Wahlstrom Lecture: *The embedded skills within a liberal arts education – the key to future success*

Debra Pitton, April 25, 2019

I want to thank those who nominated me for this opportunity. It is an honor to speak to you all tonight. I have titled this talk, "*The embedded skills within a liberal arts education – the key to future success*." As the Wahlstrom Lecture was initiated to provide ideas regarding Liberal Arts in the 21st Century, zeroing in on the skills that students gain from a liberal arts education is where I will focus my comments.

All of you here are most likely familiar with what it means when we talk about the liberal arts. However, I have been in situations when I realize that not everyone is clear about what we mean by liberal arts. I was attending a meeting in my community about a school referendum, and someone near me was going on about how their child wanted to go off to a liberal arts college, but the parent was not in favor of sending their child to a liberal institution. They said they didn't want the ideas and values they had instilled into their children to be eroded by studying at a liberal college.

As it was not appropriate for me at that time to provide clarification, I bit my tongue and turned back into the meeting. However, I wondered how many other parents held this viewpoint.

So not to take anything for granted, and as this is a lecture about liberal arts – I feel obligated to ensure you know a bit about where the concept came from and what it entails . . . . there will not be a quiz.

First, let's review some terms. (This is what we call activating prior knowledge). According to the Association of American Colleges and Universities:

Liberal Education: An approach to college learning that empowers individuals and prepares them to deal with complexity, diversity, and change. This approach emphasizes broad knowledge of the wider world (e.g., science, culture, and society) as well as in-depth achievement in a specific field of interest. It helps students develop a sense of social responsibility; strong intellectual and practical skills that span all major fields of study, such as communication, analytical and problem-solving skills; and the demonstrated ability to apply knowledge and skills in real-world settings.

Liberal Arts: Specific disciplines (i.e., the humanities, sciences, and social sciences).

Liberal Arts College: A particular type of institution—often small, often residential—that facilitates close interaction between faculty and students, and whose curriculum is grounded in the liberal arts disciplines.
(AACU article: *What is a liberal education?* https://www.aacu.org/leap/what-is-a-liberal-education)

Historically, the study of the liberal arts was considered essential for a citizen in the classical era of the Greco-Roman world. At that time, this would have entailed being able to participate in public debate, defend oneself, serve in court and on juries, and perform military service. During this time, liberal arts covered only three subjects: grammar, rhetoric and logic, collectively known as the *trivium (tri' vee uhm)*. This was extended in medieval times to include four further subjects: arithmetic, geometry, music and astronomy, named the *quadrivium (qua drive' e uhm)* – so there were seven subjects in the medieval liberal arts curriculum.

Today, almost any dictionary will define the term 'Liberal Arts' as the study of academic subjects such as literature, philosophy, mathematics, and the social and physical sciences **as distinct from professional and technical subjects**.

As a professor of Education, I have always been bothered by the last sentence, which appears in most definitions of a Liberal Arts curriculum.

To counter this last statement, the article
"In Greater Expectations: A New Vision for Learning as a Nation Goes to College," AAC&U, 2002, it was stated that, "(Current) approaches to liberal education--already visible on many campuses--erases the artificial distinctions between studies deemed liberal (interpreted to mean that they are not related to job training) and those called practical (which are assumed to be). A liberal education is a practical education because it develops just those capacities needed by every thinking adult: analytical skills, effective communication, practical intelligence, ethical judgment, and social responsibility."

Even considering that statement, we know that many people still do not understand or see the value of a liberal arts education, and supporters are constantly having to defend the choice of young people, who want to attend a college such as Gustavus.

Scott Jaschik recently wrote an article (published on Feb,15, 2019) in *Inside Higher Education* titled: The Economic Gains (yes gains) of a Liberal Arts Education, to provide a counterpoint to those who say Liberal Arts grads all end up in low paying jobs.

This article summarizes a report released by the Andrew Mellon Foundation conducted by economists Catherine B. Hill and Elizabeth Davidson Pisacreta. These women are both at Ithaka S+R (an organization that conducts research on the economics of higher education.) Their report states that while some liberal arts grads end up in lower paying jobs, “existing evidence does not support these conclusions,” that Liberal Arts grads are doomed to a life of economic struggle.

Hill also stated that some people equate liberal arts with classes in the humanities alone, and do not realize the breath of subjects studied by liberal arts graduates. She mentioned that many people consider the liberal term as only referring to politics. (Like the parents in the meeting I mentioned earlier). Hill reported that based on their studies of the economic outcome for liberal arts grads, studying the liberal arts is not a poor economic choice. There are many other factors that impact the economic outcome of graduates, and some choices of a career – like artist or elementary teacher or pastor, are not made with the goal of achieving economic gains.

So, if the liberal arts are often described as ‘distinct from professional and technical studies’, the question that often comes up when discussing educational programs is - why have some liberal arts colleges let education become a part of their curriculum?

Stephen Mucher, a professor at Bard College, stated in *Inside higher Ed* (July 17, 2014) that situating teacher education in a liberal arts institution prepares educators to ask **"why"** and not simply "what", to turn a critical eye to the world their students inhabit, and to meet the new challenges of our world.” Exactly what we are trying to do here at Gustavus.

Graduates from liberal arts colleges have had the opportunity to develop critical thinking skills in their content areas as well as depth of knowledge and problem solving. Indeed, Mucher says, the most effective teachers master the content of their discipline, know how their subjects relate to other fields and commit themselves to a lifetime of learning. This ability to make connections across disciplines is vital for all professionals, in particular, teachers. K-12 students can find facts on their devises quite easily, but they don’t know what to do with those facts, or how those facts relate, or are important. They need to be carefully taught.

John Dewey, a philosopher and educator helped conceptualize the role of American and international education during the first four decades of the 20th century. He believed that knowledge needed to be instilled through **action** in the educational world. Dewey argued for experiential education that would enable children to learn theory and practice simultaneously;

a well-known example he described, is the practice of teaching elementary physics and biology to students while preparing a meal.

What specifically do you think was in Dewey's lesson? What did the students need to do? (Consider how heat transferred from the stove to the item being cooked? Think about what happens when a substance is heated? Or why some foods provide what we need to be healthy and some are just good to eat?) You can imagine all the wonderful ways in which this lesson might have evolved, and the possible connections that were made during the conversation. In addition, the students probably had to read a recipe and use measurements for adding ingredients. What an interesting interdisciplinary learning opportunity!

So, what does it meant to "study" the liberal arts? It means to integrate ideas and information across disciplines, connecting what you learn in all courses. In particular, the skills needed for many career activities, and life itself, are learned within the disciplines that are a part of a liberal arts education. It is these skills, or processes, that provide an opportunity for college students to solve problems and think critically in new situations, utilizing the knowledge and practices they developed and honed in their classes . . . perhaps in learning situations similar to Dewey's example.

Hasna Haidar, a writer for the *Top Universities* website has identified a list of these key skills (or practices, as Dewey would say) that are gained by a typical student pursuing a liberal arts degree.

- Analytical, evaluative, critical and creative thinking skills
- Effective oral and written communication skills
- Problem-solving and pattern intelligence skills
- Ability to learn and synthesize new ideas
- Experience in quantitative and qualitative data analysis
- Critical and reflective reading skills
- Mathematical thinking skills
- Effective research skills
- Organization and time-management skills
- Information literacy skills
- Ability to adapt easily to situations
- Ethical decision-making skills
- Ability to pose meaningful questions
- Ability to work in a team
- Self-confidence and self-understanding

- Ability to be sensitive to others and be tolerant of cultural differences
- Foreign language skills and/or cross-cultural knowledge

Sounds a lot like what we do here!

Consider for a moment, how you integrate some of these skills in your courses or provide opportunities for students to utilize and hone these skills. I am going to stop talking and let you all share with your neighbor one idea that you just thought of . . . so that we can get a sense of how extensively we integrate these skills in our teaching.

(PAUSE – ask for examples)

I'd like to point out that teaching majors must make connections between subjects and access a range of knowledge to solve problems every day in a classroom. They need, and use these liberal arts skills on a daily basis.

We need you experts in the various disciplines to support the content development of future teachers. But even more – we need you to use your discipline knowledge to engage our future teachers in the liberal arts processes that develop the skills Haider listed. And that is why we need education programs and all professional programs to be situated in liberal arts institutions.

Let's go back to that list of what is learned in a liberal arts college and see how they play out in a K-12 classroom.

In true Dewey-ian fashion, I'd like you to actively match these thinking skills to one of the actions a teacher often has to take during a day in their classroom. I'm using education as the professional focus here, because that is what I know.

Dewey believed in learning by doing, so I'd like you to take a few minutes to read the list of classroom events I am giving you, all which have occurred in one or more elementary, middle or high school classrooms I've visited, and determine which of the liberal arts thinking skills the teacher has learned that will be needed to manage this particular situation. Look at the thinking skills list on the attached page, and write the number of the skill(s) the teacher used to deal with the issue in the space in front of the teaching situation.

Interactive – lecture activity: Sharing: What did you notice?

In a speech given in 2002, David Kearns of the Xerox Corporation said, "The only education that prepares us for change is a liberal education. In periods of change, narrow specialization condemns us to inflexibility--precisely what we do not need. We need flexible intellectual tools to be problem solvers, to be able to continue learning over time."

—David Kearns, Xerox, 2002

More currently, Fareed Zakaria's 2015 book entitled, *In Defense of a Liberal Education*, includes the following statement: "Facts: all kinds of factual information are now on your phone or your tablet or your computer. I think we really do need to think about what that means. How important is it that people remember dates when they could literally press a button and in 30 seconds they have the date in front of them? Yet, that memorization of dates still takes up an enormous amount of time. It takes up a lot of a teacher's energy."

According to Zakaria, educators today must teach students how to ask good questions so they can use the information they access on their phones. They need to teach students to analyze information, to consider its accuracy, reliability or validity in light of the facts they just googled.

The Liberal Arts move us beyond the accumulation of facts. What do you do with factual knowledge? It just sits there unless you use it - use it to inform, use it to make decisions, use it to compare current or new situations to what has occurred before. . . and so on. Accumulating facts is great for playing trivia, and fun to pull out when trying to impress folks, but when our students write papers that identify a new a perspective, conduct experiments they have developed, generate options for saving our environment or figure out ways to provide for needy community members – that is the ultimate gift of a liberal arts education. The more we can implement Dewey's ideas of integrating theory and practice, making connections and focusing on thinking skills, the more easily our students will be able to *apply* their knowledge.

In our current society, most people will change jobs an average of 12 times in their career, according to the Balance Careers website, (https://www.thebalancecareers.com/how-often-do-people-change-jobs-2060467), so it is important to recognize that it is the skills our students learn in our courses, not necessarily the content, that will help them transition to these new jobs over the years. Therefore, we must focus on these skills even more diligently today.

I am always happy to remind people that Gustavus was established to provide teachers and preachers for the early Swedish community. These are professions outside the traditional definition of liberal arts studies, but along with nursing and management, professions that need the liberal arts skills. As we evolved into a liberal arts college, Gustavus continued to prepare future educators. This is important because as you have seen, Gustavus education graduates,

like all majors, use the liberal arts skills they gain here on a daily basis. And in addition, education majors pass these skills along to pupils in their classrooms – the K-12 students who are our future Gusties.

The link that connects all of our content areas are these skills that we teach within our subjects. We can use these skills to reimagine how we create interdisciplinary courses. A few of us might have a little difficulty letting go of some content in our specific discipline areas, but we need to shift some of what we have taught, to provide opportunities to include a focus on the liberal arts skills.

We have a great opportunity here at Gustavus. With the faculty's approval of our new challenge curriculum, we have opened the door to the creation of more interdisciplinary courses and to the implementation of the liberal arts skills within our courses – in particular, within the challenge seminars.

When I was working in a metro public high school, (before I came to Gustavus) we had an interdisciplinary program that began with a link between our 9th grade general science and 9th grade English classes. The intersection of these courses was the critical thinking skills that both classes taught and that were embedded in their coursework. It was called the 'elements of thinking curriculum'. And although students were in separate classes, the same students were scheduled with the same teachers for both subjects. This allowed the instructors to plan and link assignments based on the analytical thinking skills. Students analyzed lab activities in the science classes that were researched and written about for English credit. Literary works were analyzed using the same skills to determine author intent and theme. The semester concluded with problem solving activities, with students challenged to discover and write about an unknown substance they were given, using the problem solving and critical thinking skills that had been taught and reinforced in both classes, while also creating analogies for the scientific discovery in their English classes. It was a pretty cool program.

So, what does it look like to teach thinking skills? Some skills lend themselves to processes we can easily identify and teach. However, we sometimes assume that our students can work through problems or engage in lessons that requires skills like teamwork – but we have not ensured that they actually <u>know</u> that process. Explicit instruction in the liberal arts skills can enhance the learning occurring in our classes, as well as provide a link between subject areas.

Why do some students struggle to find an answer to a problem? Maybe it is because they randomly approach a task, rather than systematically working for an answer. A heuristic might be used to teach students a process for problem solving.

"Heuristic", from the Greek "heuriskos," means "process." Thus, a heuristic is a structured process, approach, or algorithm, that consists of specific steps:

Sample Heuristic: (this is one I cobbled together from several examples and used with my secondary methods classroom.)

Define goals and opportunities. Objectives must be clearly stated – what exactly is the problem to be solved? What is the goal?

Map /draw the process or system. Each step of the process or important element (ideas/ options) of the system must be identified or expressed in some form.

Identify the impact of each step or element. Each process step or system element is analyzed for potential effectiveness or impact.

Link each impact back to each goal. The impact of each step or element is compared to the objectives.

Organize and consolidate statements/data/evidence. Information is organized and patterns, themes or interactions that may point to an answer are considered.

A heuristic is just one way to teach the skills we expect students to use.

The core of good teaching and effective learning centers around helping students develop thinking and problem-solving skills. These thinking skills are at the heart of effective liberal arts programs. For our students, ALL of our students to have the opportunity to develop the practices we listed – we need to focus more on these intellectual skills and processes.

Our department has been informed, via state department surveys of our graduates' supervisors, that Gustavus educators are rated as 'highly effective.' I know it's because they have had the opportunity to make connections, to think, to develop and use the skills necessary to function in the world of K-12 schools. This ability to support students as they think across subjects, make connections and solve problems, is at the center of effective teaching – anywhere, in any subject, in any setting, at any level. These skills are vital for any educated individual, and that is why we must continue to ***evolve*** our programs here at Gustavus, placing even more emphasis on the thinking skills that are at the heart of a liberal arts education.

I thank you for being liberal in your thinking - and valuing and supporting professional programs that connect with your disciplines. We will all be better off for the liberal arts graduates who are in our local schools and in the work force and in our universities, using the thinking skills they learned here - to teach and lead, the next generation of Gusties.

Thinking Skills	Teacher tasks/situations
1. Analytical, evaluative, critical and creative thinking skills	___ As a new teacher, you find that your colleagues use a punitive behavior model that does not fit your philosophy. What do you do?
2. Effective oral and written communication skills	___ Several families have recently enrolled their students in your school. The children do not speak English and two are now assigned to your classroom.
3. Problem-solving and pattern intelligence skills	___Your students are all given ipads to use and you want to ensure they use these tools appropriately.
4. Ability to learn and synthesize new ideas	___ A new behavior response program the district is considering seems to promise more than you think is possible and you want to check it out and share with your colleagues.
5. Experience in quantitative and qualitative data analysis	___You have just had an intruder drill and several students are freaking out while you try to get class started again
6. Critical and reflective reading skills	___You saw a student from a low SES take 10 dollars from your wallet that was sitting on your desk. What should you do?
7. Mathematical thinking skills	___Students have read a provocative novel and you want them to think deeply about what they have read.
8. Effective research skills	___A student says they are unable to complete the assignment because they don't have access to a computer.
9. Organization and time-management skills	___ A girl in your class is being harassed by her peers because her mom is undergoing a gender transition

Thinking Skills	Teacher tasks/situations
10. Information literacy skills	___Interdisciplinary lesson plans need to be developed by your grade level team
11.Ability to adapt easily to situations	___You realize that a particular student tends to consistently annoy you and you need to figure out how to deal with this situation.
12. Ethical decision-making skills	___Students seem unclear about a concept they just read about in their text.
13. Ability to pose meaningful questions	___You need to plan rotations for use of materials in your lab to ensure all students get access
14. Ability to work in a team	___You need to report to parents the meaning of the national academic test they just completed.
15. Self-confidence and self-understanding	___You recognize that your students are reading at different levels and you want to find ways to support each of them.
16. Ability to be sensitive to others and be tolerant of cultural differences	___The arts program has been reduced due to budget cuts; you want to infuse art and music into your lessons.
17. Foreign language skills and/or cross-cultural knowledge	___You are teaching 35 fourth graders] all subjects, you have had five snow days, and you need to ensure you meet all state standards.
	___ Several students seems to struggle with understanding a math concept – you seek out alternative ways to present the information