to write for about 8 minutes on the following questions:

1. What specific writing strategies did you use to complete this assignment?

[These answers were relevant to the writing process and not the subject matter.]

2. Did you change your mind or come to see something differently as a result of writing this paper? [Some answers pertained to the writing process; answers that were relevant to the subject matter are listed below.]

“I became more concerned about such a problem and specifically the ramifications which emanate from it.” (male)

“Learning so much about this issue opened my mind of the possible consequences of not having a higher education, besides the benefits that come from it.” (female)

“I came to realize how little information is out there for the girls about attending college. I know from my experience there was really nothing done to help motivate me to be interested.” (nontraditional female student #1)

“As a result of writing this paper, it definitely brought to light an issue that was very close to home.” (nontraditional female student #2)

“I think I came away with an understanding of how complex this issue is.” (male)

“I saw both sides of the topic while writing my paper. I used to really believe that it wasn’t very important for women to have an education, but now I think it is crucial.” (female)

“I always thought that I would just go to school and get married and that would be that. I now realize the importance of my education and am determined to finish.” (female)

“I definitely came to understand a different mindset. I never really understood why it was so important for us to have our mothers in Utah have a college education. I always thought that it was just a good thing to do while they were searching for a husband. But after hearing the benefits and noticing those benefits in the life of women I know, my mind was changed. So much so that I challenged my wife to start college next fall.” (male)

3. What do you want readers to take away from reading your work?

“I want anyone who’s reading my work, especially women in general to be more encouraged in attaining a higher education.” (female)

“I would love for my readers to take an interest in collaborating and educating both young women and their parents about all the benefits a college education can offer them.”
(nontraditional female student #1)

“I want readers of my paper to realize the significance of the problem & hopefully the readers will realize that the LDS Church needs to take some responsibility for the problem & figure out a way to fix it.” (nontraditional female student #2)

“What I wanted my readers to know is that it’s not simply a religious issue, and I tried to show that in my paper.” (male)

“That there is always a solution. Don’t let life’s challenges conquer what you can do.” (female)

“That they will see importance of the issue in their own lives & try to change it the best they can, by taking steps to getting a higher education.” (male)

4. Was this a valuable exercise for you? Explain.

“This was very valuable to me, as I have a 15 year old daughter, and am on the parent council at her school. I will be addressing possibilities for education at her school.” (nontraditional female student #1)

“It was a very valuable exercise. It made me do a lot of self-reflection as to my own views on education and what influenced those views. I have brought the topic up with many friends as I’ve been writing my paper & the discussions are always interesting.” (nontraditional female student #2)

“I enjoyed this paper and think it is a valuable exercise, especially for younger students to think about.” (male)

“I learned things I didn’t know & even had some discussions with my wife.” (male)

“Yes. I like the challenge of thinking about something I normally do not think about. This gave me reason to make a thought-out opinion on this subject.” (male)

“Yes it was a valuable exercise because it helped me realize how important school really is. Yes it can be stressful and costly, but in the end it all pays off.” (female)

5. Would you recommend using the UWLP research brief for this paper in other English 1010 classes?

“I think it should be used! Great way to spread the word! (nontraditional female student #1)

“The fact is, assigning this article is a great way to spread the message. It gets us all thinking about it & then we share it with friends & other members of the community.” (nontraditional female student #2)

“I would recommend it for all English 1010 students.” (male)

“It was a great resource and had a lot of valuable information.” (female)

“I would recommend using the subject of UWLP every class so that everyone gets a chance to hear the issue and judge for themselves.” (male)

“For sure! People need to be informed & this is a great way. I would not have known otherwise.” (male)

6. Do you have any suggestions for improving this assignment?

“Maybe offer extra credit to anyone who actually tries their proposal . . . I LOVED this assignment by the way! (nontraditional female student #2)

“One thing I that I think should be discussed is ‘what should the end goal be?’ If the goal is to get women up to the 57% national rate, then we have exchanged one problem for another, with the number of men going to school being too low. I think a discussion of the ideal female/male ration would be helpful.” (male)

“Maybe giving us more national statistics—showing us how we compare to other schools.” (female)

“Maybe even making it even more important. More sources or making it a longer paper.” (male)

Perhaps to amplify the parameters of the essay (for instance, 5–8 pages). The subject is very fascinating.

[When was the last time you had a student ask to be able to write a longer paper?!

Research & Policy Brief

January 26, 2010 | No. 1

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.

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

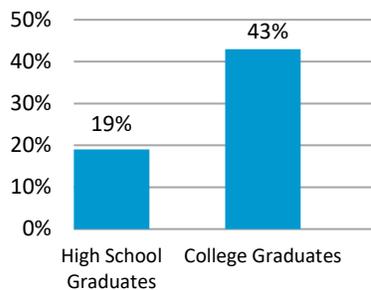
Nationally, more women (57%) than men enroll in college. In Utah, 49% of students are women.

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.

Figure 1: Volunteer Rate by Education Level



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

Children are more likely to attend college if their mothers have post-secondary degrees.

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 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 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

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

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.

Table 1: Education Level/Yearly Salary

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

Source: 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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