

Why Do I Have to Take This Course?



# WHY DO I HAVE TO TAKE THIS COURSE?

A Guide to General Education

KISHA G. TRACY

ROTEL (Remixing Open Textbooks with an Equity Lens) Project  
Fitchburg, Massachusetts



*Why Do I Have to Take This Course? Copyright © 2024 by Kisha Tracy is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License, except where otherwise noted.*

# CONTENTS

About This Book	1
<i>Fellow Instructors and Advisors</i>	1
About the Author	2
Land Acknowledgement	iv
<i>Land Acknowledgement Statement for the ROTEL Grant</i>	iv
<i>Author Land and Labor Acknowledgement: Fitchburg State University</i>	v
Acknowledgements	vi
<i>ROTEL Grant</i>	vi
<i>Contributors</i>	vi
<i>Recognitions</i>	vi

## Part I. What Is General Education?

Part 1: Terminology	9
<i>What Are General Education Courses?</i>	9
<i>What Is a Curriculum?</i>	9
<i>What Are the Liberal Arts and Sciences?</i>	9
<i>What Do We Mean by Humanities, Social Sciences, and STEM?</i>	10
Part 2: Brief Historical Overview	11

Part 3: How General Education Requirements Are Created?	13
<i>What Kind of Higher Education Institution Do You Attend?</i>	13
<i>Discussion 1.3</i>	14
<i>Who Makes and Enforces the Rules?</i>	14
Part 4: Final Thought	16
Part 5: References and Further Reading	17

## Part II. Why General Education?

Part 1: More Than a Checkbox	21
<i>What Can a Liberal Arts Education Do?</i>	22
<i>Can't I Just Learn All This on My Own?</i>	24
<i>Activity 2.1</i>	24
Part 2: How to Human (Effectively!) 101	25
<i>Activity 2.2</i>	25
<i>Discussion 2.2</i>	26

Part 3: The Student, The Person, The Professional	28
<i>The Student</i>	28
<i>The Person</i>	37
<i>The Professional</i>	41
<i>Activity 2.3</i>	47
Part 4: Final Thought	49
Part 5: References and Further Reading	50

### Part III. What Will I Learn?

Part 1: The Mission	55
<i>Fitchburg State University General Education Mission</i>	55
Part 2: "Good Trouble, Necessary Trouble"	58
<i>Who Was John Lewis?</i>	59
<i>What Is "Good, Necessary Trouble"?</i>	60
Part 3: Final Thought	62
<i>So Why Are We Talking About "Good, Necessary Trouble"?</i>	62
Part 4: References and Further Reading	63

## Part IV. Foundation

Part 1: Information Literacy	67
<i>Perspectives</i>	67
<i>Concepts to Consider</i>	68
<i>Information Literacy and Good, Necessary Trouble</i>	72
<i>Discussion 4.1</i>	73
Part 2: Quantitative Reasoning	74
<i>Perspectives</i>	74
<i>Concepts to Consider</i>	74
<i>Quantitative Reasoning and Good, Necessary Trouble</i>	78
<i>Discussion 4.2</i>	79
Part 3: Reading	80
<i>Perspectives</i>	80
<i>Concepts to Consider</i>	82
<i>Reading and Good, Necessary Trouble</i>	84
<i>Discussion 4.3</i>	85



Part 4: Speaking and Listening	87
<i>Perspectives</i>	87
<i>Concepts to Consider</i>	88
<i>Speaking and Listening and Good, Necessary Trouble</i>	91
<i>Discussion 4.4</i>	92
Part 5: Writing	94
<i>Perspectives</i>	94
<i>Concepts to Consider</i>	95
<i>Writing and Good, Necessary Trouble</i>	98
<i>Discussion 4.5</i>	99
Part 6: Final Thought	101
Part 7: References and Further Reading	102

## Part V. Exploration

Part 1: Civic Learning	109
<i>Perspectives</i>	109
<i>Concepts to Consider</i>	110
<i>Civic Learning and Good, Necessary Trouble</i>	113
<i>Discussion 5.1</i>	114
Part 2: Diverse Perspectives	116
<i>Perspectives</i>	116
<i>Concepts to Consider</i>	117
<i>Diverse Perspectives and Good, Necessary Trouble</i>	122
<i>Discussion 5.2</i>	123
Part 3: Ethical Reasoning	125
<i>Perspectives</i>	125
<i>Concepts to Consider</i>	126
<i>Ethical Reasoning and Good, Necessary Trouble</i>	128
<i>Discussion 5.3</i>	130

Part 4: Fine Arts Expression and Analysis	131
<i>Perspectives</i>	131
<i>Concepts to Consider</i>	132
<i>Fine Arts Expression and Analysis and Good, Necessary Trouble</i>	135
<i>Discussion 5.4</i>	136
Part 5: Historical Inquiry and Analysis	138
<i>Perspectives</i>	138
<i>Concepts to Consider</i>	139
<i>Historical Inquiry and Analysis and Good, Necessary Trouble</i>	142
<i>Discussion 5.5</i>	143
Part 6: Literary Inquiry and Analysis	145
<i>Perspectives</i>	145
<i>Concepts to Consider</i>	147
<i>Literary Inquiry and Analysis and Good, Necessary Trouble</i>	150
<i>Discussion 5.6</i>	152

Part 7: Personal Wellness	153
<i>Perspectives</i>	153
<i>Concepts to Consider</i>	154
<i>Personal Wellness and Good, Necessary Trouble</i>	156
<i>Discussion 5.7</i>	157
Part 8: Procedural and Logical Thinking	159
<i>Perspectives</i>	159
<i>Concepts to Consider</i>	160
<i>Procedural and Logical Thinking and Good, Necessary Trouble</i>	161
<i>Discussion 5.8</i>	164
Part 9: Scientific Inquiry and Analysis	165
<i>Perspectives</i>	165
<i>Concepts to Consider</i>	165
<i>Scientific Inquiry and Analysis and Good, Necessary Trouble</i>	168
<i>Discussion 5.9</i>	169

Part 10: Developing Skills	170
<i>Creative Thinking</i>	170
<i>Critical Thinking</i>	171
<i>Digital Literacy</i>	172
<i>Discussion 5.10</i>	173
Part 11: Final Thought	175
Part 12: References and Further Reading	176

## Part VI. Integration

Part 1: Integrative Learning	187
<i>Activity 6.1</i>	190
<i>Integrative Learning and Good, Necessary Trouble</i>	191
<i>Discussion 6.1</i>	193

Part 2: Integrative High Impact Practices	194
<i>Creative Projects</i>	194
<i>Internships</i>	195
<i>Study Abroad</i>	196
<i>Community Engagement</i>	197
<i>Student Research</i>	198
<i>Writing Intensive</i>	199
Part 3: Final Thought	201
Part 4: References and Further Reading	202

## Part VII. What About After Graduation?

Part 1: How to Human (Effectively!) 102	207
<i>Activity 7.1</i>	207
Part 2: Lifelong Learning	209
Part 3: "Selling" General Education	211
<i>Activity 7.3</i>	211
Part 4: Final Thought	212
Part 5: References and Further Reading	213

## Part VIII. For Instructors

Part 1: Why Ask Why?	217
<i>But Really... Why?</i>	218
Part 2: Students Are People Too	220
<i>Some Sobering Statistics</i>	220
<i>Making Choices</i>	222
<i>The Space and Ability to Invest</i>	222
<i>We're in This Together</i>	226
Part 3: How Can We Communicate the Significance of General Education?	228
<i>Why Do They Have to Take Our Courses?</i>	228
<i>How Can We Explicitly Teach Students the Value of Our Courses and Curriculum?</i>	230
<i>Example Strategy: Why Do We Have to Study Early World Literature?</i>	233
Part 4: References and Further Reading	234
Appendix	239





Have you ever wondered about the required courses in college? Have you asked yourself or others why you need to take specific courses? Perhaps even expressed frustration at all the “extra” requirements beyond your major? If so, you are far from alone. Many students are confused by general education courses. But this book is designed to help!

*Why Do I Have to Take This Course?* developed out of many years of thinking about general education courses and curriculums. We, as university personnel, do not always do the best job of explaining why we have certain requirements. Even though these courses make up a significant percentage of our college careers, there is not often time set aside to talk about general education and explore its purpose and goals. I started out creating spaces in individual courses to address the question – sometimes spoken and sometimes unspoken – of the significance of my courses, many of which are mostly filled with students taking them for general education credit. When we do not know the reason why we are doing something, it can sometimes lead to apathy and even resentment. Once we have an idea of the purpose, then we can start to appreciate and learn. I found that it was worthwhile to spend some time thinking about these purposes, both “official” and personal ones, as students were more willing to engage with the rest of the course once we had these discussions.

From these experiences, I began to think: what about the rest of the curriculum? This book is intended as a resource for starting these conversations across campus.

*Why Do I Have to Take This Course?* is divided into four main sections:

- What is general education? Chapter 1 explains the history of general education as well as how curriculums get designed.
- Why general education? Chapter 2 discusses the overarching purposes of general education programs.
- What will I learn? Chapters 3-6 break down general education learning, discussing some of the reasons why that learning is significant and providing food for further thought.
- What about after graduation? Chapter 7 gives a brief look at how general education can be essential beyond college.

## Fellow Instructors and Advisors

For instructors who wish to adopt this book, please note that it is designed to assign in its entirety or, more likely, in parts. If you are teaching a course with certain learning outcomes, feel free to focus only on those sections of the book with your students. Consider also using this book with your advisees, especially if they express concerns over taking certain requirements.

# ABOUT THE AUTHOR

---



Kisha G. Tracy

I grew up in a small town in rural southern Illinois. My parents were both teachers, one in elementary school and one in secondary school sciences. From an early age, I began hearing and thinking about education, from theory to practice. Although my own interests leaned towards literature, history, and other humanities, I was equally exposed to STEM and have found the skills and ways of thinking in these areas, especially when combined with those in the humanities, incredibly useful as well as perspective-changing.

From kindergarten until I graduated from high school, there were no people of color in my school system or even in the entire county. The year I went away to start college a Christian group of color moved in and started a business on the town square – in front of which a cross was burned almost immediately. When I entered undergrad, my first professor in my chosen field – Medieval Studies – was a scholar of color, Dr. Annette Parks in the History department at the University of Evansville. I did not realize it then, of course, but, as a result of her involvement in my early academic pursuits, my entire view of Medieval Studies was distinct from many who entered the field. In her courses, we often focused on the marginalized, on women, on peasants, on prisoners of war – on many whose voices are not always at the forefront in discussions about the period. Given the experiences of my younger self, I am grateful for her impact on me at the beginning of my academic career.

I would like to acknowledge that I identify as white, female, hetero, and disabled. At present, I am a tenured Professor of English Studies and Chair of the General Education Program at Fitchburg State University, a small liberal arts college in Massachusetts. I received my Ph.D. in Medieval Studies from the University of Connecticut. As an instructor, I teach courses ranging from first-year composition to medieval and early world literature, and I utilize trauma-informed pedagogy, universal design for learning, anti-racist pedagogy, and Real Talk. As a researcher, my main interests include medieval disability, especially mental health, and the

scholarship of teaching and learning. In addition to several articles, my first book was published by Palgrave in 2017 and is entitled *Memory and Confession in Middle English Literature*, and my second book was published in 2022 with Arc Humanities Press and is entitled *Why Study the Middle Ages?* I am the president of the Society for the Study of Disability in the Middle Ages, the editor of the Medieval Disability Glossary, and the co-founder of the scholarly organization the Lone Medievalist. For further information about me, see my digital portfolio.

## Media Attributions

- Kisha G. Tracy © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license

# LAND ACKNOWLEDGEMENT

---

## Land Acknowledgement Statement for the ROTEL Grant

As part of ROTEL Grant's mission to support the creation, management, and dissemination of culturally-relevant textbooks, we must acknowledge Indigenous Peoples as the traditional stewards of the land, and the enduring relationship that exists between them and their traditional territories. We acknowledge that the boundaries that created Massachusetts were arbitrary and a product of the settlers. We honor the land on which the Higher Education Institutions of the Commonwealth of Massachusetts are sited as the traditional territory of tribal nations. We acknowledge the painful history of genocide and forced removal from their territory, and other atrocities connected with colonization. We honor and respect the many diverse indigenous people connected to this land on which we gather, and our acknowledgement is one action we can take to correct the stories and practices that erase Indigenous People's history and culture.

Identified Tribes and/or Nations of Massachusetts

Historical Nations

- Mahican
- Mashpee
- Massachuset
- Nauset
- Nipmuc
- Pennacook
- Pocomtuc
- Stockbridge
- Wampanoag

Present-Day Nations and Tribes

- Mashpee Wampanoag Tribe
- Wampanoag Tribe of Gay Head Aquinnah
- Herring Pond Wampanoag Tribe
- Assawompsett-Nemasket Band of Wampanoags
- Pocasset Wampanoag of the Pokanoket Nation

- Pacasset Wampanoag Tribe
- Seaconke Wampanoag Tribe
- Chappaquiddick Tribe of the Wampanoag Indian Nation
- Nipmuc Nation (Bands include the Hassanamisco, Natick)
- Nipmuck Tribal Council of Chaubunagungamaug
- Massachusetts Tribe at Ponkapoag

In the event that we have an incorrect link or are missing an existing band/nation, please let us know so that we may correct our error.

#### Suggested Readings

Massachusetts Center for Native American Awareness

A guide to Indigenous land acknowledgment

‘We are all on Native Land: A conversation about Land Acknowledgements’ (YouTube video)

Native-Land.ca | Our home on native land (mapping of native lands)

Beyond territorial acknowledgments – âpihtawikosisân

Your Territorial Acknowledgment Is Not Enough

This land acknowledgement was based on Digital Commonwealth. Please contact ROTELPST@gmail.com with any questions or concerns.

## Author Land and Labor Acknowledgement: Fitchburg State University

The Fitchburg State University Community recognizes historical injustices. We acknowledge the legacy of the ancestral homelands and traditional territories of Indigenous Peoples from which they were dispossessed. We are cognizant that we cannot separate the history of our university or our community from the history of colonialism and slavery in the United States.

We recognize and honor the members of the Algonquian Peoples: Nipmuc, Pennacook, and Wabanaki Confederacy, whose ancestral land we now call the Fitchburg State University campus. We also acknowledge the removal of these peoples from this area and the systemic erasure of their complex and unique history.

We acknowledge the heritage of the African and Caribbean diaspora. We acknowledge the reality of slavery and forced labor that built this area.

The legacy of colonialism and slavery persists today as we continue to work towards racial justice, equity, inclusion, liberation, and community, and strive to dismantle the oppressive social systems interwoven into the fabric of our national and regional heritage.

# ACKNOWLEDGEMENTS

---

## ROTEL Grant

My sincere appreciation to the leaders of the ROTEL grant for allowing me this opportunity. I am particularly grateful to Dr. Jacalyn Kremer, Dean of Fitchburg State's Amelia V. Gallucci-Cirio Library, and Connie Strittmatter, Strategic Projects Librarian at the Gallucci-Cirio Library, for their support and championship of OER; Dr. Rachel Graddy, Associate Director of Student Accessibility Services at Worcester State University, for her guidance on accessibility; as well as Marilyn Billings, Faculty Advisor and Advocate for the grant, and the publishing support team of Rick Lizotte.

## Contributors

I would like to acknowledge and thank the contributors to this book. They include former students, colleagues (both from my campus and elsewhere), and staff in many different wonderful programs.

## Recognitions

To adapt a phrase, general education takes a village, and I have been fortunate in working with many who feel as strongly about general education as I do. I would especially like to recognize the student ambassadors at Fitchburg State who have participated in workshops with me on general education. These ambassadors – orientation leaders, peer tutors, TRIO student support services squad members, etc. – allowed me to test material and gave me feedback on various ideas and activities.

## PART I

# WHAT IS GENERAL EDUCATION?





## Learning Objectives

By the end of this section, you will be able to:

- define terms related to general education.

## What Are General Education Courses?

In short, general education courses are all those required for college and university students to take besides those required in a major.

## What Is a Curriculum?

A curriculum is all the courses or requirements that make up a course of study. So, for instance, all the courses and requirements for a major are a major's curriculum. They are carefully thought through by faculty in that field and represent what those experts believe someone graduating with that degree should know and be able to do. A general education curriculum is also a planned course of study, but one that develops personal, civic, and academic as well as professional skills.

## What Are the Liberal Arts and Sciences?

Liberal arts and sciences (or the shortened liberal arts or liberal education) is a phrase often used synonymously with general education, and it can refer to the same set of courses. It does, however, have broader meanings. The Association of American Colleges & Universities (AAC&U) "What Is a 21st Century Liberal Education?" states:

Liberal Education is an approach to learning that empowers individuals and prepares them to deal with

complexity, diversity, and change. It provides students with broad knowledge of the wider world (e.g. science, culture, and society) as well as in-depth study in a specific area of interest. A liberal education helps students develop a sense of social responsibility, as well as strong and transferable intellectual and practical skills such as communication, analytical and problem-solving skills, and a demonstrated ability to apply knowledge and skills in real-world settings.

The liberal arts and sciences encompasses knowledge and skills that we need in order to live effectively, efficiently, and/or joyfully.

The word liberal is used here not in the political sense, but in its application to education's concern with broadening a person's general knowledge and experience. This usage derives from the Latin word *liber*, meaning "free person." The word arts, just to confuse us, does not refer to "the arts," as in music, art, etc., but rather to skills of any kind that can be learned. Thus, the phrase references learned skills that are necessary for a free person to know.

## What Do We Mean by Humanities, Social Sciences, and STEM?

Modern curriculum is generally separated into three categories, or cultures: the humanities, social sciences, and STEM. The humanities generally include subjects such as literature, history, philosophy, religion, writing, languages and linguistics, and the arts, among other disciplines. The social sciences generally include subjects such as sociology, political science, geography, education, and economics, among other disciplines. STEM is in its title: science, math, engineering, and technology. Note: occasionally there has been an attempt, especially in K-12 education, to change STEM to STEAM – science, technology, engineering, the arts, and mathematics – in order to demonstrate the connections between the sciences and the arts, but this is not common.

## PART 2: BRIEF HISTORICAL OVERVIEW

---

### Learning Objectives

By the end of this section, you will be able to:

- discuss the main historical points in the development of general education.

In his book *In Defense of a Liberal Education*, Fareed Zakaria (2015, pp. 41-42) discusses the origins of the liberal arts: “Basic skills for sustenance were no longer sufficient [in ancient Greece] – citizens also had to be properly trained to run their own society. The link between a broad education and liberty became important to the Greeks. Describing this approach to instruction centuries later, the Romans coined a term for it: a ‘liberal’ education, using the word liberal in its original Latin sense, ‘of or pertaining to free men’” (41–42). Roman statesman and author Marcus Tullius Cicero (106-43 BCE) is believed to be the first recorded user of the phrase *liberal arts*. The phrase was applied to education in classical antiquity as it was a free person who had the privilege to be educated, particularly in order to participate in the rights of civic life that free people were allowed.

While the phrase *liberal arts* continued in use, its meaning has changed over time. The twelfth-century English philosopher and bishop John of Salisbury states in his *The Metalogicon* (translation, 2015, p. 37) that the liberal arts “are called ‘liberal,’ either because the ancients took care to have their children instructed in them; or because their object is to effect man’s liberation, so that, freed from cares, he may devote himself to wisdom.” Instead of a focus on free people who can participate in civic life, John of Salisbury defines *liberal* as the time and ability to learn. This approach reserves education for those who are not spending their days toiling in fields or otherwise engaged in simple survival.

In the Middle Ages, thinkers and scholars categorized the subjects that make up the liberal arts. They divided them first into the *trivium*, which was grammar, logic, and rhetoric, and then the *quadrivium*, which was arithmetic, geometry, music, and astronomy. All seven of the disciplines in the *trivium* and *quadrivium* are called “arts,” speaking to the definition of *arts* mentioned above as a learned skill. In the modern American context, the *quadrivium* would, with the exception of music, fall into the category of STEM. To many medieval thinkers, music as well as the rest of the disciplines in the *quadrivium* were part of mathematics,

which is rather different from how we usually classify music today, but makes sense considering the skills a person learns studying music.

Today, the liberal arts are mostly a focus of American education. Grant Lilford (2012, p. 194) does demonstrate that “the conversation [about the liberal arts] has flowed around and across continents.” The tenth-century Islamic thinker al-Farabi, known as the “Second Teacher” behind Aristotle, had similar approaches to classifying knowledge. His categories were: language (syntax, grammar, pronunciation, and poetry), logic, introductory sciences (arithmetic, geometry, astrology, music, weights, tool-making), physics (nature) and metaphysics (god), and society (jurisprudence and rhetoric) (Nasr, 2001, pp. 61–62). The fourteenth-century Islamic scholar Ibn Khaldûn divided knowledge into logic, natural knowledge (medicine and agriculture), metaphysics (magic and the occult), quantity (geometry, arithmetic, music, and astronomy), the Qur’an and the Hadith, jurisprudence, theology, Sufism, and linguistics (grammar, lexicography, and literature) (pp. 63-64). Music is included with other mathematics as in the quadrivium, and al-Farabi includes rhetoric, the art of argument and persuasion such as those often taught in college writing or speech courses, in the sciences rather than the humanities as they are today. In the Early Modern period (or the Renaissance), the liberal arts was referred to as humanistic education, but it was grounded in the classical ideas and remained central to European and then American education.

The understanding of where subjects belong in these categories of knowledge have shifted over time, but the main concept of the liberal arts is the same. John of Salisbury writes in *The Metalogicon* (p. 36): “The liberal arts are said to have become so efficacious among our ancestors, who studied them diligently, that they enabled them to comprehend everything they read, elevated their understanding to all things, and empowered them to cut through the knots of all problems possible of solution.” This is quite the claim! Essentially, John of Salisbury and many other thinkers across the centuries have understood the liberal arts as including everything a human being should know.

# PART 3: HOW GENERAL EDUCATION REQUIREMENTS ARE CREATED?

---

## Learning Objectives

By the end of this section, you will be able to:

- articulate the different types of higher education institutions.
- discuss how general education curriculums are created.

## What Kind of Higher Education Institution Do You Attend?

There are many different kinds of higher education institutions we can choose to attend. They serve various purposes depending on the type of education an individual decides is best for them.

- **Universities** offer a wide range of academic programs and degrees, including bachelor and graduate degrees.
- **Community colleges** offer two-year associate degree programs, career-specific degrees, and certificates. Often, they provide preparation for transfer to four-year institutions and bachelor degrees.
- **Public colleges and universities** are government-funded and usually have lower tuition for residents of the state.
- **Private colleges and universities** are funded by tuition, fees, and non-government sources.
- **Four-year colleges and universities** are called undergraduate institutions and offer bachelor programs.
- **Two-year colleges**, such as community, vocational or technical, and career colleges, offer degrees that can be completed in under two years.

In addition to the type of degree you can earn and the length of programs, institutions also differ in the

type of courses they offer and require as well as the overall experience. **Liberal arts and sciences colleges and universities** have a mission to offer courses in the liberal arts and usually have core general education curriculum requirements. The goal of these institutions is to prepare a person in all aspects of life in addition to a career. **Vocational, technical, and career colleges** offer training that is specialized for particular industries or careers. They will often not have general education requirements or very limited ones.

### **An Example: The Mission of Fitchburg State University**

The mission statement of a university or college can reveal what type of institution it is. Fitchburg State is a four-year, public university with the following mission:

*Fitchburg State University is committed to excellence in teaching and learning and blends liberal arts and sciences and professional programs within a small college environment.*

This statement tells us that Fitchburg State is a liberal arts and sciences university, which means it does have a general education curriculum, but it notes that it blends the liberal arts with professional programs, indicating there is a strong focus on career preparation.

## **Discussion 1.3**

- What type of education would you expect to receive from an institution with a mission statement like Fitchburg State's?

## **Who Makes and Enforces the Rules?**

Curriculums are decided upon by faculty, experts in their respective fields with relevant degrees and/or experience. Faculty from various departments across a college or university campus, along with other partners such as staff, administration, and current students, come together to design or revise general education curriculum. Much debate goes into this discussion as there are several considerations to balance.

One is the type and number of courses that should be required. Some of the parameters for these discussions in particular are mandated by accreditation bodies. Accreditation is the process to “ensure that institutions of higher education meet acceptable levels of quality” (“Accreditation in the United States”). Although institutions of higher education in the United States are able to make decisions independently, there does need to be some type of checks and balances: “In the United States, institutions of higher education are permitted

to operate with considerable independence and autonomy. [...] As a consequence, American educational institutions can vary widely in the character and quality of their programs. To ensure a basic level of quality, the practice of accreditation arose in the United States as a means of conducting nongovernmental, peer evaluation of educational institutions and programs” (“Accreditation in the United States”). In the six New England states, the New England Commission of Higher Education (NECHE) is the regional accreditation agency for colleges and universities, including Fitchburg State.

The NECHE standards for accreditation are broken down to cover each part of the institution. Standard Four concerns the academic program, including general education. Relevant sections read:

4.16 The general education program is coherent and substantive. It reflects the institution’s mission and values and embodies the institution’s definition of an educated person and prepares students for the world in which they will live. The requirement informs the design of all general education courses, and provides criteria for its evaluation, including the assessment of what students learn.

4.17 The general education requirement in each undergraduate program ensures adequate breadth for all degree-seeking students by showing a balanced regard for what are traditionally referred to as the arts and humanities, the sciences including mathematics, and the social sciences. General education requirements include offerings that focus on the subject matter and methodologies of these three primary domains of knowledge as well as on their relationships to one another.

The question of the type and number of requirements is influenced by the need to balance “the three domains of knowledge [...] the arts and humanities, the sciences including mathematics, and the social sciences.” Institutions accredited by NECHE are required to demonstrate that all three types of learning are represented fairly in order to “ensure adequate breadth.” When faculty are designing or refining a general education program, this is one of the major concerns, that all three domains have a clear place in the curriculum.

In addition to accreditation concerns, designers of general education curriculums are responsible for maintaining the spirit of liberal arts and sciences education. What should an educated person know and be able to do? How can a general education program guarantee exposure to all of these different types of knowledge and skills? A well-designed curriculum should address these questions, but that is not always easy to accomplish. Designers do their best to discuss, compromise, and build a program that will prepare graduates for life beyond college.

## PART 4: FINAL THOUGHT

---

Knowing the type of college or university you attend and its mission can explain what kind of education you will receive. Liberal arts and sciences institutions are concerned with more than career preparation. In the history of the liberal arts, the focus has always been on the breadth of knowledge a person needs, whether as a citizen or as a human being in general or both. While careers are incredibly important and major curriculums are designed to make sure we have the tools necessary to go into the workforce, there is more to life than work, and general education prepares us to live our best lives.



## PART 5: REFERENCES AND FURTHER READING

---

- Accreditation in the United States. U.S. Department of Education. Retrieved from <https://www2.ed.gov/admins/finaid/accred/accreditation.html>.
- John of Salisbury. 2015. *The metalogicon*. Translated by Daniel D. McGarry. Martino.
- Lilford, Grant. 2012. The liberal arts in Anglophone Africa. *The Journal of General Education*, 61(3), pp. 189–210.
- Marber, Peter, & Daniel Araya, eds. 2017. *The evolution of liberal arts in the global age*. Routledge.
- Nasr, Seyyed Hossein. 2001. *Science and Civilization in Islam*. ABC.
- What is a 21st century liberal education? Association of American Colleges & Universities. Retrieved from <http://www.aacu.org/leap/what-is-a-liberal-education>.
- Zakaria, Fareed. 2015. *In defense of a liberal education*. Norton.



## PART II

# WHY GENERAL EDUCATION?



# PART 1: MORE THAN A CHECKBOX

---

## Learning Objectives

By the end of this section, you will be able to:

- begin to think about the value of a required general education curriculum.
- locate arguments for the value of a required general education curriculum.

Throughout your college career, you will take a variety of courses, both those for your major(s) and those in the general education curriculum. Each has its own unique focus, and most will serve to check off a requirement on your transcript. In the whirlwind of the college experience, we don't always have the time to stop and consider why we are in higher education and what we hope to apply from all of these courses and their learning outcomes to the rest of our lives. In fact, I am sure many of us have used the phrase “busy work” when it comes to required coursework. When something is described as “busy work,” it is used to dismiss work assigned in a class, generally because the point or value of it is not clear. Once a course is categorized in that way, it might as well be consigned to the mental “recycling bin.” It may still have unconscious value in terms of practicing whatever skills or content it is intended to reinforce, but, in the grand scheme of learning, it loses much of its immediate and long-term purpose.

According to Elizabeth Wardle (2009, p. 771), self-reflection or “asking subjects not simply to apply a strategy but to ‘monitor their own thinking processes’” is one of the most effective methods of encouraging the ability to apply knowledge and skills learned in one situation to another, perhaps seemingly unrelated, situation. Mary-Ann Winkelmes (2013) has found that awareness of learning is necessary for retaining that learning, and we “learn more and retain that learning longer when [we] have an awareness of and some control over how [we] are learning.” Basically, the more we get involved in our own learning, the more we absorb it. The more we resist engaging in opportunities to learn or the more the value of what we are doing is kept a mystery, the more that learning does not become a part of us that we can access when we need it later.

In this book, we have a moment to reflect on general education requirements. We can think carefully about what a liberal arts and sciences education can mean to each of us, what we can learn in our studies, how our chosen careers work together with the goals of the general education curriculum, and how to continue our

lifelong learning. Essentially, we can think about how all these required courses are more than just “busy work” or checkboxes.

## What Can a Liberal Arts Education Do?

Derek Black was the heir-apparent to Stormfront, one of the largest white nationalist groups in the country. Homeschooled for most of his primary and secondary education, he was trained by his father in white nationalist rhetoric and beliefs, to the point that Derek even started a radio program for children by the time he was ten and was heavily involved in the public face of Stormfront.

When he was ready to go to college in 2010, Derek chose to attend New College in his home state of Florida. At the time, New College was a public liberal arts college, and Derek was interested in medieval history. He at first continued his activities with Stormfront, but he began to take classes in a variety of subjects and meet friends from a wide spectrum of races and backgrounds. Having had this exposure, Derek Black disavowed his association with white nationalism, publicly challenging his previously-held beliefs.

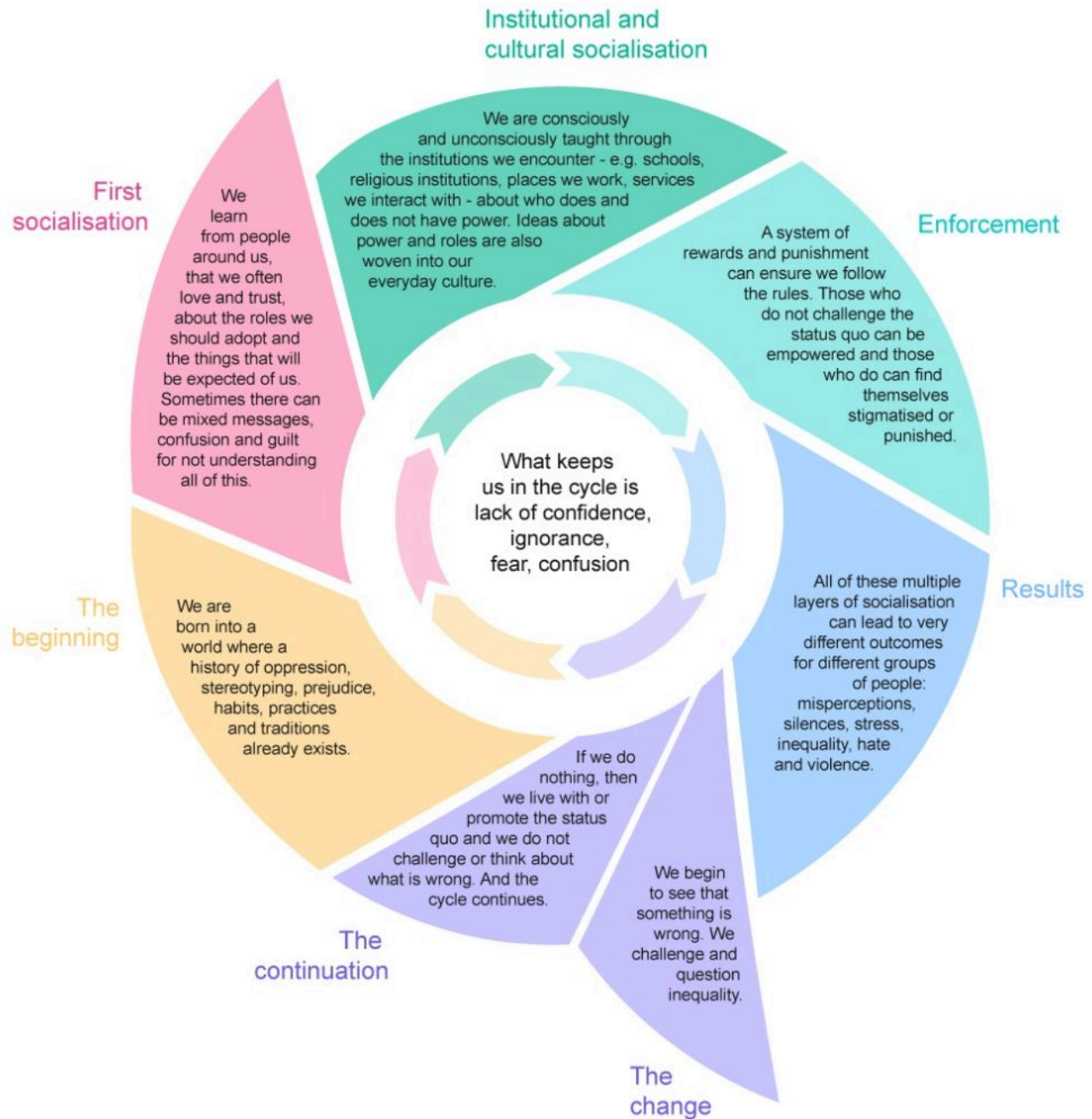
Journalist Eli Saslow wrote a biography of Derek’s journey, and he comments (2016), “He was taking classes in Jewish scripture and German multiculturalism during his last year at New College, but most of his research was focused on medieval Europe [...] He studied the 8th century to the 12th century, trying to trace back the modern concepts of race and whiteness, but he couldn’t find them anywhere. ‘We basically just invented it,’ he concluded.” In his own words, Derek says (Olmstead, 2023) that he “ultimately came to recognize the harm [of his previous beliefs] and really engage on an intellectual level with articles and statistics about race and immigration.” He continues to say that, had he gone to a different type of school, “I would not have felt socially challenged and called on to question myself and answer for the white nationalist community I was standing up for. The students weren’t there to just get their degrees and move on; they were there to pursue truth and try to understand society and challenge everything and be really rigorous about what they were studying.” Going to New College or a similar institution, for him, is “legitimately figuring out what it is you believe and what your values are.” Derek is studying for a Ph.D. at the University of Chicago, researching proto-racism in early medieval history.

A liberal arts education and the experiences that accompany it, namely exposure to a diverse group of people and ideas, countered and uprooted the racist ideology deeply entrenched in a young person who was considered the future and next generation of white nationalism.

## The Cycle of Socialization

Derek Black’s story emphasizes what Bobbie Harro calls the “cycle of socialization.” Harro’s (1982) model of the cycle of socialization (graphically illustrated below) helps us understand a wide range of ways in which social, cultural, and institutional factors can shape and support certain ways of seeing and behaving in the

world. Harro's cycle suggests that we can be socialized to play certain roles, that attitudes and behaviors and outcomes can be influenced by the unequal distribution of power and by personal and collective reluctance to break such cycles. Derek chose to break this cycle by both recognizing that the world he had been born into was wrong and challenging his own behavior and beliefs.



## Text Attributions

This section contains material, including the graphic, adapted from the chapter “How does our mind and

bias work?” from Conscious Inclusion by National School of Healthcare Science and is used under a Creative Commons Attribution-ShareAlike 4.0 International License.

## Can't I Just Learn All This on My Own?

It is tempting to question why general education courses are required. We might ask: can't I just pick up all these subjects on my own if I choose to do so? Certainly, we are all capable of doing just that. Learning can happen anywhere at any time. It does, however, take a lot of motivation to learn with the breadth and depth that a college education provides without help and guidance. The purpose of a general education curriculum is to be deliberate and comprehensive, to introduce topics and skills that individuals on their own might not even know exist or might never encounter. At the same time, there is something to be said for learning with experts in each of the fields. College provides a collection of people who have trained extensively and can provide insights that might not be available to the self-learner. There is also the idea of learning how to learn in different ways and from different perspectives. College is as much about the environment and the opportunities, being in the presence of people to learn from, as it is about gaining a specific set of knowledge.

### Activity 2.1

One of the ways to think about the value of the general education curriculum is to read, listen to, and contemplate what different people have to say about it and see what resonates with us.

- Browse through this collection of resources on Why We Study the Liberal Arts.
- Find at least three resources that resonate with you in some way and think about why.
- Feel free to post comments to the resource(s) that you have selected about the meaning(s) they have for you.

### Media Attributions

- Cycle of Socialisation © National School of Healthcare Science is licensed under a CC BY-SA (Attribution ShareAlike) license



# PART 2: HOW TO HUMAN (EFFECTIVELY!) 101

---

## Learning Objectives

By the end of this section, you will be able to:

- articulate skills and knowledge that it takes to be a human being.
- begin to consider where in the general education curriculum those skills and knowledge might be addressed.

## Activity 2.2



- Imagine you are enrolled in a class called “How to Human (Effectively!) 101.” The description on the syllabus reads:

In this course, we will discuss and identify what a person needs in order to “human,” and, more importantly, what a person needs to “human” effectively, not just to live or survive, but to manage a high quality of life that leaves the world better than we found it. Our discussions will range from the physiological to the cognitive to the social and beyond.

- By the end of the semester, what do you think would be on a list of what we need in order to “human effectively”? Create your own list.

## Discussion 2.2

During the summer of 2022, Fitchburg State University student ambassadors, including Orientation Leaders, Peer Tutors, and TRIO Student Support Services Squad Leaders, completed training on the General Education Program. In that training, like you, they were asked to list everything we need to “human effectively.” The following word cloud represents their collective responses (please note that larger words indicate multiple individuals gave the same response).

- Analyze this word cloud. Are the responses you gave in the cloud? What would you add? Would you take anything out?



- After analyzing the word cloud and comparing it to your list, think about how a student might gain these necessities while taking general education courses. What requirements might develop these types of skills and knowledge?

Note: later, in Chapter 3, we will explore specific examples.

## Media Attributions

- How to Human 101 © Kisha Tracy via. Fitchburg State University is licensed under a All Rights Reserved license
- Word cloud © Kisha Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license

# PART 3: THE STUDENT, THE PERSON, THE PROFESSIONAL

---

## Learning Objectives

By the end of this section, you will be able to:

- articulate the value of and the personal reasons for earning a degree at a liberal arts and sciences institution, particularly to potential employers.
- identify how general education learning outcomes and skills apply to real-world personal and professional situations.

We have many roles in life. While we are in school, we are **students** asked to try out new skills and then hone them, to learn different disciplines, and to connect ideas together. But, at the same time, we are individuals, **people**, with civic responsibilities, community ties, support systems, financial and medical histories, hobbies, and passions that will continue to evolve throughout our lifetimes. When we enter the workforce, we are **professionals** with occupations to contribute to, career choices to make, interpersonal dynamics to navigate, and employers to satisfy. Participating in all of these roles fully requires diverse skills and sets of knowledge, ones that can adapt and expand as our needs change. We are not the same people day to day, let alone decade to decade. What we need or want to be able to do or know changes with us, and these changes are not always predictable.

## The Student

### Developing Skills

Our time in college is unique in that it is a space in which it is safe to practice, to develop, even to fail. It is a

space in which we can work on developing the skills we will need for all of the different roles we will inhabit over our lifetimes for personal, academic, and professional success.

There are not many such spaces in life that allow us to concentrate on the betterment of ourselves. While many students also work and/or have other responsibilities at the same time as taking courses, the time inside classrooms and on campus is about learning and, in particular, it's about learning skills that transfer to every aspect of our lives, on and off campus, that complement majors, and that prepare us to tackle more complex problems and ideas. General education courses are particularly suited to accomplish this.

For instance, it is difficult to work through most intricate issues without skills in critical thinking. Figuring out creative solutions to problems is aided by learning how to find and evaluate information effectively, much of which requires digital literacy. Understanding data is complemented by quantitative reasoning and then honed by writing, speaking, and listening skills to help to make sense of and communicate those analyses, potentially affecting change or action, in ourselves or others.

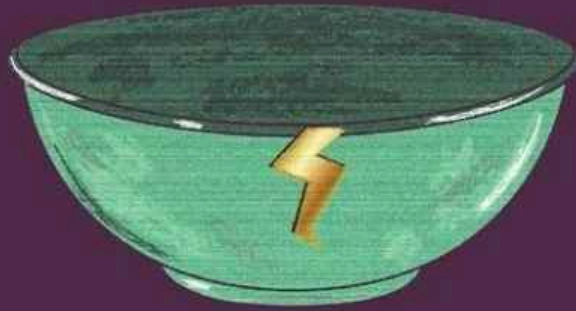
“At the intersection of a General Education curriculum and the concept of Student Success lies a mission and process to engage students in comprehensive curricular and co-curricular experiences. Through the scaffolding of the Curriculum and the life cycle of student success, we see inherent congruities of desired outcomes that prepare the student for engaged citizenship of an increasingly global society. While success is recognized and pursued as an individualized enterprise, we see that creative and critical thinkers strengthen critical skills through the Curriculum which ready them to plan and realize personal and professional goals. Similarly, an institutionally defined student success framework provides students with a roadmap by which to strategically apply their learning within the Curriculum and co-curricular spaces. With a sense of belonging and the development of agency serving as key components of student success, students who thoughtfully participate in the General Education curriculum make connections within their institutional community that ground their sense of place and increase their ability to persist. While the path to and realization of success is determined by the student, we can see the correlation between engagement in General Education and satisfactory academic progress, participation in co-curricula, community engagement, and equitable academic and professional outcomes for students.” – **Jason Smith, Assistant Dean for Student Success, Fitchburg State University**

## The Benefits of Failure

Part of the learning process, and one we often forget about, ignore, or actively dismiss, is failure. It is a rare

person that does or knows something perfectly, with no room for improvement, from the very beginning. Indeed, the point at which we start learning is the point at which something becomes difficult for us. There is a skill in learning to recognize the opportunities created by imperfection, to accept constructive criticism, and to apply feedback to future situations.

Kintsugi is a Japanese art form that repairs, in particular, broken pottery with a precious material like gold or silver. If we look at this act philosophically, it celebrates, instead of hiding, imperfections in the history of an object, indicating that the journey, the story, or the evolution is more important than any current state in which the object exists. Applying this idea to learning, it emphasizes how the development of skills is more important than any hypothetical, ideal endpoint, one that does not exist as we all can continue to improve. Along that development, we will occasionally fail, stall, and make mistakes, but, when we recognize what we have learned from those moments, have an open mind to feedback, and take advantage of the next opportunity to practice, we repair those “gaps” with gold, strengthening our learning beyond what we could have done without undergoing the full process.



IN JAPAN, BROKEN OBJECTS  
are OFTEN REPAIRED WITH  
GOLD. THE FLAW is SEEN  
as A UNIQUE PIECE OF the  
OBJECT'S HISTORY, WHICH  
ADDS TO its BEAUTY.

CONSIDER THIS  
WHEN YOU FEEL BROKEN.

## Building a Toolbox of Knowledge

The word “knowledge” sometimes is misinterpreted. It often gets reduced to minor facts – what author wrote what book, what date an event happened, what is the abbreviation for a certain chemical element. These are types of knowledge and useful. But true knowledge goes beyond facts. It includes the skills and the ability to understand a subject, to apply it, to see it in conjunction with other knowledge and skills. Having knowledge is one aspect of learning, but actively being able to utilize it is another.

Remember how from one week to the next a global pandemic shut down school, work, and most social activity. What new knowledge did we need? We had to understand the science to keep ourselves and those around us safe or to manage illness if necessary. We had to learn how to situate ourselves historically and civically. We had to navigate new ethical situations. We had to empathize with the diverse needs of others. We

had to parse information that changed constantly. We had to maintain personal wellness and security in an unfamiliar and unstable environment. These are only a few examples, and these were sets of knowledge we did not anticipate having to activate only a few weeks prior to the outset of COVID.

While it is possible to meet each new need as a blank slate and persevere, it is by far easier to handle them when we already have a toolbox of knowledge upon which to draw. Previous knowledge is like building a house with a foundation already in place as opposed to starting by needing to clear the ground, digging the shape, mixing the concrete, etc. The array of general education courses provides experience with a breadth of learning from different viewpoints and demonstrates a variety of methods, disciplinary and interdisciplinary, to think about our world – past, present, and future. For example, approaching life with a working knowledge of literary analysis allows us to experience the thoughts of others and encounter more than we ever practically could on our own. Being trained in historical methods of analysis prepares us to examine evidence and reach informed conclusions or judgments. By taking general education courses, we gain knowledge about our world across many artistic, civic, diverse, ethical, historical, literary, and scientific perspectives, increasing the number of lenses – or layers of lenses – we have available to us to look at problems or questions.

“Have you considered how your identity impacts how much you enjoy the classes you take? Your unique perspective contributes to class discussions in so many ways. In life, you are asked to solve problems from a variety of points of view, use your general education to expand your thinking and knowledge. How are people with disabilities represented in books? How can a statistics course teach us about social equity? Who is left out of U.S. history? The general education curriculum increases your knowledge about the world, different populations, and yourself. Representation matters; your presence in the classroom transforms learning!” – **Dr. Elizabeth Swartz, Director of TRIO Student Support Services, Fitchburg State University**

## The Game of Life

The classic game of Trivial Pursuit can certainly be played individually, but it is frequently played in teams. Why? It includes questions in a range of categories, including Geography, Entertainment, History, Art and Literature, Science and Nature, and Sports and Leisure. Having multiple people who have different strengths – one person knows more Art and Literature trivia but another is stronger in Sports and Leisure – raises the chances of success. The same is true of life. A narrow or limited outlook or skill set makes it far more difficult to thrive. Having multiple bases of knowledge impacts our chances for success, however we define that for ourselves. The general education curriculum helps to build this toolbox.



And just to note: like playing the game of Trivial Pursuit, gaining knowledge is not only about what will be useful, but also about learning simply for the enjoyment of it or to find what fulfills us on a personal level.



## Identifying Connections

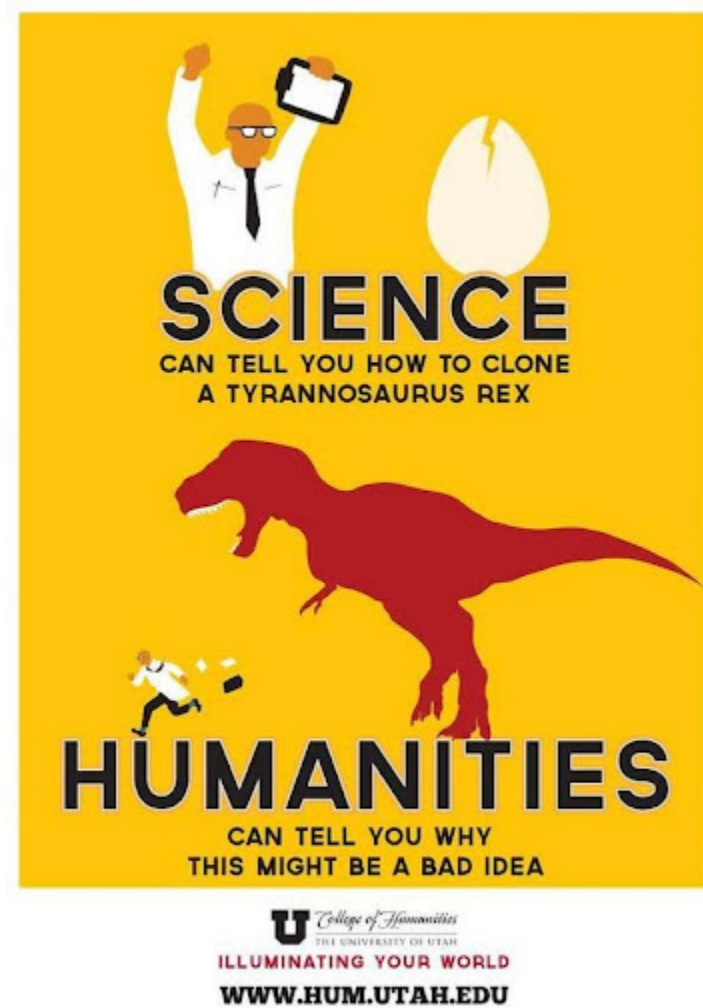
“More than anything else, being an educated person means being able to see connections that allow one to make sense of the world and act within it in creative ways. [L]istening, reading, talking, writing, puzzle solving, truth seeking, seeing through other people’s eyes, leading, working in a community—is finally about connecting. A liberal education is about gaining the power and the wisdom, the generosity and the freedom to connect.” (Cronon, 1998)

William Cronon points out one ultimate goal of engaging in a liberal education: connection. The idea of connection can have multiple meanings. Several of the general education learning skills are about communication – for instance, writing, speaking, listening – which is the act of connecting clearly and effectively with others.

More to Cronon’s point, however, is that nothing acts alone in a vacuum. Let’s say we are designing a new house to go on top of that foundation we talked about earlier. This seems straightforward. We would expect

such an endeavor to require engineering skills. Engineering itself is grounded in scientific inquiry and analysis, procedural and logical thinking, and quantitative reasoning. There are also issues requiring civic learning, such as how government agencies work as well as building and zoning codes. There are questions of ethics. How and what materials are used? How are the people building the house being treated? Are there concerns about the environment? There is a need to understand diverse perspectives. Is this house accessible to people with disabilities, now and in the future? Will it be economically affordable for the people of the area? A knowledge of historical analysis may be necessary if there are questions about the previous ownership of the land or if it is of historical significance. Not to mention creative thinking may be needed to design a house under specific conditions or in an artistic manner. All of these are above and beyond the daily skills of writing requests, reports, or proposals; speaking with and listening to colleagues; working with digital software; etc. Bringing all of these types of thinking together is called integrative learning (see more in chapter 3), another outcome of general education.

When we take separate courses with different content, we can fall into the trap of believing that every discipline or subject is completely separate, which is far from true. The ideal is connecting learning across courses and subjects, finding how they are related or how they complement each other. For instance, Kevin Baeza-Cervantes (2013) makes the argument in “Humanities and STEM Make Strange But Necessary Bedfellows” that, instead of viewing the humanities and sciences as separate or opposites, they should be perceived as working together. He states, “Ultimately, we need to recognize that one cannot live without the other. While STEM and business are [perceived as] great for sustaining a livelihood after college, studying the humanities helps us make sense of our lives and our world. People study [the humanities] because it appeals to our innate curiosity, our desire to constantly question the claims of all authorities, whether political, religious or scientific.” Baeza-Cervantes illustrates that STEM fields are responsible for many great accomplishments: vaccines, technology, all kinds of other discoveries. The humanities, however, provides us with the skills to question and to analyze from other perspectives. Take a look at this poster from the University of Utah College of Humanities:



This image is very funny, playing on the popular Jurassic Park book and film series. Further analysis of this poster takes us a bit further than its humor.

“Science can tell you how to clone a Tyrannosaurus Rex.” Aside from any other considerations, this type of research, whether or not it results in dinosaurs roaming the earth again, is awesome! The ground-breaking work that it would require could have implications for all kinds of advancements in genetics, in medicine, in paleontology, just to name a few.

“Humanities can tell you why this might be a bad idea.” The literary exploration of the idea in Jurassic Park is a thought experiment on the ethical and practical considerations of bringing dinosaurs back into our modern world and of the ramifications of human greed and pride.

When combined, different ways of thinking can result in better conclusions that respect both what we can do and what we should do.

## Discussion 2.3

- Can you think of situations in which those skills typically considered in STEM do benefit or could benefit from skills typically considered in the humanities?

“Looking from the perspective of an academic support center, I see the value of general education courses in how they show students that the skills they learn in their own majors are actually applicable in a variety of contexts. When students first start coming to tutoring and academic coaching sessions, they are often seeking ‘fill in the blanks’ ways to succeed in the courses in which they are struggling. In other words, struggling students are often hoping that they can get a few rote, repeatable steps to memorize to achieve mastery. In their tutoring or coaching sessions, however, in the process of trying to help students understand concepts they find challenging, we often encourage them to draw on skills in areas where they feel academically confident. For many students, the process of considering – for example – how the quantitative reasoning skills with which they are comfortable are similar to the logic of organizing a paper (or vice versa) is extremely empowering, and something they can then carry into their lives more generally. The way that general education classes help students develop the higher-order ability of transferring skills from one context to the next – rather than just seeing each new context as an inaccessible black box of wholly new skills– is an outcome we see all the time in academic support centers.” – **Dr. Kat McLellan, Director of Academic Coaching and Tutoring Center, Fitchburg State University**

## Beyond the Classroom

Another form of connection that is possible is that between what we learn in the classroom and what we experience outside of it. One of the advantages of attending a liberal arts college is that, beyond the range of courses offered, there are also a variety of other opportunities: clubs, organizations, community service, student government, and events. The benefits of these extracurriculars are well-known, including on chances of getting jobs post-graduation, on academic performance, and on mental health (Jeongeun & Bastedo, 2017; Keenan, 2010; Billingsley & Hurd, 2019).

While such opportunities certainly are for entertainment and stress relief, many can also reflect and connect with the work in general education classes. For instance, attending an event for Constitution Day can relate to civic learning, historical inquiry and analysis, ethical reasoning, and much more depending on the theme of the event. Participating in recreational sports is a part of personal wellness. English Club promotes literary inquiry

and analysis skills. Sororities and fraternities take part in civic engagement and service projects. Submitting to an on-campus art gallery or viewing an exhibit enhances fine arts expression and analysis skills. Extracurricular life is as much about learning as it is about pursuing non-academic interests.

“College students learn knowledge, skills, and abilities outside the classroom just like inside the classroom. Outside the classroom, students gain specific knowledge and skills that are also classroom outcomes, particularly those in the general education curriculum. Examples include verbal, nonverbal, and written communication, critical thinking skills, information literacy, and the integration of knowledge. We provide a forum for students to explore, understand, and navigate diverse perspectives, develop a sense of civic responsibility, and practice ethics. We promote personal wellness. In addition, we foster skills that are specific to our co-curricular learning environment such as conflict management, self-advocacy and agency, and the development of one’s values. On many campuses, the co-curriculum is an integral part of the First Year Experience. General education programs are designed to develop skills that will serve the college graduate well over the course of a life and career that are likely to include many unpredictable chapters and developments that we cannot even imagine while in college. These foundational skills and the ability to integrate knowledge prepare students not for the first job, but for jobs many years later, and for an enriching and fulfilling life. Campuses with a robust co-curricular life intentionally provide opportunities and experiences that deepen and inform general education learning outcomes, and offer a laboratory of sorts through on-campus employment, engagement opportunities, and support services.” - **Dr. Laura Bayless, Vice President for Student Affairs, Fitchburg State University**

## The Person

### Improving Quality of Life

Adam Weinberg (2017), in “An Open Letter to New Liberal Arts College Students: What You Should Know on Day #1,” states that a “liberal arts education will help you identify the kind of life you want to lead. And it has the power to help you develop the skills, values, and habits to take on that life and be successful.” College is about options. We choose our majors and minors. We choose our individual courses. We choose how we participate in those courses. We choose extracurricular activities. Granted, there are pressures that sometimes affect those decisions – familial, financial, physical, mental – but, even with these pressures, options

are available to us. What all of these choices add up to is figuring out who we are and what we want out of life, professional and personal, and then giving us the opportunities to develop the skills and knowledge necessary to make that life happen at the level of quality we deserve.



Alan Rappeport (2015) quotes Matthew B. Crawford, a writer and mechanic, as observing, “It’s obviously kind of a reductive approach to think of your course of study in college as merely a means to a paycheck,’ Mr. Crawford said, suggesting the study of things like happiness can be enriching in ways that are hard to measure.” The assertion that general education courses can develop quality of life is difficult to assess, but it is important to have in the back of your mind as you take different classes.

For instance, general education provides the skills to read effectively and deeply. Ceridwen Dovey (2015) remarks that “[a]fter the First World War, traumatized soldiers returning home from the front were often prescribed a course of reading [...] Later in the century, bibliotherapy was used in varying ways in hospitals and libraries, and has more recently been taken up by psychologists, social and aged-care workers, and doctors as a viable mode of therapy.” Dovey continues, “[R]eading books can be good for your mental health and your relationships with others, but exactly why and how is now becoming clearer, thanks to new research on reading’s effects on the brain...Regular readers sleep better, have lower stress levels, higher self-esteem, and lower rates of depression than non-readers.” And that’s only from reading!

Irina Dumitrescu (2016) provides a more serious framework for the significance of general education through a specific example, discussing how communist Romania, in the 1940’s and 50’s “carried out a massive program of re-education and extermination of the country’s cultural elites.” She reveals that “[e]ducated political prisoners drew on rich inner resources to preserve their sanity and their spirits. They used their knowledge to help their fellow inmates survive as well. Their experiences reveal what the attack on the humanities really is. It is an attack on the ability to think, criticize, and endure in crisis, and its virulence betrays how vital the liberal arts are.” In times of crisis, we turn to books, art, music, and other forms of learning to persevere. The COVID years are an excellent example. During this difficult time, many people found comfort in learning new skills, in literature and the fine arts, and in creating in various forms. Another example is a



devastating event like the Boston marathon bombing. In the years following, people found solace in art, music, and poetry inspired by the tragedy (Shea, 2014).

“In life, just as in art or music, creativity is a function of understanding the choices available to you at any given moment. A working knowledge of color and composition can help you make a beautiful painting. Knowing which notes are in a certain scale can open up possibilities for a song you’re writing. The more you learn, the more choices you have. The more choices you have, the freer you are to author your own story. What you choose to know is who you choose to be. It is something that can’t be taken away from you. It does not change with the whims of the marketplace or advances in technology. With the breadth of knowledge general education classes provide – in math, science, the humanities – comes the confidence to talk to people from all walks to life, the ability to advocate for the things you believe in, the chance to make valuable contributions to your community. Learning more about how the world works is a way of finding your unique place in it. Enriching opportunities – both personally and professionally – await people who make that discovery.” – **Dr. Steven Edwards, English Studies, Fitchburg State University**

## Honing Cognitive Processes

The brain is an amazing organ with vast capabilities that we are still trying to comprehend. Perhaps one of its most fascinating capabilities is its potential to grow and change throughout our lifetimes. This function is called neuroplasticity, which “is the brain’s capacity to continue growing and evolving in response to life experiences [...] It means that it is possible to change dysfunctional patterns of thinking and behaving and to develop new mindsets, new memories, new skills, and new abilities (“Neuroplasticity”). With this possibility, the brain is able to take in new information and learn new skills, allowing a person to improve and then apply better, stronger pathways in the brain to future efforts. It also means that EVERY person can learn and exceed their previous level of ability in ANY area with practice and training. Moheb Costandi summarizes research on neuroplasticity (2016, p. 88): “[S]ome people spend years or decades acquiring other types of knowledge, skills, or expertise. Such rigorous, long-term training also leads to long-lasting changes in both the structure and function of the brain.” Put simply: the brain needs to exercise!

## View: "Neuroplasticity"



*One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://rotel.pressbooks.pub/whydoihavetotakethiscourse/?p=45#oembed-1>*

While courses in majors do provide a rigorous amount of cognitive exercise, general education courses provide an array of different exercises. It is rather like working out physically. If you only do one type of exercise over and over again that targets one muscle group, those muscles will be particularly well-developed, and this may be your goal if you have a specific activity in mind. But, to achieve all-around physical fitness, we must do different types of exercises that build up various muscles or work on cardiovascular systems or help with flexibility, which, incidentally, might aid in the previous goal as well by providing support for that one targeted muscle group. General education is a variety of exercises for the brain, working multiple neural pathways that support each other in order to strengthen our overall cognitive processes.

## Thought Exercise

Think about the story of Derek Black earlier in this chapter. Consider what it would be like if we had been able to study and map his brain prior to attending college and then again after, when he renounced his white nationalist beliefs. It is likely the neural pathways in his brain looked very different, not only from the experience of a college education, but from forming new patterns of thinking to replace his old ones.

## Being an Informed Citizen

The 2016 Education Advisory Board report “Reclaiming the Value of the Liberal Arts for the 21st Century” tells us that “[m]isrepresentations of the liberal arts as a synonym for esoteric humanities fields miss the significance of the liberal arts’ origins as a set of skills (grammar, logic, and rhetoric) taught in ancient Greece to prepare citizens for participation in civic life” and that a “narrow definition of the liberal arts as a synonym for the humanities overlooks the fundamental connection between the liberal arts and the development of democratic society.” At the heart of a liberal education is the need to be informed enough to participate effectively and productively in community life. In the United States, this can entail voting on a range of topics or assisting in local and/or national government proceedings. The ability to do so relies on understanding the issues which might be far outside of our fields of knowledge, being able to listen to and communicate with others, and make educated decisions.

To return to Dumitrescu and darker aspects of citizenship: “If the study of literature or history were



really that pointless, a government trying to control the minds of its subjects would not go to the trouble of putting humanities students and professors in jail.” A similar situation occurred in Turkey in 2016 when their President began imprisoning and/or restricting the freedom of travel of the country’s academics. Government control of its citizens often begins with anti-intellectual sentiments and actions, highlighting the necessity for education in maintaining a free-thinking citizenry.

Scott Samuelson (2014) argues that the purpose of liberal arts “is that we should strive to be a society of free people, not simply one of well-compensated managers and employees, and that “there are among future plumbers as many devotees of Plato as among the future wizards of Silicon Valley, and that there are among nurses’ aides and soldiers as many important voices for our democracy as among doctors and business moguls.” As we have discussed before, we all inhabit multiple roles, some required and some voluntary. We are at liberty to be more than just our professions by engaging in different communities and attempting to affect change that will better the lives of ourselves and others.

## The Professional

### Maximizing Your Major

Seth Godin (2023) tells us that, “In a recent survey, the Graduate Management Admission Council reported that although MBAs were strong in analytical aptitude, quantitative expertise and information-gathering ability, they were sorely lacking in other critical areas that employers find equally attractive: strategic thinking, written and oral communication, leadership and adaptability.” He asks, “Are these mutually exclusive? Must we trade one for the other?” The answer is no! Fully engaging in a general education curriculum simultaneously with a major can develop skills that are necessary for any chosen profession and can improve the chances of finding a job in that profession.

### Hearing from the Experts

#### Business

“The Business Administration major is truly interdisciplinary with general education playing a significant role in student success. To be successful, business students need to be adept communicators, flexible to change, and critical thinkers. Research confirms that a first-year

writing course improves strong business communication performance just as the skills acquired in math courses affect student performance in microeconomics, managerial accounting, and business statistics (Ritchie, 2014). Business strategy requires an understanding of the world in which it operates. One method, STEEPLE, is an analysis of current Societal, Technological, Ethical, Economical, Political, Legal, and Environmental factors. Strategies, goals, and decisions are created with the STEEPLE analysis in combination with additional internal, external, and data components. Successful business strategies, such as the STEEPLE process, are anchored in the fundamentals of general education. General education exposes students to various ways of thinking, opens creative avenues, and encourages proper communication. Incorporating general education with business courses creates a holistic curriculum that embodies community and creativity, ultimately leading to adaptability and thinking critically.” – **Dr. Denise Simion, Business Administration, Fitchburg State University**

## Communications Media

“The benefit of general education for Communications Media students is that general education introduces ideas that may be new, thereby providing different ways of thinking about things both inside and outside of one’s major. Courses within a major are often limited in scope by design as concepts and ideas are taught within the framework of the discipline; however, it is critically important to have the tools to think more broadly about subject and context. General education courses provide the information needed to give a more expansive point of view that renders one able to think more critically not just in their major, but in their life long after graduation.” – **Professor M. Zachary Lee, Communications Media, Fitchburg State University**

## Criminal Justice

“Criminal justice majors significantly benefit from the general education requirements, which promote exposure to other fields and place emphasis on hands-on, practical experience. For example, criminal justice majors have the opportunity to take the cross-departmental course titled Geographic Information System for Criminal Justice, or ‘GIS for CJ,’ which provides a distinctive twist on data analysis for the criminal justice major. In this upper-level course, students are exposed to the Earth and Geographic Sciences Department, exploring the intersection of crime and mapping. Through course activities, students utilize actual crime data and mapping software to create and analyze crime ‘hot spots’ and problem solve solutions to reduce crime, all through the combined lens of criminal justice and geographic sciences. After this course, students have a unique skill set ready to offer in the criminal justice field.” – **Dr.**

**Eileen Kirk, Behavioral Sciences, Fitchburg State University**

## Education

“While in Education courses, students discover teaching and learning are dynamic processes that require building skills like reading, writing, and thinking about information, sharing ideas and seeking to understand a variety of content from many subjects. Education majors learn that teaching requires the development of curriculum to inspire and engage students to participate in learning opportunities that will educate them about subjects found in the general education curriculum, for example, literature, mathematics, science, art, history, etc. Information from the curriculum is essential to know and understand. The subject content from the general education courses is transformed into the lessons future educators will create and teach to ultimately develop knowledgeable, skilled, and caring citizens who engage fully in life and work to build strong communities.” – **Dr. Danette Day, Education, Fitchburg State University**

## Nursing

“Students in the nursing major may wonder why they are required to take courses in music, literature, history, or ethics, and what they have to do with nursing. After all, isn’t nursing all about science, giving medications, and taking blood pressures? To recognize the value of general education courses, first consider that nurses work with diverse patient populations: people of all ages, backgrounds, who may speak a language other than English, or may not speak at all. Nurses are educated to provide care in hospitals, clinics, schools, communities, and homes. In all settings, nurses talk with patients and families, develop plans of care, and notice when people are afraid, angry, or not feeling well. Knowing someone’s hobbies, favorite books, movies, music, art, or food can help the nurse to get to know the patient, serve as a topic of conversation, and promote conversation and relationship building. Although nursing education involves learning a lot of hands-on skills, general education courses provide the student with a foundation for nursing knowledge and prepare students to communicate and engage with diverse patient populations.” – **Dr. Christine Devine, Nursing, Fitchburg State University**

## Giving Employers What They Want

The World Economic Forum Future of Jobs Survey 2023 (p. 38) identifies the twenty-six core skills required of workers today. These are, in order ranked by frequency of note by employers:

1. Analytical thinking
2. Creative thinking
3. Resilience, flexibility and agility
4. Motivation and self-awareness
5. Curiosity and lifelong learning
6. Technological literacy
7. Dependability and attention to detail
8. Empathy and active listening
9. Leadership and social influence
10. Quality control
11. Systems thinking
12. Talent management
13. Service orientation and customer service

14. Resource management and operations
15. AI and big data
16. Reading, writing and mathematics
17. Design and user experience
18. Multi-lingualism
19. Teaching and mentoring
20. Programming
21. Marketing and media
22. Networks and cybersecurity
23. Environmental stewardship
24. Manual dexterity, endurance and precision
25. Global citizenship
26. Sensory-processing abilities

Eleven of these skills map directly to one or more general education requirements (note that the survey uses different terminology in some cases; the equivalent general education terminology is in parentheses):

- Analytical thinking (fine arts, historical, literary, and scientific inquiry and analysis; critical thinking)
- Creative thinking
- Technological literacy (digital literacy)
- Empathy and active listening (diverse perspectives; speaking and listening)
- Systems thinking (procedural and logical thinking; integrative learning)
- AI and big data (information literacy)
- Reading, writing, and mathematics (reading, writing, and quantitative reasoning)
- Multi-lingualism (speaking and listening; diverse perspectives)
- Environmental stewardship (ethical reasoning)
- Manual dexterity, endurance, and precision (personal wellness)
- Global citizenship (civic learning)

Other skills on the list are also addressed in the curriculum. Curiosity and lifelong learning are the overarching goals of a liberal education. Resilience, flexibility, and agility are by-products of the general education experience. Service orientation and customer service are improved with an understanding of diverse perspectives and civic engagement. Motivation and self-awareness result from metacognition, also a part of the general education experience. An argument can be made to connections with other skills on the list as well. Food for thought: compared to previous surveys, there are indications that creative thinking will increase in importance in the coming years at greater rates than analytical thinking (p. 39).

Speaking from the perspective of potential employers, Seth Godin (2023) remarks, “[I]f you’ve got the

vocational skills, you're no help to us [the employer] without these human skills, the things that we can't write down or program a computer to do. Real skills can't replace vocational skills, of course. What they can do is amplify the things you've already been measuring." Vocational skills, or the skills necessary for a particular job, are important. They allow a person to do work for which they have trained. But Godin's point is that, without the other types of learning that makes us human, vocational skills will only carry a person so far. All jobs require more than just competence in a narrow field.

Jarrett Carter (2016), in "Why tech industries are demanding more liberal arts graduates," asserts that the liberal arts and sciences are the "concrete foundation of global connectivity in communication, leadership, innovation and enterprise." Carter makes this conclusion based upon the previously-mentioned EAB report. That report provides even more detail and examples: "In his book, *The World Is Flat*, Thomas Friedman explains that, more than teaching skills like writing or critical thinking, the liberal arts help students interpret and master narrative complexity. This allows liberal arts graduates to approach ideas from multiple angles and to synthesize information from different sources, both crucial skills for innovation. The former chairman and CEO of Saks Incorporated, Stephen Sadove, believes the liberal arts provide the foundation for strong management by teaching students empathy and storytelling, skills managers need to communicate effectively." In "Even in the age of STEM, employers still value liberal arts degrees," Steven Lindner (2016) argues that "HR executives perceive graduates with liberal arts degrees as well-rounded candidates with characteristics that stimulate efficiency and resourcefulness. Workers who can navigate and rethink business models using knowledge from many different disciplines, with an ability to continuously learn, are qualities in the wheelhouse of liberal arts students." What all of these sources are supporting is that employers want employees who are adaptable, creative, critical thinkers and communicators with the ability to view the world and their work through multiple lenses. In other words, they want employees who have had a rich general education experience.

## Leaning into Flexibility

The World Economic Forum Future of Jobs Survey 2023 (p. 40) notes that "businesses emphasize the importance of resilient and reflective workers embracing a culture of lifelong learning as the lifecycle of their skills decreases." We hear the phrase all the time: this is a fast-changing world. With new technologies and new professions developing constantly, the workforce will look different between the time a person enters college to the time they graduate, let alone throughout their careers. Indeed, according to a 2021 report "Number of Jobs, Labor Market Experience, Marital Status, and Health: Results from a National Longitudinal Survey" from the Bureau of Labor Statistics, "Individuals born [...] 1957-64 held an average of 12.4 jobs [defined as an uninterrupted period of work with a particular employer] from ages 18 to 54." Some data indicates that Americans change careers seven times in their lifetimes on average (Broom, 2023). Each time a person changes careers, they need to learn new occupational skills, but, with a solid liberal arts background, individuals have more confidence in their ability to make such transitions.

“When I started my college career I entered as an undecided major, which was one of the best choices since it helped me focus on a wide range of general education courses. I had an awesome advisor that I worked with to help me pick out courses that would meet requirements, but also allowed me to get credits towards the two degrees I was looking at. Ultimately I majored in English, but I took courses in physics, biology, statistics, and history that helped give me a much wider perspective on the way I approached the world once I graduated. I now work in Healthcare IT, but having a broad knowledge base outside of my degree really helped me set myself up to be successful. When I talk to doctors and nurses, my general understanding of biology helps me to understand what may be going on when they refer to certain procedures or conditions they’re trying to document in the computer. While I was never super great at math in school, the courses I took in statistics help me to find the right criteria when searching for specific data sets and to understand what the numbers imply while my courses in the humanities help me to communicate effectively what these numbers mean in more human terms. If I hadn’t taken general education courses, I would have felt very locked into a small range of career paths that was determined by my major, but because I’d expanded my skills and knowledge base through general education courses I was able to make a jump to a very different career path where I’m thriving.” – **Erin Golden, Senior Digital Health Analyst, University of Wisconsin Health and B.A., English Education, University of Illinois**

## Activity 2.3

- Set up the meeting with your advisor during the advising period for the next semester. Or drop in during their office hours at any time.
- Interview them about their experiences in college with general education courses.
  - Did they find these courses beneficial?
  - What did they learn?
  - Which courses did they enjoy the most?
  - Were certain courses or skills helpful later in life?
  - Were they introduced to topics they would not have otherwise known about?

## View: “Have You Talked to Your Instructor Today?”



*One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://rotel.pressbooks.pub/whydoihavetotakethiscourse/?p=45#oembed-2>*

### Media Attributions

- Japanese Gold Meme Happy © Digital Mom Blog is licensed under a All Rights Reserved license
- Trivial Pursuit Token © Christian Heldt via. Wikimedia is licensed under a Public Domain license
- Humanities © The University of Utah is licensed under a All Rights Reserved license
- Owl! at the Library © Owl! at the Library via. Facebook is licensed under a All Rights Reserved license



## PART 4: FINAL THOUGHT

---

Understanding why general education is required is to accept that we are human beings and constantly evolving and changing. The value of a liberal education may not be truly clear until the end of our lives, which can be frustrating. As William Cronon (1998) remarks, “A liberal education is not something any of us ever achieve; it is not a state. Rather, it is a way of living in the face of our own ignorance, a way of groping toward wisdom in full recognition of our own folly, a way of educating ourselves without any illusion that our educations will ever be complete.” Lifelong learning is more than a catchphrase. It is what it means to be human.

More practically, however, we can do our best to glean as much as we can out of college opportunities at the time we are experiencing them. Adam Weinberg (2017) tells us how to take advantage: “Use every class and every assignment to learn to communicate effectively, especially to write well. Work with numbers and data. Weave disparate ideas into new ways of thinking. Frame questions. Argue. Create. Do research.” This work will have a positive effect on us as students, as people, and as professionals.

## PART 5: REFERENCES AND FURTHER READING

---

- Attis, David. 2016, August 19. Reclaiming the value of the liberal arts for the 21st century. EAB. Retrieved from <https://www.eab.com/research-and-insights/academic-affairs-forum/white-papers/reclaiming-the-value-of-the-liberal-arts>.
- Baeza-Cervantes, Kevin. 2013, November 12. Humanities and STEM make strange but necessary bedfellows. University of California, Riverside Highlander News. Retrieved from <http://www.highlandernews.org/11270/humanities-and-stem-make-strange-but-necessary-bedfellows/>.
- Billingsley, J.T., & N.M. Hurd. 2019. Discrimination, mental health and academic performance among underrepresented college students: the role of extracurricular activities at predominantly white institutions. *Social Psychology of Education*, 22, 42–446.
- Broom, Douglas. 2023, May 2. How many careers will be the norm, experts say. World Economic Forum. Retrieved from <https://www.weforum.org/agenda/2023/05/workers-multiple-careers-jobs-skills/>.
- Bureau of Labor Statistics. 2021, August 31. Number of jobs, labor market experience, marital status, and health: Results from a national longitudinal survey.” U.S. Department of Labor. Retrieved from <https://www.bls.gov/news.release/pdf/nlsoy.pdf>.
- Carter, Jarrett. 2016, July 22. Why tech industries are demanding more liberal arts graduates. Education Dive. Retrieved from <http://www.educationdive.com/news/why-tech-industries-are-demanding-more-liberal-arts-graduates/423093/>.
- Costandi, Moheb. 2016. *Neuroplasticity*. Cambridge: Massachusetts Institute of Technology.
- Cronon, William. 1998. “Only connect...”: The goals of a liberal education. *The American Scholar*, 67(4). Retrieved from [http://www.williamcronon.net/writing/Cronon\\_Only\\_Connect.pdf](http://www.williamcronon.net/writing/Cronon_Only_Connect.pdf).
- Dovey, Ceridwen. 2015, June 9. Can reading make you happier? *The New Yorker*. Retrieved from <http://www.newyorker.com/culture/cultural-comment/can-reading-make-you-happie>.
- Dumitrescu, Irina. 2016, May 25. “Frivolous” humanities helped prisoners survive in Communist Romania. Zócalo Public Square. Retrieved from <http://www.zocalopublicsquare.org/2016/05/25/frivolous-humanities-helped-prisoners-survive-communist-romania/ideas/nexus/>.
- Godin, Seth. 2023, June 9. Let’s stop calling them “soft skills” — and call them “real skills” instead. IDEAS.TED.COM. Retrieved from <https://ideas.ted.com/soft-skills-and-real-skills/>.
- Harro, Bobbie. 2000. The cycle of socialization. In M. Adams, W. Blumenfeld, R. Castaneda, H. Hackman, M. Peters, and X. Zuniga (Eds.), *Readings for diversity and social justice* (pp. 16-21). New York: Routledge.
- Jeongeum, Kim, & Michael N. Bastedo. 2017. Athletics, clubs, or music? The influence of college extracurricular activities on job prestige and satisfaction. *Journal of Education and Work*, 30(3), 249-269.

- Keenan, Lisa. 2010. The effect of extracurricular activities on career outcomes: A literature review. *Student Psychology Journal*, 1, 149-162.
- Kintsugi – art of repair. Traditional Kyoto. Retrieved from <https://traditionalkyoto.com/culture/kintsugi/>.
- Lindner, Steven. 2016, April 4. Even in the age of STEM, employers still value liberal arts degrees. *New York Daily News*. Retrieved from <http://www.nydailynews.com/life-style/age-stem-employers-liberal-arts-degrees-article-1.2588435>.
- Micaela. 2013, May 26. How does writing affect your brain? *DailyInfographic*. Retrieved from <http://www.dailyinfographic.com/how-does-writing-affect-your-brain-infographic>.
- Neuroplasticity. *Psychology Today*. Retrieved from <https://www.psychologytoday.com/us/basics/neuroplasticity>.
- Olmstead, Molly. 2023, January 11. This college helped a prominent white nationalist leave the movement. Here's what he thinks about DeSantis' plan for it. *Slate*. Retrieved from <https://slate.com/news-and-politics/2023/01/derek-black-new-college-desantis-plan.html>.
- Ritchie, C. M. 2014. The impact of prerequisite general education courses on the ETS major field test for business (MFT-B). *Journal of Education for Business*, 89(6), 292–299. Retrieved from <https://doi-org.fitchburgstate.idm.oclc.org/10.1080/08832323.2014.889065>.
- Samuelson, Scott. 2014, April 29. Why I teach Plato to plumbers. *The Atlantic*. Retrieved from <http://www.theatlantic.com/education/archive/2014/04/plato-to-plumbers/361373/>
- Saslow, Eli. 2018. *Rising out of hatred: The awakening of a former white nationalist*. New York: Doubleday.
- Saslow, Eli. 2016, October 15. The white flight of Derek Black. *The Washington Post*. Retrieved from [https://www.washingtonpost.com/national/the-white-flight-of-derek-black/2016/10/15/ed5f906a-8f3b-11e6-a6a3-d50061aa9fae\\_story.html](https://www.washingtonpost.com/national/the-white-flight-of-derek-black/2016/10/15/ed5f906a-8f3b-11e6-a6a3-d50061aa9fae_story.html).
- Shea, Andrea. 2014, April 11. How art is helping heal Boston a year after the bombings. *WBUR*. Retrieved from <https://www.wbur.org/news/2014/04/11/art-healing-boston-marathon-bombings>.
- Wardle, Elizabeth. 2009. “Mutt genres” and the goal of FYC: Can we help students write the genres of the university? *College Composition and Communication*, 60(4), 765-89.
- Weinberg, Adam. 2017, December 6. An open letter to new liberal arts college students: What you should know on day #1. *Huffpost*. Retrieved from [https://www.huffpost.com/entry/an-open-letter-to-new-lib\\_b\\_11402470](https://www.huffpost.com/entry/an-open-letter-to-new-lib_b_11402470).
- Winkelmess, Mary-Ann. 2013. Transparency in teaching: Faculty share data and improve students' learning. *Liberal Education*, 99(2). Retrieved from [https://webcourses.ucf.edu/files/79896633/download?download\\_frd=1](https://webcourses.ucf.edu/files/79896633/download?download_frd=1).
- World Economic Forum. 2023, May. *Future of jobs report 2023*. World Economic Forum. Retrieved from [https://www3.weforum.org/docs/WEF\\_Future\\_of\\_Jobs\\_2023.pdf](https://www3.weforum.org/docs/WEF_Future_of_Jobs_2023.pdf).
- Zull, James E. 2002. *The art of changing the brain: Enriching the practice of teaching by exploring the biology of learning*. Sterling, VA: Stylus.



## PART III

# WHAT WILL I LEARN?



# PART 1: THE MISSION

---

## Learning Objectives

By the end of this section, you will be able to:

- communicate the key elements of the mission of a general education curriculum.

During this chapter, we will explore the learning outcomes of general education. “Learning outcomes” define and articulate from the outset what we want to learn about a specific skill or subject. They are essentially what we hope to learn by doing, studying, or thinking in different courses. One course will have a variety of learning outcomes and perhaps multiple ones that reflect distinct parts of the general education curriculum. By looking at each of the general education learning outcomes, we can see evidence for why studying in these different ways is important.

## Fitchburg State University General Education Mission

First, let’s take a look at the mission of an overall curriculum, what we hope a graduate will be and be able to do after graduation.

### Activity 3.1

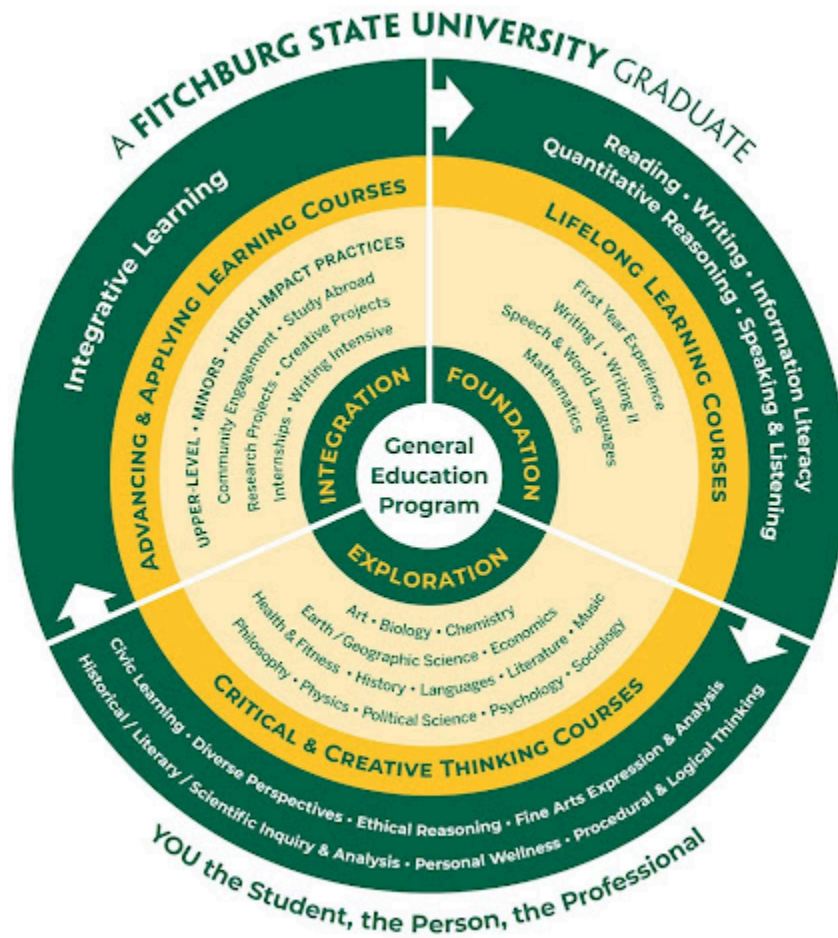
The Fitchburg State University General Education program prepares creative and critical thinkers who integrate and communicate learning from a variety of disciplines and experiences in ways that enhance civic, personal, and professional lives.

- Read the Mission statement carefully.

- Identify key words throughout the Mission and provide your own definitions for each of the terms.

Second, let's take a look at a visual, the Fitchburg State University General Education Program wheel.

## Discussion 3.1



- Based on both the definitions of the titles and on what is included in their respective pieces of the wheel, what differences do you notice among the three sections: Foundation, Exploration, and Integration?
- What do you think is the purpose of each of these types of courses?
  - Lifelong Learning Courses
  - Critical and Creative Thinking Courses
  - Advancing and Applying Learning Courses
- Can you match learning outcomes (in the outer, dark green layer) with the types of courses available (in the inner, light gold layer)?



## Media Attributions

- A FSU Graduate © Fitchburg State University is licensed under a All Rights Reserved license

## PART 2: "GOOD TROUBLE, NECESSARY TROUBLE"

---

### Learning Objectives

By the end of this section, you will be able to:

- identify former United States Representative and civil rights activist John Lewis.
- articulate the concept of "good, necessary trouble."

## Who Was John Lewis?

John Lewis was both a witness to history and a maker of history. He was born on February 21, 1940, in Alabama, into a family of sharecroppers. Lewis first met Dr. Martin Luther King, Jr., when he was eighteen. While in college at the American Baptist Theological Seminary in Nashville, Tennessee, he became involved in the Nashville Student Movement, thus beginning his work in civil rights activism. As an activist, he was involved in the desegregation of lunch counters, in the Freedom Riders, in the Student Nonviolent Coordinating Committee (serving as chairman), in “Bloody Sunday” in Selma, in the Voter Education Project, and in the March on Washington in 1963. In the latter, he was considered one of the “bix six” leaders along with Dr. King. Indeed, he spoke directly before King gave his famous “I Have a Dream” speech – his own speech having been “toned down” by the other organizers.

During his civil rights activities, despite his commitment to the philosophy of nonviolence that he kept throughout his life, Lewis was imprisoned frequently and was injured often. He was the first Freedom Rider to be attacked, and his skull was fractured in Selma during “Bloody Sunday” on March 7, 1965.



John Lewis in 1964 (Photo by Marion S. Trikosko, in public domain)



John Lewis in 2006 as a U.S. Representative (Photo in public domain)

Lewis was first elected to the House of Representatives, as representative of Georgia, in 1986, after which he was reelected 18 times. During his time in Congress, Lewis continued to be an activist, introducing and supporting legislation affecting marginalized groups and attending protests for causes in which he believed. Lewis understood that culture and history were important. For fifteen years, he introduced a bill every year to create a national African American museum in Washington, which eventually led to the opening of the Smithsonian National Museum of African American History and Culture in 2016. Lewis was also the first Congressperson to write a graphic novel, a trilogy titled *March*.

John Lewis died on July 17, 2020, from pancreatic cancer. He was the last living member of the “bix six.”

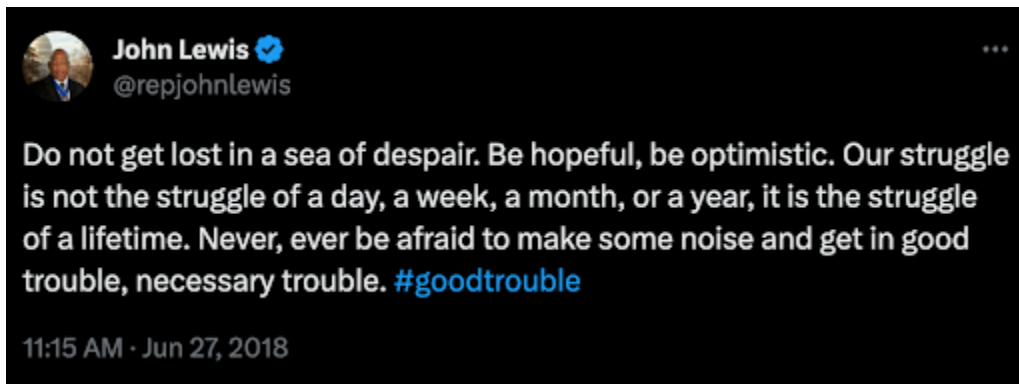
See *John Lewis’ autobiography* *Walking with the Wind: A Memoir of the Movement* for the detailed story of his life.

## What Is “Good, Necessary Trouble”?

On March 1, 2020, John Lewis stood on the Edmund Pettus Bridge in Selma, Alabama, to commemorate “Bloody Sunday,” where, sixty-five years earlier, he had been severely beaten by law enforcement for crossing the bridge with 600 others in peaceful protest against police brutality after the killing of twenty-six-year-old Jimmie Lee Jackson. During his speech on that occasion, he encouraged those listening to “get in good trouble, necessary trouble.” In his book *Across That Bridge: A Vision for Change and the Future of America* that he originally wrote in 2012 and then added an introduction to in 2017, Lewis explores more of what he means by those words:

“Ordinary people with extraordinary vision can redeem the soul of America by getting in what I call good trouble, necessary trouble. Voting and participating in the democratic process are key. The vote is the most powerful nonviolent change agent you have in a democratic society [...] You must also study and learn the lessons of history because humanity has been in this soul-wrenching, existential struggle for a very long time.”

“Trouble,” in Lewis’ definition, is not a synonym for reckless, purposeless, or chaotic behavior. His “trouble,” inspired by the actions of those like Rosa Parks, is action and affecting change, and “good, necessary trouble” is the attempt, the struggle, to contribute to positive change. Thus, voting and education, especially when there are barriers that must be overcome to achieve either, are aspects of “good, necessary trouble.”



Tweet by John Lewis on June 27, 2018 (Included on the basis of fair use)

Affecting positive change often requires struggle. Lewis grew up in a time when he, as a Black man, was not allowed to vote nor was he allowed to have a library card. He became a leader of the Civil Rights Movement that made voting and education rights, among other rights, possible, if not guaranteed, for all. But Lewis knew that no one movement would be enough to “offer all the growth humanity needs to experience,” and that growth requires labor, for “struggle is inevitable because tension motivates the imperative to change.” When he wrote the introduction to the reissue of *Across That Bridge* in 2017, he believed that the “sprouting of activist groups and angry sentiments represents a growing sense of discontent in America and around the world.” He writes:

“Let us appeal to our similarities, to the higher standards of integrity, decency, and the common good, rather than to our differences, be they age, gender, sexual preference, class, or color. If not, the people will put aside the business of their lives and turn their attention to the change they are determined to see, just as the Women’s March, Black Lives Matter, the Equal Justice Initiative, the Coalition of Immokalee Workers, and others so adamantly demonstrate.”

Lewis equated the protests, unrest, activism, and advocacy in the last decade or so to “good, necessary trouble” comparable to the Civil Rights Movement.

See John Lewis’ book *Across that Bridge* or watch the documentary *John Lewis: Good Trouble* for more on his philosophy.

## Media Attributions

- John Lewis © Wikimedia is licensed under a Public Domain license
- John Lewis 2006 © Wikimedia is licensed under a Public Domain license
- @repjohnlewis © John Lewis via. X is licensed under a All Rights Reserved license

## PART 3: FINAL THOUGHT

---

### So Why Are We Talking About “Good, Necessary Trouble”?

Throughout the next three chapters, we will explore several learning outcomes in general education. At the end of each of them, we will look at how that type of learning informs, works with, and/or is integral to examples of “good, necessary trouble” that have emerged or gained prominence in the last decade, with specific focus on the COVID years. As Lewis comments, people come up with “different methods of struggle” against what they believe needs to change. There are two main lenses we will use: participation in “good, necessary trouble” and full comprehension of why individuals and groups engage in those actions.

What does participation take? Of the Civil Rights Movement, Lewis says in *Across that Bridge*:

“Many people believe that because we focused on breaking unjust laws and evil traditions, that our movement was free-form, spontaneous, and unrehearsed. Nothing could be further from the truth. We did not just wake up one day and decide to march on Washington or from Selma to Montgomery. We studied, we strategized, we organized, trained, and prepared to take action. Most of what we accomplished grew out of years, decades, and even centuries of groundwork that was laid before most of us were even born, and those at the center of the struggle studied that history and used its wisdom to develop the strategic actions of the movement.”

To be a part of affecting positive change requires understanding issues facing humanity, their histories, and what is necessary to make something better. It requires skills of various kinds, including an ability to meet and argue against opposition. Indeed, as Lewis continues, it is “through study and preparation that you can increase the power of your work.” General education provides a foundation for that study.

Why participate? There are many reasons why individuals and groups decide to participate in “good, necessary trouble.” It may be that something affects them or those they care about personally. It may be that there are issues that someone feels strongly about. As Lewis says, “Sometimes you have to be willing to turn things upside down to make them right side up.” Maybe they want to be “on the right side of history.” Or maybe they simply want to exercise their civic rights and responsibilities. It takes empathy and knowledge to relate to why others believe what they do and behave the way they do. General education can help develop that empathy and knowledge.

Read through the following chapters for specific examples of general education and “good, necessary trouble.”

## PART 4: REFERENCES AND FURTHER READING

---

Lewis, John, and Brenda Jones. 2012. *Across that bridge: A vision for change and the future of America*. New York: Hachette. E-book.

Lewis, John, and Mike D'Orso. 1998. *Walking with the wind: A memoir of the movement*. New York: Simon & Schuster.





# PART IV

# FOUNDATION



# PART 1: INFORMATION LITERACY

---

## Learning Objectives

By the end of this chapter, you will be able to:

- define Foundation learning outcomes.
- discuss the applicability of foundational skills.

Foundation learning outcomes are intended to help develop the skills that underpin other types of learning and are necessary to succeed personally, academically, and professionally.



*By studying Information Literacy, we can recognize what information is needed and have the ability to locate, evaluate, and use that information effectively and ethically.*

## Perspectives

We wake up in the morning, and, barely conscious, we reach for our cell phones or laptops. With a deep breath, we start scrolling to catch up on what happened with our friends, family, and around the world while we were asleep. From that point through the rest of the day, we are inundated with information. Through social media, the news, talking with people at school and at work, images, quantitative and qualitative data, advertisements, there is a constant stream of information surrounding us.

Some of the information we are bombarded with we are aware of, but some information influences us almost without our realizing it. As a result, it can be difficult to differentiate accurate information, misinformation, disinformation, and, even, propaganda. As Kaiser Moffat in “The Importance of Media Literacy” (2018) notes, “In a perfect world, both sides of every argument or depiction would be presented and we would be able to make informed decisions based on the information we receive in the media; however, most often people create media to influence you in one particular way.” Being able to make up our own minds about information is essential in almost all aspects of our lives. Practicing **Information Literacy** can help us do that.

## Concepts to Consider

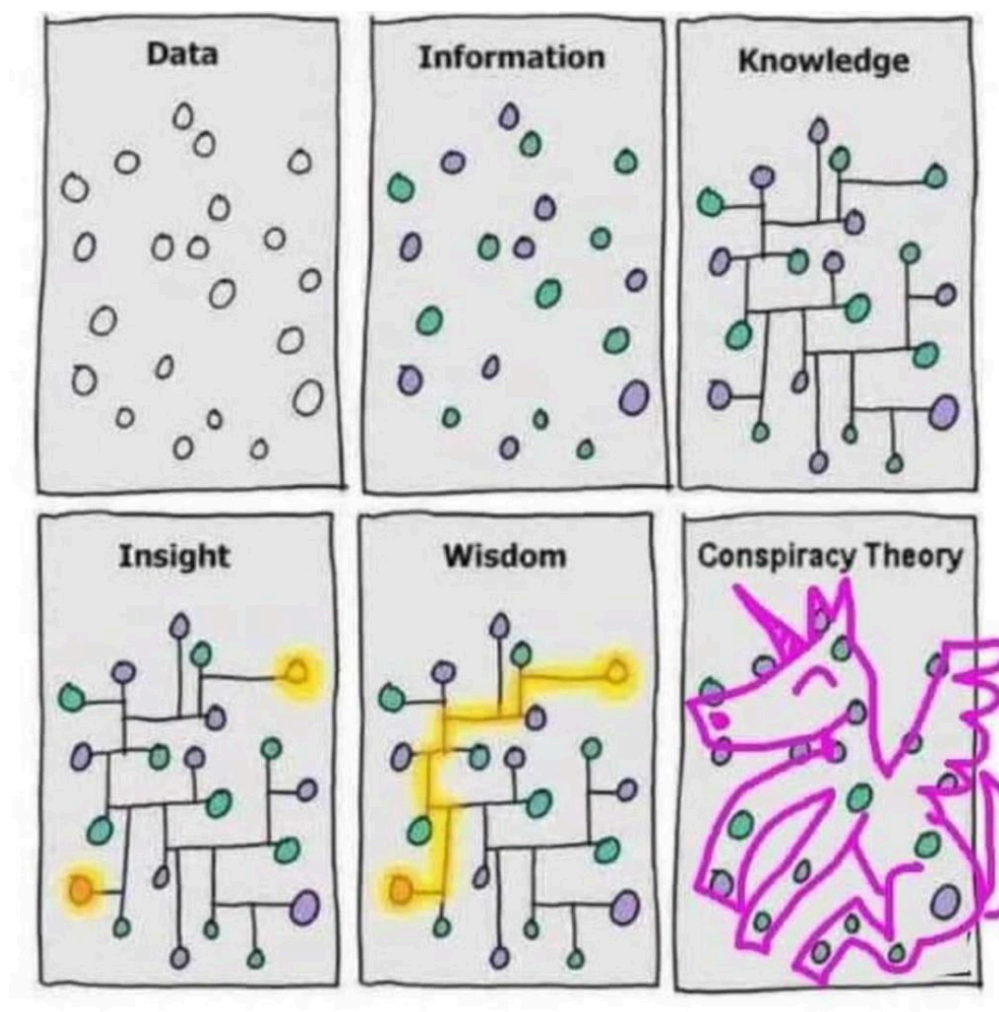
**Information Literacy** encompasses a variety of skills. When we are the ones searching for information, rather than making sense of what is given to us, we need first to understand what it is we need. In classes, the topic or a general subject is presented to us. This is a starting point, but, from there, once we decide on more specific arguments or ideas, we need to find information that will both give us more context and provide us with an understanding of what others know and what they are saying. In many cases, in college, we are encountering new subjects about which we may know very little at the beginning of the process, so we need to gain a working knowledge. Additionally, as individuals, we have only one perspective on a topic; there are many others out there and probably experts who have been thinking about and researching related subjects for a long time. If we are to have an informed opinion, we need to know what they have already thought and discussed.

Recognizing what information we need goes beyond the classroom. We encounter new experiences every day, and, more than likely, we are unfamiliar with a good portion of them. For example, if we are diagnosed with a medical condition for the first time, we likely do not know the symptoms, the treatment options, or what to expect, so it is important to know what information we need in order to address that condition. When we rent or buy an apartment or home, the same is true. We have to ask: what information do I need? Learning effective methods for identifying what we need or want to know means that we can find more and better information.

Once we know what information is needed, the next step is knowing how to locate that information. For small questions, many of us go to Google (or some similar) for answers. If we are cooking and need to know how many cups are in a quart, it is easy enough to turn to Google for that information. But is it the most effective way to locate information on a more complex question? For instance, that medical condition? Or on an issue on a voting ballot with which we have little to no experience? Recognizing that there are multiple ways to find information, that each method has its own pros and cons, and then knowing how to best use them are necessary abilities.

After we have found information, then it is crucial we evaluate it. This step is where we need to begin when information is handed to us – through social media, by an acquaintance, in the news. Not all information is created equal. With the gift that is worldwide internet access comes the responsibility to vet the information

we encounter, for it is all too easy to share incorrect information, whether accidentally or deliberately. As Carol Burnell, et. al., state in *The Word on College Reading and Writing*, “There’s a lot of great material on the Web, but there’s a lot of garbage, too. Being able to tell which is which is a digital-age-important life skill.” The skills to, by examining a piece of information, question and investigate its credibility, originator, purpose, biases, context, logic, and accuracy – some of which can be obvious, but others might be more (deliberately) obscure – can make the difference in our own decision-making and how we affect others. Practicing these skills in a variety of circumstances makes them a strong habit.



An important element in Information Literacy is how we use that information once we have obtained it – will we use it ethically or not? First, will we give credit to the source and not claim, actively or passively, that it is information we have created? Ideas belong to people, and it is theft to misrepresent their labor as our own. As an example, scientists James Watson and Francis Crick have been credited with discovering DNA’s double helix since the 1950’s, but since then we have learned that scientist Rosalind Franklin was equally involved in the discovery and the information she provided was not credited (Cobb and Comfort, 2023). This omission

has stood for decades, not only miscrediting the full facts of the discovery but contributing to the erasure of women in science.

Second, will we represent the information accurately to the best of our ability? We can all make mistakes in the dissemination of information – we are, after all, human – but deliberately misrepresenting information for gain or to mislead someone is an unethical act. Individuals have the right to make their own decisions, and, to do that, they need access to accurate and unmanipulated information. Consciously providing inaccurate information can have adverse effects. Misrepresenting information due to apathy or lack of concern can have the same result, which is why it is necessary to learn the gravity of the ethical use of information and practice it (see Ethical Reasoning in chapter 5.3).

Burnell, et. al., claim that Information Literacy and “[k]nowing what’s going on in the world is, arguably, a citizen’s responsibility.” It is difficult to exercise the rights and privileges of citizenship (see Civic Learning in chapter 5.1), and therefore be a full participant in our various communities, if we do not have the ability – and humility – to recognize what we do not know, find the needed information, evaluate the accuracy of that information, and be committed to ethically using it.

Beyond civic responsibilities, there are simply the everyday benefits of Information Literacy. In addition to those suggested above, Burnell, et. al., comment, “Plus, it feels good to join in a conversation and know the facts, or to be sure we’re sharing a meme, social media post, or news article that’s accurate and trustworthy.” There is satisfaction in “being in the know” and compassion in not sharing harmful or misleading information with the world or even our specific corners of it.

As you read through this book, take note how many of the other general education skills connect to Information Literacy.

**“Information Literacy** refers to a suite of interconnected skills that enable us to find, evaluate, use, and create information. In college, these skills are most often associated with writing a research paper. However, at its core, **Information Literacy** is about how we consume and create information both in and outside of the classroom. Any time you identify a need for information, any moment you open the browser on your phone to look something up on Google, you are using the basic foundation skills of **Information Literacy**. As you strengthen these skills, you will begin to engage in higher order thinking processes to question whether you are using the best search terms or even looking in the right place in order to find the information you need. But **Information Literacy** is more than just the searching skills, it’s about evaluating and determining whether you have found the right information to answer your question. **Information Literacy** is critical for recognizing the value of information and attributing information you have found to its author out of respect for their contribution to

your understanding and helping others find the information you used so they could retrace your steps. The integrated skills that we define as **Information Literacy** are constantly evolving which make it a lifelong learning process. While these skills are crucial for research papers and projects in college, you will find that the more you strengthen your **Information Literacy** the better able you will be to navigate the world beyond your classroom walls.” – **Renée Fratantonio, Librarian and Head of Instruction and Information Literacy, Amelia V. Gallucci-Cirio Library, Fitchburg State University**

“**Information Literacy** in the college setting is commonly discussed as the ability to find, evaluate, analyze, and synthesize source materials. The specific skills vary but can range from conducting literature reviews and replicating experimental procedures to performing close readings and identifying scholarly sources. The ability to evaluate if a news source is reputable, or if a statistic is derived using valid methodology, is a skill whose value extends far beyond the classroom. **Information Literacy** allows us to critically examine news, social media, and other information sources and decide which ones to trust. In a time of shortening news cycles, increasing misinformation, and AI hallucinations, **Information Literacy** provides a framework for being an informed and responsible global citizen. With the rapid developments in generative AI, **Information Literacy** also has growing implications for all workplaces. Recent headlines about lawyers, military personnel, and other experts citing facts that are later revealed to be AI hallucinations highlights the need for everyone to understand where information is coming from and how to use it responsibly. While the specific medium of academic essays and final projects is not applicable to all careers, the **Information Literacy** skills learned through general education courses give everyone the tools to interact responsibly with the increasingly complex, interconnected, and unfiltered information ecosystems around us.” – **Kai Fay, Discovery & Access Strategic Projects Manager, Harvard University**

## Information Literacy and Good, Necessary Trouble

“As healthcare providers, we must acknowledge the problem of misinformation and its potential consequences. We have a duty to be transparent, and to educate ourselves with a critical eye. As we look ahead to the development of further treatments and vaccination for SARS-CoV-2, careful testing and peer-reviewed study will be essential. Physicians are trusted by many, and before sharing our ideas and opinions, we should be informed by the highest quality data available. This responsibility to disseminate reliable information extends to public health officials, social influencers, and civic leaders whose words may reach the ears of many.” – **Taylor Nelson, et.al., “The Danger of Misinformation in the COVID-19 Crisis (2020, p. 512)**

False or fake information is having an effect in almost every aspect of our lives, from the mundane to the momentous. The World Economic Forum (Romeo, 2022) reports that research presented at the National Bureau of Economic Research Summer Institute “estimates that fake reviews cost online shoppers 12 cents for every dollar they spend and increase the chances that they buy a lower-quality product.” A World Health Organization review of infodemics and health misinformation (Borges do Nascimento, et. al., 2022, p. 557) found that “people are feeling mental, social, political and/or economic distress due to misleading and false health-related content on social media during pandemics, health emergencies and humanitarian crises.” Study after study has confirmed the role of mis- and disinformation on negative perceptions of the Black Lives Matter movement (see Wright, Gatlin, Acosta, & Taylor, 2023; Klein, 2022).

Some definitions may be helpful. Misinformation is unintentional dissemination of incorrect information. Disinformation is the deliberate spreading of false information in order to mislead others. Propaganda is extreme forms of disinformation that are highly organized and generally political in nature. While intention is important in distinguishing among these types of fake information, the end result is often the same: the spread of information that is incorrect or flat out malicious, which can have an adverse effect on people’s beliefs, even promoting dangerous behaviors.

While such tactics are not new – we have evidence of disinformation campaigns back to the Romans – fake information can now spread almost instantaneously through digital means, particularly social media outlets: “the lines between fact, entertainment, fabrication and fiction are increasingly blurred, and once disinformation is released, news distribution systems make it impossible to try to curb the virality of the publication” (Rey, 2021). Once something is out there, it lingers, which means it can be re-shared at any time.

Given these circumstances, it becomes an act of “good, necessary trouble” to make it a habit to check the



validity of information, especially before sharing it with others. It takes time, and, sometimes, we just want to click “share” on a humorous meme without thinking, but we have a responsibility to our family, friends, and colleagues – and even further afield – to provide only the best information, especially on topics that have real consequences for others or our society.

## Discussion 4.1

- If you have already taken a course with a primary focus on Information Literacy, think about what you were asked to do and what you learned. If you have not already taken an Information Literacy course, think about the types of courses you could take.
- In what ways did or might the idea(s) or example(s) discussed above apply in such a course?
- What other ideas or examples would you add to the discussion?

## Media Attributions

- Information icon © Creative Fabrica is licensed under a CC0 (Creative Commons Zero) license
- Memo image © Nadeem Farooq Paracha is licensed under a All Rights Reserved license

## PART 2: QUANTITATIVE REASONING

---



*By studying **Quantitative Reasoning**, we can analyze and interpret mathematical information as a means to evaluate arguments and make informed choices.*

### Perspectives

As you begin your day and catch up on those news articles, you click on one about crime in your area. The author includes a graph that breaks down crime by racial group and then proceeds to analyze the data and present conclusions that seem a bit inconsistent. You have two choices: you can accept what the author is claiming or you can take a closer look at the data for yourself and apply **Quantitative Reasoning** skills, making your own conclusions or choosing to find other data to support or contradict it.

### Concepts to Consider

On social media, you will often see memes with something along the lines of: “Another day has passed, and I didn’t use math once.” These may earn a bit of a laugh, but the truth is they are completely inaccurate. When we think of math as more than numbers or “getting a correct answer,” as **Quantitative Reasoning**, we can realize that it is really a set of skills for thinking and communicating that involves, according to the Mathematical Association of America’s report “Quantitative Reasoning for College Graduates: A Complement to the Standards” (originally published in 1994), “drawing inferences from data, interpreting models, estimating results, assessing risks, suggesting alternatives, and even making reasonable, testable guesses.” The report also talks about how **Quantitative Reasoning** complements and reinforces reasoning skills in general, particularly problem-solving (see Procedural and Logical Thinking in chapter 5). We rely on it regularly in our lives, and it enhances our lives to have effective skills in this area. **Quantitative Reasoning**

helps us understand our relationship to the world from a mathematical perspective and be able to process numerical information and data, which comes to us in various forms, from the written to the visual such as graphs and charts. We use it to figure out finances and career moves, even to decide which school system is best for our children. Indeed, even hobbies – for example, as Bennet Attaway, et. al. (2023), “we would expect that fans of tabletop role-playing games should be well-acquainted with basic probability.” Math is everywhere!

A joint statement by the National Council of Supervisors of Mathematics and TODOS: Mathematics for ALL, “Mathematics Education Through the Lens of Social Justice: Acknowledgment, Actions, and Accountability” (2016), states that **Quantitative Reasoning** is “both a mirror and a lens to understand the world around us” and “an analytical tool to understand, critique, and transform the world” (p. 3). They continue that “[m]athematics can be used to problem-solve and model real-world phenomena, sociopolitical situations, community issues, and power relationships.” *Mathematics for Social Justice: Focusing on Quantitative Reasoning and Statistics* by Gizem Karaali and Lily S. Khadjavi (2021) discusses how **Quantitative Reasoning** can be applied to studying and finding solutions to issues such as poverty, gentrification, human rights, income gaps and the minimum wage, crime, racial profiling, nutrition, recycling, and gerrymandering, among others (see Diverse Perspectives in chapter 5).

The Mathematical Association of America’s “A Common Vision for Undergraduate Mathematical Sciences Programs in 2025” (Saxxe and Brady, 2015, p. 6) comments that “[s]ociety benefits from college graduates who are generally educated in higher mathematics, whose lives and social activities are influenced by their understanding of mathematics and, through it, of interesting aspects of history and culture.” The “Quantitative Reasoning for College Graduates” report asserts that **Quantitative Reasoning** skills “enhance the quality of citizens” (see Civic Learning in chapter 5). Much of how our civic systems’ work relies on the analysis of numerical data. The decision of how much funding a certain educational district receives is often reliant upon data concerning demographics, test scores, and tax contributions. Crime laws emerge out of various statistics. Census data drives many choices, including the shape of voting districts. Being an informed citizen means being able to apply **Quantitative Reasoning** skills.

Besides civic life, **Quantitative Reasoning** is an essential part of many majors and careers. “A Common Vision” (p. 5) states, “Courses in the mathematical sciences have been taught as part of a classical education for thousands of years and continue to gain new meaning and relevance. There are now, perhaps more than ever, amazing career opportunities for people with training in mathematically-intensive fields.” They view general education **Quantitative Reasoning** courses as “pathways into many different STEM majors and also as key components in the preparation of scientifically-literate citizens” (p.6). Business, engineering, biology, chemistry, economics, math education, psychological science, sociology, and geography are among some of the most obvious and well-known majors that utilize **Quantitative Reasoning**, but they are also underlying skills in criminal justice, public health, journalism, political science, history, and exercise and sports science, just to name a few.

It is common for some people to believe that they are not “good” at math, and therefore are not a good fit for **Quantitative Reasoning** courses. Due to societal pressures, women and historically marginalized groups

in particular demonstrate this belief at higher rates (“**Quantitative Reasoning** for College Graduates”). Attaway, et. al. (2023), find that “[b]eyond anxiety, adults may have a range of affective responses toward math and quantification, and those who find math difficult may equally react with skepticism or with uncritical trust in numbers.” In fact, **Quantitative Reasoning** skills, like other general education skills, are not innate, but learned, and anyone can improve with practice (see chapter 2.3 on neuroplasticity).

*Special note: check out the Lathisms website dedicated to “showcasing the contributions of Latinx and Hispanic mathematicians” and Spectra, the Association for LGBT Mathematicians.*



Alchemist statue by Spanish artist Jaume Plensa installed at the Massachusetts Institute of Technology represents a thinking person comprised of numbers and math functions (Photo by Nathan Rupert via Attribution-NonCommercial-NoDerivs CC BY-NC-ND 2.0)

“In an increasingly data-driven world, the ability to understand, interpret, and analyze quantitative information is essential for making informed decisions, solving complex problems, and engaging in meaningful research. **Quantitative Reasoning** is broadly applicable to countless disciplines by providing a fundamental framework for comprehending and navigating the vast amount of numerical data that permeates our society. **Quantitative Reasoning**

equips students with the skills needed to evaluate information critically. In an era of information overload, it is essential to be able to assess the reliability and validity of numerical data. By cultivating **Quantitative Reasoning** skills, students become discerning consumers of information, capable of differentiating between sound statistical analyses and misleading claims. They learn to question assumptions, recognize biases, and apply logical reasoning to quantitative arguments. **Quantitative Reasoning** also fosters problem-solving abilities. By engaging with numerical data, students learn to identify patterns, draw connections, and develop hypotheses. They acquire the capacity to break down complex problems into smaller, manageable components and apply mathematical and statistical techniques to arrive at viable solutions. This analytical mindset enables students to tackle challenges in diverse domains, from designing experiments and analyzing survey data to predicting market trends and optimizing business operations. In addition, **Quantitative Reasoning** empowers students to contribute meaningfully to research and innovation. Many scientific disciplines rely on quantitative methodologies to generate new knowledge and drive progress. By developing proficiency in statistical analysis and data interpretation, students gain the tools to participate in cutting-edge research, explore novel ideas, and make original contributions to their respective fields. Moreover, in a world increasingly shaped by technology and artificial intelligence, **Quantitative Reasoning** provides a foundation for understanding algorithms, data modeling, and machine learning principles, enabling students to navigate and leverage these emerging technologies effectively. Lastly, **Quantitative Reasoning** has practical applications beyond academia. In today's data-driven job market, employers seek candidates who possess strong quantitative skills. From finance and marketing to healthcare and engineering, professionals in various industries rely on **Quantitative Reasoning** to inform decision-making, assess risks, and drive innovation. By developing competency in quantitative vocabulary and analyses, students enhance their employability and open doors to a wide array of rewarding career opportunities. By mastering **Quantitative Reasoning**, students become adept at navigating the increasingly data-centric world and are better prepared to make informed decisions, tackle complex challenges, and contribute meaningfully to their chosen fields.” – **Dr. Benjamin Levy, Mathematics, Fitchburg State University**

## Quantitative Reasoning and Good, Necessary Trouble

“Using mathematics as a tool to critically analyze systemic racism has a long history in the United States. In 1900 W.E.B. DuBois predicted, quite prophetically, that ‘the problem of the 20th century is the problem of the color line.’ DuBois was also among the first to invoke mathematics and statistics to analyze issues of racial injustice through his *Data Portraits Visualizing Black America*. The first Black person known to have earned a graduate degree in mathematics in the U.S. was Kelly Miller, who went on to use what he had learned as a graduate student at Johns Hopkins to challenge the flawed statistics of eugenics in Fredrick Hoffman’s 1896 book *Race Traits and Tendencies of the American Negro* and, as a faculty member at Howard University, taught mathematics as a tool for understanding social issues. The first known Black woman to enter graduate school in mathematics was Anna Julia Cooper, who later dedicated her life to the struggle for racial justice. Almost a century later, former mathematics teacher and civil rights leader Bob Moses declared that ‘mathematics literacy is the literacy of the 21st century,’ and that the failure to provide equitable mathematics education for all has helped maintain the color line that still threatens our democracy [...] Historically, mathematics has been used as both an instrument of oppression and an instrument of liberation; mathematics education has reinforced racial hierarchies, but it has also been a gateway for freedom and opportunity. Algorithms and statistics can perpetuate or identify and mitigate racism; mathematical tools can be used to create fairer elections or entrench unjust power dynamics. Mathematics has a role to play in today’s movement for racial justice, and mathematicians can choose how to use their skills to advance justice.” – **Evelyn Lamb, Omayra Ortega, and Robin Wilson, “The Role of Mathematics in Today’s Movement for Racial Justice” (2023, p. 319, 323)**

The way Evelyn Lamb, Omayra Ortega, and Robin Wilson (2023) describe mathematics’ role in racial justice highlights how learning a subject and the skills associated with it – in this case, **Quantitative Reasoning** – can be an act of “good, necessary trouble” unto itself. Just as John Lewis discusses how study and preparation are necessary, foundational skills can be applied to address and support a range of issues.

Racial profiling is the “practice by law enforcement officials of targeting individuals for suspicion of crime based on the individual’s race, ethnicity, religion or national origin,” such as using these characteristics to decide which drivers to stop for minor traffic violations” (“Racial Profiling: Definition,” 2005). It has been the subject of Black Lives Matter protests, in particular. Such police practices have been defended with a number

of arguments. Jack Glaser (2006, p. 396) identifies the arguments that “targeting groups who have a higher criminality rate improves police efficiency and thereby increases public safety” (p. 396) and the more racist belief that there are “real behavioral differences across groups” (p. 395). Glaser, however, used a mathematical simulation to find that “profiling invariably has the effect of increasing differences in incarceration rates between groups” and “popular presumptions about its efficiency are probably overconfident” (p. 413). Camelia Simoiu, Sam Corbett-Davies, and Sharad Goel (2017) developed a statistical approach to detecting discrimination called the threshold test that builds on previous approaches – the benchmark and outcomes tests – and overcomes their limitations. They reached the conclusion that, in “a dataset of 4.5 million motor vehicle stops in North Carolina, [their] threshold test suggests that black and Hispanic motorists face discrimination in search decisions” (p. 1213).

Anecdotal or qualitative data of racial profiling is powerful, particularly when hearing the stories of Black or Latinx people who have been harmed or even killed for supposedly minor police stops. Quantitative data and analyses provide compelling evidence that disproves arguments for the continued use of racial profiling and can be used in court cases and calls for policy changes.

## Discussion 4.2

- If you have already taken a course with a primary focus on Quantitative Reasoning, think about what you were asked to do and what you learned. If you have not already taken a Quantitative Reasoning course, think about the types of courses you could take.
- In what ways did or might the idea(s) or example(s) discussed above apply in such a course?
- What other ideas or examples would you add to the discussion?

## Media Attributions

- Quantitative © Kisha Tracy adapted by Cludinary is licensed under a CC0 (Creative Commons Zero) license
- Alchemist Statue © Nathan Rupert is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license



## PART 3: READING

---



*By studying **Reading**, we can extract and construct meaning through interaction and involvement with written language and other media.*

### Perspectives

“The frequent hearing of my mistress reading the Bible aloud, for she often read aloud when her husband was absent, awakened my curiosity in respect to this *mystery* of reading, and roused in me the desire to learn. Up to this time I had known nothing whatever of this wonderful art, and my ignorance and inexperience of what it could do for me, as well as my confidence in my mistress, emboldened me to ask her to teach me to read. With an unconsciousness and inexperience equal to my own, she readily consented, and in an incredibly short time, by her kind assistance, I had mastered the alphabet and could spell words of three or four letters. My mistress seemed almost as proud of my progress as if I had been her own child, and supposing that her husband would be as well pleased, she made no secret of what she was doing for me [... My master] was astounded beyond measure, and probably for the first time, proceeded to unfold to his wife the true philosophy of the slave system, and the peculiar rules necessary in the nature of the case to be observed in the management of human chattels. Of course he forbade her to give me any further instruction [...T]he determination which he expressed to keep me in ignorance, only rendered me the more resolute to seek intelligence.” –



**Fredrick Douglass, *The life and times of Frederick Douglass, from 1817-1882* (pp. 51-53)**

Janet Duitsman Cornelius in the book *“When I Can Read My Title Clear”: Literacy, Slavery, and Religion in the Antebellum South* (1991) investigates the meaning of literacy, the ability to read, to the enslaved in the United States in the nineteenth century. As Frederick Douglass eloquently expresses, enslaved individuals like himself were typically forbidden to learn to read for it was understood that **Reading** leads to exposure to ideas, which leads to thinking, and thinking leads to a belief in human rights and potential resistance against those who would take those rights away. Nineteenth-century America is not the only time and place that access to **Reading** has been used as a weapon for preserving hierarchies. After all, even the Bible contains stories of the enslaved escaping or rebelling. As Cornelius tells us, many “risked discovery, death, and dismemberment to learn to read and write” (p. 4). The intense desire to read that Douglass conveys, especially after the slaveholder forbade him from doing so, is fundamental to the shaping of his identity. Cornelius comments, “While scholars of literacy recognize literacy’s usefulness as a medium of social control and industrial training, the majority still agree that the basic result of literacy has been and is one of liberation” (p.2). That people have risked their lives to learn to read in the face of oppressors trying to prevent it is something to consider as we think about the significance of **Reading**.



Statue of Queen Eleanor of Aquitaine (c.1122-1204) in Fontevraud Abbey in France; Queen Eleanor was a famous patron of authors of the time (Photo by Kisha G. Tracy)

## Concepts to Consider

**Reading** is more than the act of making out individual words. It is also about the meaning of those words, especially in the deliberate way a writer composes and orders them. Skilled readers “reflect on what they’ve read by interacting with the text and asking questions while they read” and “focus on what is essential in the text, retaining the information they need” (“The Impact of Reading Comprehension on Learning,” 2022).

**Reading** is as much an act of communication as writing is (see Writing in chapter 4.5). The reader is the person with whom the writer is connecting. If the writer has the responsibility to be as clear and effective as possible, then a reader has the responsibility to meet the writer halfway and extract what meaning they can and construct their own.

**Reading** strategies are not restricted to written communication but can also be used with other forms of media, such as images. Each type of writing and media may need a different **Reading** strategy or strategies depending on how complex its composition and purpose – and the goals of the reader in the first place. Academic articles, for example, tend to be very dense, but, at the same time, they generally have a logical structure that can help a reader understand their context and conclusions. By practicing **Reading**, we can improve our understanding of any type of writing or media, regardless of the level of complexity.

There are benefits to learning **Reading** skills beyond being able to participate in literacy and

communication. In compiling research on the benefits of strong **Reading** skills, Elizabeth Escar (2022) found that they contribute to the following:

- development of higher academic self-confidence
- improved writing skills (see Writing in chapter 4.5)
- developing critical thinking and analytical skills (see Critical Thinking in chapter 5)
- promoting mental stimulation and growth
- improved problem-solving skills (see Procedural and Logical Thinking in chapter 5)
- increasing empathy and understanding (see Diverse Perspectives in chapter 5)
- improving memory and recall
- enhancing concentration and focus

This is quite a list! Escar sums up these benefits by stating that “[a]dults who improve their reading comprehension skills [are] more productive at work, communicate effectively, and lead a quality life,” which means **Reading** affects every aspect of our lives. Note also how **Reading** skills interact with other types of general education learning (noted in the parentheses above). Indeed, Escar calls **Reading** the “foundation for all other academic skills.”

“**Reading** is a complex task that involves skills like decoding words, deciphering vocabulary, and making meaning of sentences, paragraphs, and longer selections of text. It also requires us to actively engage with a text to sustain our attention, stamina, and effort so that we can understand what we are reading. What is most critical in **Reading**, however, is our ability to monitor how well we are comprehending while we are **Reading**. Comprehension monitoring requires us to use our metacognitive skills to funnel our attention towards the reading selection, make connections to prior learning, actively notice what we do or don’t understand, and make decisions about how to problem-solve while **Reading** to resolve confusion. While we may do all of these things readily when we are **Reading** something by choice, it can be an entirely different story when we are forced to read assigned materials for our classes, which are typically written at challenging or ‘instructional’ levels, rather than at our independent reading levels. You may have been taught a specific method for approaching texts, like SQ3R (survey, read, recite, review) or PQ4R (preview, question, read, reflect, recite, review). These methods are helpful, but sometimes students get caught up in trying to ‘do the steps,’ instead of focusing on their metacognition and comprehension monitoring. To be honest, the specific process isn’t that important. What’s most important to note is that previewing a text and developing

questions for yourself to answer while you read is common to all metacognitive approaches to reading, as are the processes of **Reading** actively and reviewing what you have read. Highlighting is a passive activity that does not help you to fully engage with, understand, or remember what you have read, and it does not make reviewing text any easier when you return to it. Instead, actively annotating texts with your thoughts, feelings, questions, and connections as you read (or taking notes that contain the same self-relevant cognitions) can help you to focus your efforts on understanding what you are **Reading**, resolving confusion, and identifying where and when you need to ask for clarification or assistance. One way to incorporate immediate support for clarification is to read an assigned text with a peer, sharing your reading strategies and understandings with one another as you read together. Doing so may help you to acquire new reading strategies that you can apply to your readings in other courses, too.” – **Dr. Laura Garofoli, Psychological Science, Fitchburg State University (first published in Fitchburg State University Contact, Summer 2021)**

## Reading and Good, Necessary Trouble

On January 30, 2023, Tom Jefferson, et. al., published “Physical interventions to interrupt or reduce the spread of respiratory viruses” on the Cochrane Database of Systematic Reviews. Almost immediately, this study was used by COVID-deniers and anti-regulationists as evidence that masks do not work in preventing the spread of COVID-19. The lead researcher even interviewed with Maryanne Demasi and stated that there is “still no evidence that masks are effective during a pandemic.” Reading only the news articles about the interview or the review reveal just a part of the story, however. In this case, like many others, it is important to return to the original review and ancillary materials and use reading strategies to parse out exactly what this study did conclude.

First, we need to understand the context of the study and take a look at the authors. Jefferson has a history of questioning the severity of COVID-19 and the need for mitigation measures. On April 9, 2020, he co-wrote an article “COVID-19 deaths compared with ‘Swine Flu’” that essentially relegated the pandemic to a long seasonal outbreak. This could speak to author intent and bias.

Second, we should read the article itself. The authors’ conclusions state, “There is uncertainty about the effects of face masks.” This statement, however, is an example of why we should not only read conclusions of studies, but rather the full article, especially methodologies and limitations in scientific papers. The authors admit, “The high risk of bias in the trials, variation in outcome measurement, and relatively low adherence with the interventions during the studies hampers drawing firm conclusions.” What this implies is that the results

of the study are highly in question based on the inadequacies of the methodologies. “Low adherence” indicates that participants in the tests did not consistently wear the masks that were being studied.

Third, we should read responses to the study to provide further context. Karla Soares-Weiser is the Editor-in-Chief of the Cochrane Library. On March 10, 2023, she published a statement on the Cochrane site about this review. She states in the first sentence that it “would be accurate to say that the review examined whether interventions to promote mask wearing help to slow the spread of respiratory viruses, and that the results were inconclusive.” She continues to apologize that the “wording [in the Plain Language Summary] was open to misinterpretation” and states that the Library takes “responsibility for not making the wording clearer from the outset” (this issue is also a matter of effective Writing – see chapter 4.5).

What can this situation tell us about **Reading**?

- We should read the original work ourselves rather than relying on someone else’s interpretation.
- Context plays an important role in full reading comprehension (see Information Literacy in chapter 4.1).
- Understanding the genre of reading and how it is structured can help with interpretation (for instance, here, recognizing to look for methodologies and limitations in scientific readings and not focusing just on conclusions or the abstract).
- Using skills from other contexts can be beneficial (here, see Scientific Inquiry and Analysis in chapter 5.9).

It also tells us how important **Reading** is in social and health issues, such as the efficacy and necessity of masking for personal and public wellness during the pandemic.

## Discussion 4.3

- If you have already taken a course with a primary focus on Reading, think about what you were asked to do and what you learned. If you have not already taken a Reading course, think about the types of courses you could take.
- In what ways did or might the idea(s) or example(s) discussed above apply in such a course?
- What other ideas or examples would you add to the discussion?

## Media Attributions

- Reading Icon © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license
- Statue of Queen Eleanor of Aquitaine © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution

NonCommercial ShareAlike) license

# PART 4: SPEAKING AND LISTENING

---



*By studying **Speaking and Listening**, we can develop and apply skills for communicating effectively in a spoken or signed world language, in order to disseminate knowledge, reach a broader audience, and foster understanding across people and cultures.*

## Perspectives

What would it have been like to hear the great speakers of the past, those before we had the ability to record, and especially those who spoke in different languages? Most of what we have is their words written down, by themselves or second-hand (which can be an issue when people misrepresent someone's words – see, for instance, the comparison of two versions of Sojourner Truth's "Ain't I a Woman" speech, one written down by an audience member at the Woman's Rights Convention in Akron, Ohio, on May 29, 1851, and one written down a decade later, giving the speech its common title). Sometimes we are fortunate enough to have a description by a contemporary listener. Neely Tucker of the Library of Congress quotes from the 1850 Anti-Slavery Bugle someone who heard Frederick Douglass speak: "His voice is full and rich, and his enunciation remarkably distinct and musical. He speaks in a low conversational tone most of the time, but occasionally his tones roll out full and deep as those of an organ. The effect is electrical." We learn about the timbre of Douglass' voice, his style of speaking conversationally rather than more formally, and his ability to emphasize certain points by changing his tone. We also learn he was "electrical." Skilled speakers have this effect: to thrill, to move, to make an impression on their listeners.





## Concepts to Consider

The ability to speak effectively is invaluable. Speaking is our primary means of communication on a daily basis, whether that is public speaking or simply talking with other human beings. We use speaking skills when we convey our order at the local Dunkin Donuts in the morning and when we ask for clarification on an assignment from an instructor. We use them on job interviews and in advocating for our children's needs at school. And we use them in public speaking circumstances where we are often trying to persuade our audience of something we deeply believe. Mark Rowh (2009) remarks, "Public speaking abilities can be helpful in everything from making a class presentation to advancing your career. In some cases, public speaking is a job requirement." He continues that "public speaking gives you a chance to make a positive impression on others [...and] provides a great vehicle for sharing ideas that matter to you [...as it] offers you a chance to articulate your thoughts and inform or shape the opinions of listeners." We increase our value in the workplace as well as our opportunities for making a difference.

Critical listening is the flip side of effective speaking. As reading and writing work together, so do **Speaking and Listening**. A speaker tries to communicate clearly and persuasively to their audience. The audience then has the responsibility to listen carefully and, like a reader, construct meaning from what is presented. The COVID years gave us a unique challenge in listening. As many of us were mostly communicating on remote devices, how we listened changed. We were confronted with shifts in how we were given information, a potential lack of accompanying body language, and difficulties with concentration. Remote interaction,





Krismelly Grullon Rojas, an alum of Fitchburg State majoring in early childhood education, comments on the benefits of studying another language: “You can communicate more with people, you can communicate across cultures, and you can understand more. The more you learn, the better” (first published in *Contact*, Summer 2021). Pair language learning with studying abroad or visiting a country that speaks that language, immersing in another experience and way of thinking, and the result can be life-changing (see Integrative High Impact Practices in chapter 6.2). It is important to note that, while we often default to thinking of **Speaking and Listening** as exclusively verbal and auditory experiences, signed languages are also a form of **Speaking and Listening**.

Public speaking and learning world languages can invoke some anxiety, especially when perceived as a requirement. Concerning public speaking, Nancy Weil (2009) humorously writes, “Given the choice between picking up a live snake or a live microphone, many of you reading this would reach for the reptile.” Some of this anxiety stems from fear of looking foolish or of rejection. As Benni Ichsanda Rahman Hz (2022, p. 116) notes, “students find it difficult to share their thoughts or ideas to others, because they are afraid that their perspectives will not be accepted.” This anxiety can increase when asked to speak in a new, as yet unfamiliar language. Introverted individuals especially tend to have more anxiety traditionally in these situations: “Introverted people already have a lot of dopamine in their bodies, so when they are required to speak in front of a community, their anxiety and tension levels will increase” (p. 112). But, as Richard Tierney writes on the book jacket of *The Introverted Presenter* (2015) about certain jobs, “Introverts are congenitally programmed to recoil from the prospect of public speaking with fear and loathing, yet making presentations to expert and non-expert audiences is an inescapable requirement for career advancement in any technical field.” It is important we learn how to manage our anxiety to share our voices.

Weil reassures us that we “can learn, improve upon and even come to enjoy” speaking skills. To do so, we have to practice communicating to audiences and find our own styles. What may be effective for one speaker might not work as well for another, due to personality differences, audience types, and experience. Learning about different strategies, especially how skilled speakers of the past and present became so, helps us develop our own way of communicating.

“In November 2020, the Georgetown University Center on Education and the Workforce published a report called *Workplace Basics: The Competencies Employers Want, 2020*. This report focuses on the important skills and abilities needed in the workplace and how they impact people’s earnings. One key finding of the report is that communication has consistently been the most sought-after skill by employers for many years. In fact, in 2019, about 90 percent of workers in various occupations were required to have strong communication skills. The study also reveals that jobs that rely heavily on effective communication tend to offer higher salaries

compared to positions that require other common skills like physical sciences, computer sciences, and business knowledge. This suggests that being able to communicate well is not only essential for success in the workplace but also financially rewarding. **Speaking and Listening** play a vital role in not only the professional world but also in our political, cultural, and economic systems. It affects our personal relationships and contributes to shaping our individual and collective identities in an increasingly diverse and interconnected world. In today's society, the ability to connect, communicate, and collaborate on various issues and ideas has become more crucial than ever before. In this digital age, where partisan rhetoric dominates the news and social media platforms reshape public life, the significance of effective **Speaking and Listening** skills cannot be overstated. Journalism and politics are undergoing significant shifts, and our personal, family, and community interactions face new challenges. Developing and honing these communication skills not only prepares us for the evolving professional and civic landscape but also helps us become active global citizens with deep roots in our local communities.” – **Dr. Collin Syfert, English Studies, Fitchburg State University**

## Speaking and Listening and Good, Necessary Trouble

“Most of my life I was particularly terrified of speaking up, because I had a speech impediment, which made it difficult to pronounce certain letters, sounds, and I felt like I was fine writing on the page, but once I got on stage, I was worried my words might jumble and stumble. What was the point in trying not to mumble these thoughts in my head, if everything’s already been said before? But finally I had a moment of realization, where I thought if I choose not to speak out of fear, then there’s no one that my silence is standing for.” – **Amanda Gorman, TED Talk, “Using your voice is a political choice”**

Having performed at President Joe Biden’s inauguration in 2020 reading her poem “The Hills We Climb,” Amanda Gorman is the youngest inaugural poet in United States history. She also is the first National Youth

Poet Laureate, the first poet to perform at the Super Bowl, and the first poet featured in an Annie Liebovitz photo on the cover of *Vogue*.

In her TED talk, and in her activism work, Gorman makes us think about the connection between **Speaking and Listening** and speaking up. She openly talks about her speech impediment, citing how it made her doubt her ability to speak clearly and whether she had anything necessary to communicate. She also has an auditory processing disorder and is hypersensitive to sound; her mention of “jumbling and mumbling” referencing how she hears words at times. Upon reflection, she chose to perform poems and give speeches about issues such as race, feminism, and marginalization – about people she wanted to stand up for by speaking up.

There are those who have tried to silence Gorman. In May 2023, a complaint was filed at the Bob Graham Education Center in Miami Lakes, Florida, against the book version of Gorman’s inauguration poem, “alleg[ing] that the work is ‘not educational,’ contains indirect hate speech and shouldn’t be in schools” (Chappell, 2023). But, as Gorman reminds us, “the choice to be heard is the most political act of all.”

*Special note: Gorman was one of the college graduates in 2020 who did not get a commencement when she finished her undergraduate degree in sociology at Harvard University. She celebrated by joining actor John Krasinski’s web series Some Good News, chatting with Oprah Winfrey and giving her own commencement address at the end.*

## View: “Using your voice is a political choice”



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://rotel.pressbooks.pub/whydoihavetotakethiscourse/?p=77#oembed-1>

## Discussion 4.4

- If you have already taken a course with a primary focus on **Speaking and Listening**, think about what you were asked to do and what you learned. If you have not already taken a **Speaking and Listening** course, think about the types of courses you could take.
- In what ways did or might the idea(s) or example(s) discussed above apply in such a course?
- What other ideas or examples would you add to the discussion?

## Media Attributions

- Speaking and listening icon © Kisha G. Tracy is licensed under a CC0 (Creative Commons Zero) license
- Frederick Douglass © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license
- Benefits of Language Learning Infographic © Modern Language Association is licensed under a Public Domain license

## PART 5: WRITING

---

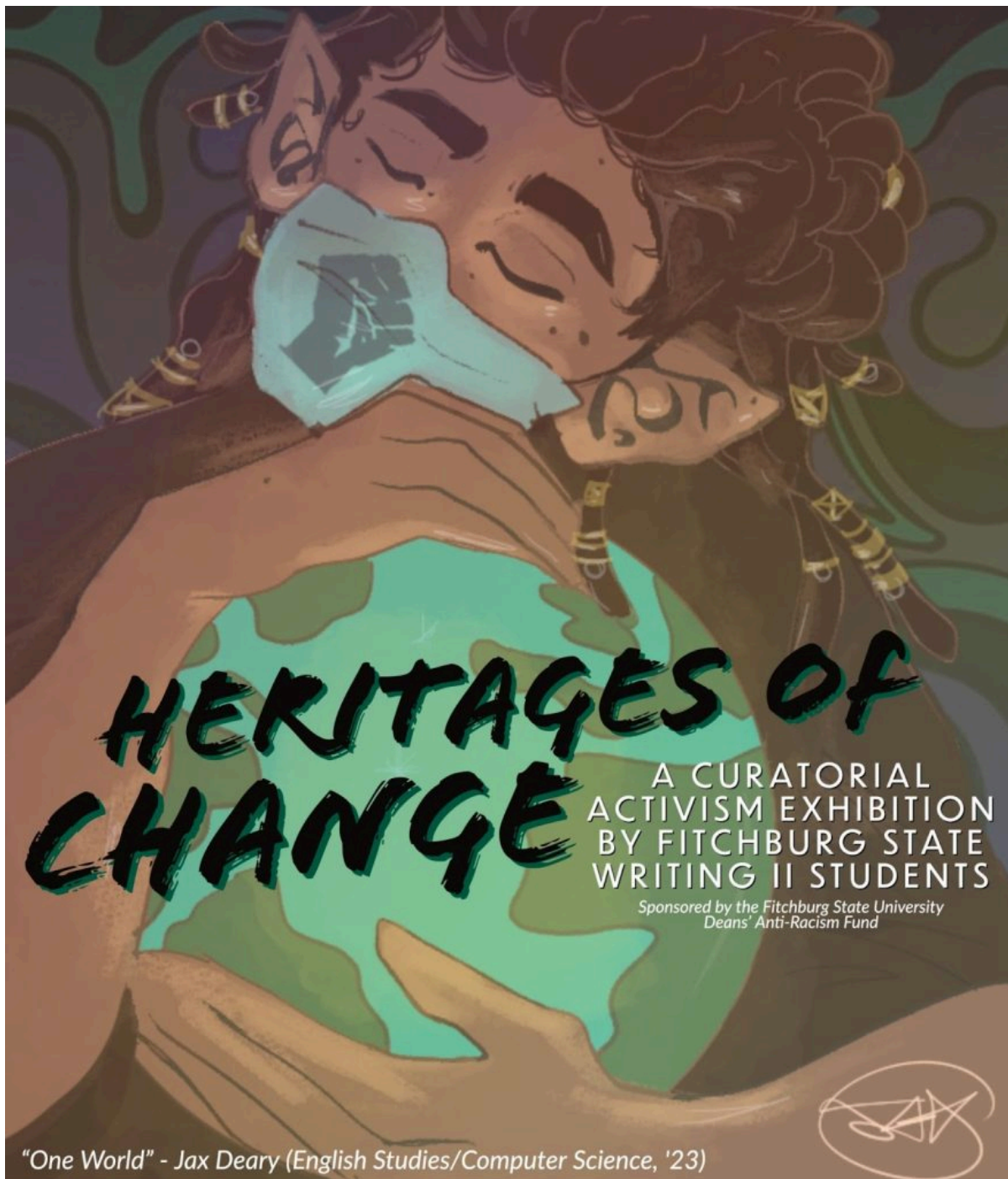


*By studying **Writing**, we can draft original texts to develop and express ideas working with different media including words, data, and images.*

### Perspectives

In 2021, individual sections of first-year writing at Fitchburg State University began focusing their **Writing** on Heritages of Change and exhibition curation. “Heritages of change” is a type of heritage activism that focuses on emphasizing historically marginalized heritage, including that which is currently in the making. The exhibition engages with curatorial activism, which is “the practice of organizing [...] exhibitions with the principle aim of ensuring that certain constituencies [...] are no longer ghettoized or excluded from the master narratives” (Reilly, 2017). The process of contributing to this exhibition reveals that, through **Writing** effectively and passionately, we can help to affect change. We can have an impact on issues about which we strongly believe.





Poster for the exhibition “Heritages of Change” featuring work by Fitchburg State University Writing II students

## Concepts to Consider

The act of **Writing** is one of the ways humans communicate with each other. We use it both to persuade others and, in some ways, persuade ourselves of our ideas as we work them out through written expression. If we stop

to think about it, **Writing** of different kinds is everywhere in our personal and professional lives – in work reports, in social media, in films and literature, in government laws and legal documents – and we are or can be called upon to be the authors of those pieces, needing to understand how each writing context is different and what it requires. Liza McFadden, alum of Fitchburg State University and president of a philanthropist and executive advising company, states, “My belief is that writers are the framers of our world, whether they go into traditional lines of work like working in the news, or whether they write legislative bills, or pen highway billboards” (first published in Fitchburg State University *Contact*, Summer 2021). Being a “framer” implies influence over the world around us.

Randy Meech, another alum of Fitchburg State and director of engineering for maps at Snap, Inc. (which runs Snapchat), comments on **Writing**: “You’re learning the subject matter, but you’re also learning about the clarity of your arguments. I code a little, but most of what I do is reading and writing. In any career path, the higher you go, it’s still a sales job. You’re always communicating, and it’s important you’re describing things coherently and consistently, whether it’s in a design document or an email or making a pitch to an investor” (first published in Fitchburg State University *Contact*, Summer 2021). Meech references the way that the act of **Writing** can help us order our ideas and think through problems or projects. Beyond that, he reiterates the essential element of **Writing** to persuade, which he claims is part of every career.

Beyond these benefits, research has also shown that **Writing** has individual benefits. Zoe Andres (2019) outlines what happens in the brain when we write. She describes the following brain activities during the process of **Writing**, in particular, memoir:

- The frontal lobe is going to be the one to pick which event you choose to describe and allow you to plan how you are going to approach the task.
- [The hippocampus] is what pulls that memory from storage so that you can relive it and write it down.
- [Broca’s area] is what gives you the ability to turn your memory [...] into a written description.
- [Wernicke’s area] is what allows you to read what you have written and understand whether what is on the page matches that image you have in your head.
- Experienced writers showed extra activation in the parts of Broca’s area dedicated to speech, suggesting that experienced writers create their stories through an inner “narration” instead.
- [The motor area] allows you to hold a pen and form the physical letters on the page or, if you are typing, press the correct keys in the right sequence.
- The caudate nucleus is located deep within the brain and is involved with processes that have been extensively practiced [...] during the writing process, this part of the brain is extremely active in experienced writers but remains quiet in the novice writers.

In the article “How Writing Affects Your Brain, According to Science,” Kristina Segarra (2021) summarizes these findings: “during the writing process, many parts of the brain become engaged. The more you write, the more a brain responds by establishing new neural connections within these regions.” As a result, she talks



about how **Writing** “develop[s] organizational skills” and “boost[s...] reasoning and problem-solving skills” (see Procedural and Logical Thinking in chapter 5.8). When we write, the brain is extremely active, which essentially works like exercise in the rest of the body. By activating all of these parts of the brain regularly, we are building and strengthening its capabilities. Further, **Writing** practice “builds critical thinking, which empowers people to take charge of [their] own minds’ so they ‘can take charge of [their] own lives . . . and improve them, bringing them under [their] self command and direction’ (Foundation for Critical Thinking, 2020, para. 12). **Writing** is a way of coming to know and understand the self and the changing world, enabling individuals to make decisions that benefit themselves, others, and society at large” (“Writing to Think”) (see Critical Thinking in chapter 5.10). **Writing** is more than ordering words on a page. It is a way to interact with and make sense of the world.

Like Quantitative Reasoning, individuals sometimes express apprehension about **Writing**, making statements like, “I am bad at writing.” The good news is that **Writing**, like the other general education skills, is about practice (see chapter 2.3 on neuroplasticity). How do athletes get better at their sport? Practice. How do musicians learn to play so well? Practice. How do “god gamers” earn their reputation? Practice. The same is true for skills like **Writing**. No matter the skill level we begin on, the more we write the better we write, and the stronger our brain gets.

“At the start of each semester, when we talk about past experiences with academic **Writing**, students often express frustration with shifting standards of what ‘good’ **Writing** looks like, as if every teacher has their own definition and students have to completely relearn how to write each year, with few to no rules continuing between classes. These observations, and the related frustrations, are real and reasonable, but the solution isn’t the obvious one: teachers should just come together and decide what counts as good **Writing** and only teach that. The real solution is much more complicated because **Writing** is much more complicated. All communication, whether it is written, spoken, or in another form, relies on context to be effective, and context changes: a lot. Successful writers have internalized that reality almost without realizing it, adapting their **Writing** to different audiences and situations without much deliberate thought. For the rest of us, though, that process is not as intuitive, and so must be learned, over and over again. The good news is that nearly everyone has already figured out a system for identifying communication context and adapting to it. Think about it: do you have a ‘customer service voice’ that you use in your job? What about the differences in how you speak to family members at home and to your friends online? It’s not that far of a leap from leaving out the emojis in a job application to using a different structure for a history essay and a chemistry lab

report. You already know how to do this...now is the time to practice and get better at it.” – **Dr. Heather Urbanski, English Studies, Fitchburg State University**

## Writing and Good, Necessary Trouble

The genre of letter writing has a long history. Some believe they are one of the oldest forms of writing. Ida Tomshinsky (2013, p. 112) claims, “According to the testimony of ancient historian Hellanicus, the first recorded handwritten letter, epistle, was written by Persian Queen Atossa, the daughter of Syrus and mother of Xerxes, around 500 BC.” The New Testament contains whole sections dedicated to letters from the Apostles. The Smithsonian National Postal Museum “Letter Writing in America” traces the value of the letter in the United States, a country that covers thousands of miles and has historically often had families and acquaintances living very far apart with limited means of communication.

Letter writing also has a long history in advocacy. As a style of writing that expresses personal feelings and anecdotes in addition to research and facts, where necessary, and addresses those to specific audiences, letters have the benefit of being more difficult for a recipient to ignore than other types of writing. They can convey strong-held ideas, particularly when they are in opposition to those that have been demonstrated by the addressee. Three particular kinds of letters are common as tools of advocacy and persuasion.

### Letters to the Editor

Letters to the editor are communications with regularly-printed publications, such as newspapers or magazines, print or digital. The University of Kansas Center for Community Health and Development *Community Tool Box*, a collection of resources for taking action on community issues, has an entire section dedicated to letters to the editor. They describe them as “generally found in the first section of the newspaper, or towards the beginning of a magazine, or in the editorial page. They can take a position for or against an issue, or simply inform, or both. They can convince readers by using emotions, or facts, or emotions and facts combined.” These letters can be selected for publication, yet they are still of a personal style, inviting the reader to participate in a dialogue.

## Letters to Elected Officials

The *Community Tool Box* also contains a section about writing letters to elected officials. They advise: “A well-written personal letter may be the most effective way to communicate with elected officials. They want to know how their constituents feel about issues, especially when those issues involve decisions made by them. Your elected officials usually know what advocacy groups are saying about an issue, but they may not understand how a particular decision affects you. A well-written letter describing your experiences, observations, and opinions may help persuade an official in your favor.” Taking the time to write to an elected official can have weight. If they are interested in hearing from the people they represent, then making sure they are aware of how their decisions affect those people is important. Letters to elected officials are also a way to practice citizenship (see Civic Learning in chapter 5.1).

## Open Letters

Open letters are generally addressed to a specific person or persons but are posted publicly for everyone to be able to read. They have been a tactic used by protest movements from the late eighteenth century onwards, especially with the rise of newspapers (Geoghegan & Kelly, 2011). Avery Blank (2016) offers this advice: “While the thoughts of open letters are shared with more than one person, the intimacy and personal nature of a letter should not be lost. Share your thoughts and opinions on what you are passionate about and what matters to you. Write about the civic, social or political issues that inspire you, anger you, excite you, or worry you.” Open letters are not intended to be reports or essays; they are still letters and should reflect that style.

Writing effective letters of various kinds, as with any genre, is a matter of studying the format and practice.

## Discussion 4.5

- If you have already taken a course with a primary focus on **Writing**, think about what you were asked to do and what you learned. If you have not already taken a **Writing** course, think about the types of courses you could take.
- In what ways did or might the idea(s) or example(s) discussed above apply in such a course?
- What other ideas or examples would you add to the discussion?

## Media Attributions

- Writing Icon © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license
- Poster for the exhibition Heritages of Change © Jax Deary is licensed under a CC BY-NC-SA

(Attribution NonCommercial ShareAlike) license

## PART 6: FINAL THOUGHT

---

To have something to build on, we have to have a foundation. The skills discussed in this chapter are foundational for so much of our lives, personal and professional. As a student, we have the opportunity to practice, honing these skills and developing habits so that we have a toolbox at our fingertips, ready to apply to any circumstance as it arises.

# PART 7: REFERENCES AND FURTHER READING

---

- Andres, Zoe. 2019, April 22. Psychologically speaking: your brain on writing. *University of Waterloo Writing and Communication Centre*. Retrieved from <https://uwaterloo.ca/writing-and-communication-centre/blog/psychologically-speaking-your-brain-writing>.
- Attaway, Bennet, John Voiklis, Jena Barchas-Lichtenstein, Eric Hochberg, & Jim Hammerman. 2023. Exploring the relationship between quantitative reasoning skills and news habits. *Numeracy*, 16(1). Retrieved from <https://digitalcommons.usf.edu/numeracy/vol16/iss1/art3/>.
- Blank, Avery. 2016, July 21. Jennifer Aniston, tech leaders use open letters to advocate for themselves and their brands: How you can, too. *Forbes*. Retrieved from <https://www.forbes.com/sites/averyblank/2016/07/21/aniston-tech-leaders-use-open-letters-to-advocate-for-themselves-and-their-brand-how-you-can-too/>.
- Borges do Nascimento, Israel Junior, et. al. 2022. Infodemics and health misinformation: a systematic review of reviews. *Bulletin of the World Health Organization*, 100(9), pp. 544-561. Retrieved from <https://doi.org/10.2471%2FBLT.21.287654>.
- Burnell, Carol, Jaime Wood, Monique Babin, Susan Pesznecker, & Nicole Rosevear. *The word on college reading and writing*. Open Oregon Educational Resources. Retrieved from <https://openoregon.pressbooks.pub/wrd/>.
- Chappell, Bill. 2023, May 25. 1 complaint led a Florida school to restrict access to Amanda Gorman's famous poem. *NPR*. Retrieved from <https://www.npr.org/2023/05/24/1177877340/amanda-gorman-poem-restricted-miami-school>.
- Cobb, Matthew, & Nathaniel Comfort. 2023, April 25. What Rosalind Franklin truly contributed to the discovery of DNA's structure. *Nature*. Retrieved from <https://www.nature.com/articles/d41586-023-01313-5>.
- Cornelius, Janet Duitsman. 1991. *"When I can read my title clear": literacy, slavery, and religion in the antebellum South*. University of South Carolina Press.
- Demasi, Maryanne. 2023, February 5. EXCLUSIVE: Lead author of new Cochrane review speaks out. *Maryanne Demasi, reports*. Retrieved from <https://maryannedemasi.substack.com/p/exclusive-lead-author-of-new-cochrane>.
- Douglass, Frederick. 1882. *The life and times of Frederick Douglass, from 1817-1882*. Christian Age Office.
- Escar, Elizabeth. 2022, August 16. What are the benefits of reading comprehension? *Iris*. Retrieved from <https://irisreading.com/what-are-the-benefits-of-reading-comprehension/>.
- Geoghegan, Tom, & Jon Kelly. 2011, March 23. Open letters: Why are they on the increase? *BBC*. Retrieved from <https://www.bbc.com/news/magazine-12809682>.

- Glaser, Jack. 2006. The efficacy and effect of racial profiling: A mathematical simulation approach. *Journal of Policy Analysis and Management*, 25(2), pp. 395–416. Retrieved from [https://gspp.berkeley.edu/assets/uploads/research/pdf/Glaser\\_JPAM2006.pdf](https://gspp.berkeley.edu/assets/uploads/research/pdf/Glaser_JPAM2006.pdf).
- The impact of reading comprehension on learning. 2022. *Eastern Washington University*. Retrieved from <https://online.ewu.edu/degrees/education/med/reading-literacy/reading-comprehension-on-learning/>.
- Jefferson, Tom, & Carl Heneghan. 2023, April 9. COVID-19 deaths compared with “Swine Flu.” *The Centre for Evidence-Based Medicine*. Retrieved from <https://www.cebm.net/covid-19/covid-19-deaths-compared-with-swine-flu/>.
- Jefferson, Tom, et. al. 2023. Physical interventions to interrupt or reduce the spread of respiratory viruses. *Cochrane Database of Systematic Reviews* 1. Retrieved from <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD006207.pub6>.
- Karaali, Gizem, & Lily S. Khadjavi. 2021. *Mathematics for Social Justice: Focusing on Quantitative Reasoning and Statistics*. MAA Press.
- Klein, Colin, Ritsaart Reimann, Ignacio Ojea Quintana. et al. 2022. Attention and counter-framing in the Black Lives Matter movement on Twitter. *Humanities and Social Science Communications*, 9(367). Retrieved from <https://doi.org/10.1057/s41599-022-01384-1>.
- Lamb, Evelyn, Omayra Ortega, & Robin Wilson. 2023, February. The role of mathematics in today’s movement for racial justice. *Notices of the American Mathematical Society*, 70(2), pp. 319-324. Retrieved from <https://www.ams.org/notices/202302/rnoti-p319.pdf>.
- Letter writing in America. *Smithsonian National Postal Museum*. Retrieved from <https://postalmuseum.si.edu/research-articles/letter-writing-in-america>.
- Moffat, Kaiser. 2018, November 6. The Importance of media literacy.” *Young Leaders of the Americas Initiative*, U.S. Department of State. Retrieved from <https://ylai.state.gov/the-importance-of-media-literacy/>.
- Mathematics education through the lens of social justice: Acknowledgment, actions, and accountability. 2016. *National Council of Supervisors of Mathematics and TODOS: Mathematics for ALL*. Retrieved from [https://www.todos-math.org/assets/docs2016/2016Enews/3.pospaper16\\_wtodos\\_8pp.pdf](https://www.todos-math.org/assets/docs2016/2016Enews/3.pospaper16_wtodos_8pp.pdf).
- Quantitative reasoning for college graduates: A complement to the standards. 1994. *Mathematical Association of America*. Retrieved from <https://www.maa.org/programs/faculty-and-departments/curriculum-department-guidelines-recommendations/quantitative-literacy/quantitative-reasoning-college-graduates>.
- Racial profiling: Definition. 2005, November 23. *American Civil Liberties Union*. Retrieved from <https://www.aclu.org/documents/racial-profiling-definition>.
- Rahman Hz, Benni Ichsanda. 2022. Exploring students’ public speaking anxiety: Introvert vs extrovert. *Journal of English Language Studies (Online)*, 7(1), 107-120.
- Reilly, Maura. 2017, November 7. What is curatorial activism? *ARTnews*. Retrieved from <https://www.artnews.com/art-news/news/what-is-curatorial-activism-9271/>.
- Rey, Tania. 2021, July 24. The rise of disinformation and ‘fake news’ in times of crisis. *Atalayar*. Retrieved

- from <https://www.atalayar.com/en/articulo/society/rise-disinformation-and-fake-news-times-crisis/20210724145830152229.html>.
- Rowh, Mark. 2009. Speak out! Everyone can benefit from public speaking skills. Make your voice heard. *Career World*, 38(3). Retrieved from [https://link-gale-com.fitchburgstate.idm.oclc.org/apps/doc/A212105443/AONE?u=mclin\\_c\\_fitchcol&sid=bookmark-AONE&xid=d9ff8ad9](https://link-gale-com.fitchburgstate.idm.oclc.org/apps/doc/A212105443/AONE?u=mclin_c_fitchcol&sid=bookmark-AONE&xid=d9ff8ad9).
- Saxxe, Karen, & Linda Brady. 2015. A common vision for undergraduate mathematical sciences programs in 2025. *Mathematical Association of America*. Retrieved from <https://www.maa.org/sites/default/files/pdf/CommonVisionFinal.pdf>.
- Segarra, Kristina. 2021, September 19. How writing affects your brain, according to science. *Medium*. Retrieved from <https://writingcooperative.com/how-writing-affects-your-brain-according-to-science-e0259f006fa>.
- Simoiu, Camelia, Sam Corbett-Davies, & Sharad Goel. 2017. The problem of infra-marginality in outcome tests for discrimination. *The Annals of Applied Statistics*, 11(3), pp. 1193–1216. Retrieved from <https://5sharad.com/papers/threshold-test.pdf>.
- Soares-Weiser, Karla. 2023, March 10. Statement on ‘Physical interventions to interrupt or reduce the spread of respiratory viruses’ review. *Cochrane Library*. Retrieved from <https://www.cochrane.org/news/statement-physical-interventions-interrupt-or-reduce-spread-respiratory-viruses-review>.
- Nelson, Taylor, Nicole Kagan, Claire Critchlow, Alan Hillard, & Albert Hsu. The danger of misinformation in the COVID-19 crisis. *Missouri Medicine*, 117(6), pp. 510-512. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/33311767/>.
- Romeo, John. 2022, October 11. Disinformation is a growing crisis. Governments, business and individuals can help stem the tide. *World Economic Forum*. Retrieved from <https://www.weforum.org/agenda/2022/10/how-to-address-disinformation/>.
- TED. 2021, January 20. Amanda Gorman: Using your voice is a political choice. *You Tube*. Retrieved from <https://youtu.be/zaZBgqfEa1E>.
- Tierney, Richard. 2015. *The introverted presenter*. Apress.
- Tomshinsky, Ida. 2013. The art of writing handwriting letters and notes. *International Journal of Business, Humanities, and Technology*, 3 (8), pp. 109-116. Retrieved from [http://www.ijbhtnet.com/journals/Vol\\_3\\_No\\_8\\_December\\_2013/12.pdf](http://www.ijbhtnet.com/journals/Vol_3_No_8_December_2013/12.pdf).
- Tucker, Neely. 2020, June 15. Hearing Frederick Douglass: His speech on John Brown. *Timeless: Stories from the Library of Congress*. Retrieved from <https://blogs.loc.gov/loc/2020/06/hearing-frederick-douglass-his-speech-on-john-brown>.
- University of Kansas Center for Community Health and Development. Section 2 Writing letters to the editor. *Community Tool Box*. Retrieved from <https://ctb.ku.edu/en/table-of-contents/advocacy/direct-action/letters-to-editor/main>.
- Weil, Nancy. 2009. Public speaking: It’s not about you: How audience-centered speaking can help you conquer stage fright. *Cio*, 22(10). Retrieved from <https://fitchburgstate.idm.oclc.org/>



login?url=https://www.proquest.com/trade-journals/public-speaking-not-about-you/docview/205942078/se-2.

Wright, Chrysalis, Kwame Gatlin, Damaris Acosta, & Christopher Taylor. 2023. Portrayals of the Black Lives Matter movement in hard and fake news and consumer attitudes toward African Americans. *Howard Journal of Communications*, 34(1), pp. 19-41. Retrieved from <https://doi.org/10.1080/10646175.2022.2065458>.

Writing to think: Critical thinking and the writing process. *Purdue Global Academic Success and Writing Resource Center and Blog*. Retrieved from <https://purdueglobalwriting.center/writing-to-think/>.



# PART V

# EXPLORATION



# PART 1: CIVIC LEARNING

---

## Learning Objectives

By the end of this chapter, you will be able to:

- define Exploration learning outcomes.
- discuss the usefulness of different viewpoints and a variety of methods of thinking.

Exploration courses allow us to experience topics from different viewpoints and use a variety of methods to think about our world – past, present, and future – as well as build upon the skills developed in the Foundation. These courses can expose us to a number of artistic, civic, diverse, ethical, historical, literary, and scientific perspectives while expanding our approaches to thinking and wellness.



*By studying **Civic Learning**, we can articulate the values associated with democratic and public institutions in the context of local, national, and global perspectives, and begin to develop practical skills and knowledge required for engaged citizenship to address issues such as social justice and inequality.*

## Perspectives

An essay attached to the Library of Congress collection “Women of Protest: Photographs from the Records of the National Woman’s Party” concerning the tactics and techniques used by women in the suffrage movement

in the early twentieth century outlines what some of the protestors of the time were willing to endure in their quest to receive the right to vote. They used methods such as lobbying, parades, publicity stunts, picketing, and demonstrations. The latter two saw several of them arrested, including Lucy Burns, Dora Lewis, and Alice Paul. The essay describes that, in addition to the generally horrible conditions in U.S. prisons at the time, imprisoned suffragists suffered “compromised health and bodily harm,” due in some cases to verbal abuse, solitary confinement, and hunger strikes that resulted in the prisoners being force-fed (p.10). The force-feeding “was by all accounts a torturous experience for the women, one that they withstood repeatedly” (pp. 10-11). These women endured horrendous situations and physical and emotional torture. All to demand the right to vote. In their pursuit of that right, as many of the women had led up to that point comfortable lives ignorant of the extent of poverty, racial issues, and other hardships, they discovered circumstances that they wanted to help change – through the vote and through further activism.

## Concepts to Consider

What this story reveals to us is the value that people have placed on the right to vote and the lengths to which they were willing to go to secure that right for themselves. It should give us pause as we consider why **Civic Learning** is a part of the general education curriculum. As we discussed in Chapter 1, the idea of a liberal education stems from the concept of free citizens needing to understand how to exercise their rights and responsibilities. That aspect is still inherent in the general education of today with research showing that many of the skills associated with such a curriculum are useful in **Civic Learning**. To participate in democratic activities, including voting and other forms of decision-making, we have to know how those processes work and what our – and others’ – rights and responsibilities are. Without such knowledge, inexperience or apathy makes it difficult to know when those rights and responsibilities are being encroached upon and then what we can do to address it.

The U.S. Department of Education 2012 “Advancing Civic Learning and Engagement in Democracy” report, which draws on the American Association of Colleges & Universities’ National Task Force on Civic Learning and Democratic Engagement report “A Crucible Moment: College Learning & Democracy’s Future,” states, “Education in America must prepare all students for informed participation in civic and democratic life,” noting the role of **Civic Learning** in student achievement and in job success. The Massachusetts Department of Higher Education documents that Massachusetts is the first state to make **Civic Learning** a goal for all public higher education students. The policy to create this goal in May 2014 acknowledges that the **Civic Learning** skills “needed by citizens are often the same as those needed in the 21st century workplace, including: building consensus; solving problems in groups; and knowledge of other cultures and countries as economies grow more global.” They also indicate that these skills should be complementary with other general education coursework and majors, noting that we all will be a part of civic life no matter our “academic discipline or eventual field of employment.”

Sylvia Hurtado (2019, p. 98) identifies six dimensions of **Civic Learning** (note the other general education skills with which each dimension connects):

- **Self** – developing “one’s own identity, voice, reflective practice, and sense of purpose”
- **Communities and cultures** – developing “empathy and appreciation for diverse individuals and communities, the capacity to transcend one’s own embedded worldviews, and the recognition of inequalities that impact underserved communities” (see *Diverse Perspectives* in chapter 5.2 and *Historical Inquiry and Analysis* in 5.5)
- **Knowledge** – developing an understanding of “knowledge as socially constructed; information literacy in this era of ‘alternative facts’ and misinformation, including the capacity to understand scientific evidence and critically evaluate sources of authority; and deep knowledge of key democratic principles, processes, and debates that inform one’s major or area of study” (see *Information Literacy* in chapter 4.1 and *Scientific Inquiry and Analysis* in 5.9)
- **Skills** – includes “conflict resolution, deliberation, and community-building, as well as the ability to work collaboratively and communicate with diverse groups” (see *Speaking and Listening* in chapter 4.4 and *Writing* in 4.5)
- **Values** – includes “ethical and moral reasoning and democratic aspirations such as equality, liberty, justice, and interest in sustaining the arts and sciences for the public good” (see *Ethical Reasoning* in chapter 5.3 and *Fine Arts Expression and Analysis* in 5.4)
- **Public action** – includes “participation in democratic processes and structures, multiple forms of action and risk-taking to promote social progress, and ally behaviors such as working alongside communities in need to solve important problems” (see *Integrative Learning* in chapter 6.1 and *Integrative High Impact Practices* in chapter 6.2)

While **Civic Learning** does include voting and understanding how civic institutions work, it also includes “capacities and habits of mind that include knowledge, skills, and values to counter misinformation, negotiate conflict, and identify threats to a pluralistic democracy” as well as the “skills and dispositions for a diverse and changing world” (Hurtado, p. 95). Given the interconnectedness of the world, especially through the internet, increasingly, knowledge of not only American civic processes but those of other countries and cultures is essential.

**Civic Learning** can encourage future action by promoting “civic commitment (i.e., plans to engage in civic activities in the future)” and “efficacy (i.e., the belief that one’s civic actions can lead to change)” (Ballard, Cohen,& Littenberg-Tobias, 2016). These plans and beliefs can be enacted through Civic or Community Engagement (see *Integrative High Impact Practices* in chapter 6.2).

## View: “Why is Civic Education important?”



*One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://rotel.pressbooks.pub/whydoihavetotakethiscourse/?p=85#oembed-1>*



Bald eagle wearing a COVID mask at a private home in Ayer, Massachusetts (Photo by Kisha G. Tracy)

“**Civic Learning** helps us understand our roles and responsibilities as active participants in society. It provides opportunities to explore and understand the foundations of democracy and self-government, to develop a sense of social responsibility and empathy towards others, and it helps us appreciate the significance of democratic institutions and the need to protect and uphold democratic ideals. Given our current political climate, this is crucial. It promotes critical thinking skills by encouraging students to examine complex social issues from multiple



perspectives. It teaches students how to gather and evaluate information, analyze evidence, and make informed decisions. These skills are crucial for addressing societal challenges and navigating a rapidly changing world. While many of the careers of the future may not yet exist, the skills needed for good citizenship will prepare students for whatever the future holds. **Civic Learning** helps students develop a sense of social responsibility and empathy towards others. It exposes them to diverse perspectives, experiences, and social issues, fostering a deeper understanding of the complexities and interconnectedness of the world. By engaging with real-world problems, students can be motivated to make positive contributions to their communities.” – **Dr. Paul Weizer, Economics, History, and Political Science, Fitchburg State University**

## Civic Learning and Good, Necessary Trouble

In 1978, the Supreme Court ruled in the *Regents of the University of California v. Bakke* case, extending affirmative action, which grants limited consideration to historically marginalized groups, to higher education by allowing race to be one of several factors in college admission policy and finding that affirmative action was permissible under the Constitution and Title VI of the Civil Rights Act of 1964, which makes it illegal to discriminate based on race, color, religion, sex, and national origin. *Regents of the University of California v. Bakke* was then further upheld in 2003 in *Grutter v. Bollinger*, ruling that affirmative action in college admissions, if they took into consideration other factors besides race, was not against the Fourteenth Amendment and the Equal Protection Clause, which guarantees individuals be treated equally under the law.

Affirmative action in college admissions was an attempt to level the playing field and redress disadvantages created by segregation. Eight states have already banned affirmative action due to debates if affirmative action works, but, according to a BestColleges report (Nam, 2023), using data from the Civil Rights Project, the “average Black-to-white student graduation rate gap at the top dozen public universities *without* affirmative action is 10.1%, while the average gap at the top dozen public universities *with* affirmative action is 6%.” Meredith Kolodner of *The Hechinger Report* (2023) states that “[e]ight of the 10 flagships [the most well-known state-funded university in a state] with the biggest gaps for Black students do not consider race in admissions.” This data suggests that affirmative action yields positive results.

In 2023, the Supreme Court heard *Students for Fair Admissions v. President and Fellows of Harvard* and *Students for Fair Admissions v. University of North Carolina*. The Harvard case claimed that Asian-American applicants were disproportionately affected by the university’s affirmative action policies with the number of those admitted remaining flat despite an increase in applications. SCOTUS ruled, in a 6-2 vote

(with one recusal) in the Harvard case and 6-3 in the North Carolina case, in favor of the plaintiffs. This decision essentially overturns *Grutter v. Bollinger*. Fabiola Cineas and Ian Millhiser (2023) lay out the stakes of these decisions: “The plaintiffs advocated a ‘colorblind’ theory of the Constitution that would prohibit the government from considering race in virtually any context, including efforts to voluntarily integrate racially segregated grade schools and other institutions.” There is debate of what exactly this means in terms of college admissions and how applicants can express adversities as a result of racial discrimination or related issues. Amy Howe (2023) writes: “Chief Justice John Roberts explained that college admissions programs can consider race merely to allow an applicant to explain how their race influenced their character in a way that would have a concrete effect on the university.” In a statement against the ruling, President Biden advocated, as a stop gap after the Supreme Court decision, for a practice “where colleges take into account the adversity a student has overcome when selecting among qualified applicants.”

Justice Sonia Sotomayor wrote the dissent of those who voted against the ruling. Dissents in law are disagreements by individuals with the majority opinion and can themselves represent “good, necessary trouble” in their willingness to present evidence for the disagreement, which can be used in later law cases (see Writing in chapter 4.5). At the very beginning of the dissent, she states, “The Equal Protection Clause of the Fourteenth Amendment enshrines a guarantee of racial equality. The Court long ago concluded that this guarantee can be enforced through race-conscious means in a society that is not, and has never been, colorblind.” Here, she refers to *Regents of the University of California v. Bakke* and *Grutter v. Bollinger* as well as *Brown v. Board of Education of Topeka, Kansas* (1954), which ended state-sanctioned segregation in schools. She continues to assert that “limited use of race has helped equalize educational opportunities for all students of every race and background and has improved racial diversity on college campuses.” The effects of the overturning of affirmative action in college admissions are yet to be determined. Understanding the process of how laws are made, upheld, and overturned is essential to participating in advocacy – another way of getting into that good trouble John Lewis loved so well.

## Discussion 5.1

- If you have already taken a course with a primary focus on Civic Learning, think about what you were asked to do and what you learned. If you have not already taken a Civic Learning course, think about the types of courses you could take.
- In what ways did or might the idea(s) or example(s) discussed above apply in such a course?
- What other ideas or examples would you add to the discussion?

## Media Attributions

- Civic learning icon © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial

ShareAlike) license

- Eagle with Mask © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license

## PART 2: DIVERSE PERSPECTIVES

---



*By studying **Diverse Perspectives**, we can describe and critically examine how different cultural and intellectual frameworks shape our social reality through a comparative study of diverse socio-cultural institutions and practices of historical, local, and global contexts.*

### Perspectives

Geel, Belgium, is famous as the site of the martyrdom of Saint Dymphna. After her death at the hands of her father in the seventh century, Geel became known as a destination for those with mental disability or mental health issues. Dymphna herself became the patron saint of mental health. Those who visited Geel were housed either in the hospital or, when that filled up, in the houses of welcoming community members. Centuries later, these practices continue today in a community that finds it ordinary to welcome difference.

Anne Thériault, who identifies as a person with mental health issues, writes of her pilgrimage-like visit to Geel that she “dreamed of a place like Geel long before [she] knew it was real.” She ponders, “Managing the distress caused by mental illness is hard enough, and that difficulty increases exponentially when you have to exist in a world that fears and hates your illness. To fix all that, you would have to change society entirely, but that’s exactly what Geel has done.” She claims that Geel is “proof of how well we can love each other when we practise [sic] radical acceptance.” Even more, it is an example of what happens when we learn about, experience, and respect **Diverse Perspectives**.

### Text Attributions

The first paragraph of this section contains material adapted from *Heritages of Change* by the same author.

## Concepts to Consider

“You look at this country and you look at this world and you need to understand it in complex ways. And part of that complexity is, of course, questions of gender: If you don’t want to deal and relate and think about what it means to be a woman in this planet – you’re going to have serious problems. The same with dealing with the question of ethnicity and race.” – **Junot Diaz, Dominican-American Author (quoted in Moreno, 2015)**

Diversity refers to the great variety of human characteristics, ways that we are unique even as we are all human and share more similarities than differences. These differences are an essential part of what enriches humanity.

Learning about different people can help us learn more about ourselves as often our own culture is invisible to us. We may have ideas about what is customary behavior and we may have negative reactions when someone does something different. To prevent or resolve conflicts that may occur in any social interaction, you should maintain an attitude of respect for others, be open minded and willing to compromise, and know how to work together calmly to resolve conflicts.

As you begin to explore how you are different from others in a respectful way, you begin to understand why you think and behave in certain ways based on your upbringing and past experiences and appreciate that this does not have to be the only way to approach life. Experiencing new ways of thinking, ideas, concepts and values leads to deeper and more complex thinking and creativity. Diversity on campus is beneficial for all students, not just those from ethnic or minority groups. Socially, students develop a more mature worldview and are better prepared for interacting with a diverse world in the future. Students who embrace opportunities to experience diversity have greater satisfaction with their college careers and take a personal responsibility both for broadening their own social world and for speaking out against prejudice and discrimination wherever encountered.

Differences among people may involve where a person was born and raised, the person’s family and cultural group, factual differences in personal identity, and chosen differences in significant beliefs. Some diversity is primarily cultural, other diversity may be biological, and some diversity is defined in personal terms. Diversity generally involves things that may significantly affect some people’s perceptions of others, not just any way people happen to be different.

When discussing diversity, it is often difficult to avoid seeming to generalize about different types of people and such generalizations can seem similar to dangerous stereotypes. The following descriptions are meant only to suggest that individuals are different from other individuals in many possible ways and that we can all learn

things from people whose ideas, beliefs, attitudes, values, backgrounds, experiences, and behaviors are different from our own.

## *Types of Diversity*

The following are various aspects of diversity. These are just some of the types of diversity you are likely to encounter on college campuses and in our society generally.

**Diversity of race.** Race refers to what we generally think of as biological differences and is often defined by what some think of as skin color. Such perceptions are often at least as much social as they are biological.

**Diversity of ethnicity.** Ethnicity is a cultural distinction that is different from race. An ethnic group is a group of people who share a common identity and a perceived cultural heritage that often involves shared ways of speaking and behaving, religion, traditions, and other traits. Race and ethnicity are sometimes interrelated but not automatically so.

**Diversity of cultural background.** Culture, like ethnicity, refers to shared characteristics, language, beliefs, behaviors, and identity. We are all influenced by our culture to some extent.

**Diversity of educational background.** Colleges do not use a cookie-cutter approach to admit only students with identical academic skills. Diversity of educational background helps ensure a free flow of ideas and challenges those who might become set in their ways.

**Diversity of geography.** People from different places often have a range of differences in ideas, attitudes, and behaviors.

**Diversity of socioeconomic background.** People's identities are influenced by how they grow up, and part of that background often involves socioeconomic factors. Socioeconomic diversity can contribute a wide variety of ideas and attitudes.

**Diversity of gender roles.** Women have virtually all professional and social roles, including those once dominated by men, and men have taken on many roles, such as raising a child, that were formerly occupied mostly by women. These changing roles have brought diverse new ideas and attitudes to college campuses.

**Diversity of age.** While younger students attending college immediately after high school are generally within the same age range, older students returning to school bring a diversity of age. Because they often have broader life experiences, many older students bring different ideas and attitudes to the campus.

**Diversity of sexual orientation.** People who are lesbian, gay, bisexual, transgendered, transsexual, and two spirited make up a significant percentage of people. Exposure to this diversity helps others overcome stereotypes and become more accepting of human differences.

**Diversity of religion.** For many people, religion is not just a weekly practice but a larger spiritual force that infuses their lives. Religion helps shape different ways of thinking and behaving, and thus diversity of religion brings a wider benefit of diversity to college.

**Diversity of political views.** A diversity of political views helps broaden the level of discourse on campuses

concerning current events and the roles of government and leadership at all levels. College students are frequently concerned about issues such as environmentalism and civil rights and can help bring about change.

**Diversity of physical ability.** Some students have athletic talents. Some students have physical disabilities. Physical differences among students bring yet another kind of diversity to colleges, a diversity that both widens opportunities for a college education and also helps all students better understand how people relate to the world in physical as well as intellectual ways.

**Diversity of extracurricular abilities.** Students participate in a wide variety of activities outside of class: clubs, activities, abilities in music and the arts, and so on. A student body with diverse interests and skills benefits all students by helping make the college experience full and enriching at all levels.

## Text Attributions

This section contains material taken from “Chapter I.3: Successful students embrace a diverse community” from *A Guide for Successful Students* by Irene Stewart and Aaron Maisonville and is used under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License..

## View: “The danger of a single story?”



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://rotel.pressbooks.pub/whydoihavetotakethiscourse/?p=87#oembed-1>





Statue of Mattachine leader Iyannough in Hyannis, Massachusetts (Photo by Kisha G. Tracy)

“We live in a globalized society with diverse people with diverse historical, political, and economic experiences. These experiences shape people’s perspectives. For a deeper and fuller understanding of social problems and issues, different perspectives are sorely important. The ability to proffer an effective solution to problems is a function of adequate understanding and application of diverse perspectives. For instance, solving the problems of poverty, global warming, and other issues requires an understanding of the dynamics and dimensions of the issues. The understanding of the issues is made possible through the use and application of diverse perspectives in the analysis of the phenomena. A well-rounded education, therefore, fosters diverse perspectives. Diverse perspectives challenge some entrenched ideas enabling



students to examine varying ideas that are helpful in understanding and problem-solving. On the issue of poverty, for example, the first task in solving the problem is to understand the causes as well as the population in poverty. The focus on economic factors alone leads to a narrow understanding of poverty, its dynamics and dimensions. A narrow understanding of the issue leads to inadequate solutions. On the contrary, diverse perspectives require the examination of the relationship between poverty and historical, economic, geographical, political, and socio-cultural factors such as discrimination. The approach analyzes poverty in a broader context that leads to an effective solution. The same is the case for the analysis of global warming. A deeper understanding of the problem and solution will draw from varying perspectives such as political, economic, socio-cultural, geographical, and ecological perspectives. All in all, the application of diverse perspectives for the analysis of issues is invaluable because it provides a whole picture that includes varying ideas that illuminate the issues for an effective solution.” – **Dr. Jason Nwankwo, Behavioral Sciences, Fitchburg State University**

“When I envision a world that is caring, considerate, and mindful of others, it focuses on developing learners who view the world through multiple lenses. I do not believe we can accomplish creating a world that establishes innovations without understanding the unique circumstances and issues that plague many communities in our global society. I do not believe we can create art that moves people to emotions without exploring the depths of expression and the many ways people feel across cultures. We cannot provide life-altering care without understanding the unique history many communities view our medical institutions through. We cannot address crime in our communities without understanding the intricate interplay of systems, institutions, and people in rehabilitating the lives of so many in our justice system. These examples and many more are why the **Diverse Perspectives** general education requirement is necessary for our college curriculums. When we invest in learning from a perspective different than our own, we allow many communities the grace of having nuanced and complex reasoning for decisions, experiences, and realities. By embracing this outlook on issues, we undoubtedly open ourselves up to new solutions, opportunities, and growth. As someone exploring new content, I encourage you to embrace the mess that is understanding something other than yourself. You will be better prepared for an ever-changing and

constantly-growing more diverse future.” – **Junior Peña, Director of Student Diversity, Equity, & Belonging Programs, Fitchburg State University**

“The prominent slogan of the disability civil rights movement ‘Nothing about us without us’ always reminds me of ‘No taxation without representation’ from the American Revolution. In both instances, people with disabilities and the American colonists did not want governments to make laws and policies without input from the impacted population. Despite attempts throughout history to erase or downplay the efforts of disabled people, the impact and contributions of disabled people are interwoven throughout American history. Currently, 15% of the world’s population identifies as disabled; that’s over 1 billion people! Disability is one of the only identity categories that anyone can enter at any time throughout their lives. So not only is disability considered a diverse identity category, it’s also statistically likely that you or someone in your circle will be impacted by a disability (either temporarily or permanently) at some point in your life. Therefore, a solid understanding of disability rights, culture, and legislation is essential for equipping individuals to navigate their ever changing ability status.” – **Dr. Rachel Graddy, Associate Director of Student Accessibility Services, Worcester State University**

## Diverse Perspectives and Good, Necessary Trouble

“LGBTQ+ people exist everywhere in the United States. We are in every state, every zip code and every community. We live in apartments in big cities and in farmhouses in rural communities. We exist across races and ethnicities, incomes and experiences.” – **“We Are Here: Understanding the Size of the LGBTQ+ Community,” Human Rights Campaign (2020)**

A Gallup poll found, with data from 2021, that 7.1% of U.S. adults “self-identify as lesbian, gay, bisexual, transgender or something other than heterosexual,” which is “double the percentage from 2012, when Gallup first measured it.” Further, about “21% of Generation Z Americans who have reached adulthood – those born between 1997 and 2003” identify as LGBTQ+ (Jones, 2022). In the 2021 Human Rights Campaign report “We Are Here: Understanding the Size of the LGBTQ+ Community,” which is based on data from the U.S. Census Bureau, “more people in the United States may be openly identifying as LGBTQ+ than ever before; at least 20 million adults in the United States could be lesbian, gay, bisexual or transgender people. Millions more could be another identity that is more expansive than these four terms.” These numbers simply reaffirm the fact that people who identify as LGBTQ+ are our neighbors, colleagues, and fellow citizens.

Yet, on June 8, 2023, in “LGBTQ+ Americans Under Attack,” the Human Rights Campaign declared, for the first time, a national state of emergency for LGBTQ+ people in the United States. They track at least 525 state bills against the LGBTQ+ community, 220 of which are against the transgender community. The Anti-Defamation League’s 2023 report, “Hate in the Bay State: Extremism & Antisemitism in Massachusetts, 2021-2022,” reveals that Massachusetts “witnessed considerable anti-LGBTQ+ hate in 2022. Over the last year, extremists targeted LGBTQ+ events, particularly drag shows, throughout the state. Throughout 2022, Boston Children’s Hospital endured multiple waves of threats and harassment stemming from the hateful and false narratives surrounding gender-affirming care” (10). These “false narratives” are driven by misinformation and disinformation (see Information Literacy in chapter 4.1), which fuel baseless fears. For instance, there is a narrative that transgender athletes – pretty much always trans-women, rather than trans-men, which is a sexist outlook unto itself – have advantages in athletic competitions, although studies conclude that there is no evidence to suggest this is true (see Jones, Arcelus, Bouman, & Haycraft, 2017). There *is* evidence, however, that forcing people to compete in gender categories in which they do not identify is “distressing and may deter engagement in competitive sport altogether” (p.712).

Scholar Gabrielle Bychowski (2018) states, “More and more, we are learning that the human species is not now and has never been limited to two types of genders, two types of cultures, two types of brains, or two types of bodies.” Studying the perspectives of the LGBTQ+ community in order to gain better, more correct information and an understanding of the issues that affect them and sharing those perspectives through relevant civic channels to wider audiences, joining what the Human Rights Campaign recognizes as “countless heroes fighting back,” will help improve quality of life for everyone.

*Explore* LGBT Thought and Culture, *an online resource documenting LGBTQ+ political and social movements, and the* LGBT Magazine Archive.

## Discussion 5.2

- If you have already taken a course with a primary focus on **Diverse Perspectives**, think about what you were asked to do and what you learned. If you have not already taken a **Diverse Perspectives** course,

think about the types of courses you could take.

- In what ways did or might the idea(s) or example(s) discussed above apply in such a course?
- What other ideas or examples would you add to the discussion?

## Media Attributions

- Diverse Perspective icon © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license
- Statue of Mattachiest Leader © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license

# PART 3: ETHICAL REASONING

---



*By studying **Ethical Reasoning**, we can think critically about right and wrong human conduct, assess our own ethical values, recognize ethical issues across a variety of contexts, think about how different ethical values and perspectives might be applied to ethical dilemmas, and consider the ethically relevant ramifications of alternative actions or policies.*

## Perspectives

Developed in 2022 by the research laboratory OpenAI, Chat Generative Pre-Trained Transformer (or ChatGPT) is an artificial intelligence chatbot, which is software that mimics human conversation. After you submit a question or prompt, it will develop a response that is based upon “training its AI with an extraordinarily large amount of data, much of which comes from the vast supply of data on the internet,” and it has so far been able to, at someone’s direction, “make jokes, write TV episodes, compose music, and even debug computer code” (Heilweil, 2022). And when given parameters, it produces (rather mediocre) writing on the subject requested.

There are already ethical concerns being debated about ChatGPT. The Future of Life Institute (2023) has called for “all AI labs to immediately pause for at least 6 months the training of AI systems more powerful than GPT-4,” citing that these concerns need to be addressed:

- Should we let machines flood our information channels with propaganda and untruth?
- Should we automate away all the jobs, including the fulfilling ones?
- Should we develop nonhuman minds that might eventually outnumber, outsmart, obsolete and replace us?
- Should we risk loss of control of our civilization?

These are huge questions, ones that have ethical considerations for all of us. Further than these concerns, Cindy Gordon (2023) tells us there is evidence of ChatGPT “producing toxic content, surfacing up biases on women, and in particular women of color” learned from the web content it has been fed. While it seems to have certain limits built in (i.e. Hitler is bad), most limits seem easily overridden.

Universities too are grappling with ChatGPT as it is possible for students to complete assignments through the AI. In a 2023 BestColleges survey of undergraduate and graduate students, “half of students (51%) agree that using AI tools to complete assignments and exams counts as cheating or plagiarism” while 48% believe it is possible to use AI in an ethical and responsible way in coursework and 40% believe that the use of AI by students defeats the purpose of education. Faculty and students alike share these concerns. University of North Carolina at Chapel Hill student Sierra President writes, “With the creation of new AI platforms that assist in gaining and distributing information, the ethical dilemmas of using sites like ChatGPT have become pertinent, making students like me wonder if we should even be using these platforms to begin with” (2023). Is it ethical for a student to use ChatGPT for even a portion of an assignment and represent the work as their own? Are there some circumstances in which it would be ethical and others in which it is not?



## Concepts to Consider

It is mind-boggling how many ethical decisions we make a day. These begin with relatively simple scenarios. Do I cross the road on a do not walk sign when there are no cars coming? Do I turn in the \$20 bill I found in the parking lot? Some scenarios are far more complicated, requiring deliberate thought and care in order to make a decision. Should I report an incident of sexual violence even though my friend has told me not to do so?

Should I intervene when I witness an act of microaggression or bullying (see Byers and Cerulli, 2021, on the use of **Ethical Reasoning** in cyberbullying situations in college)? These questions are complex with a number of variables to consider.

The study of **Ethical Reasoning** builds peoples’ “abilities to evaluate their own values and beliefs, think critically about ethical issues, and apply an ethical reasoning process to generate sound decisions” (Horner, 2021, p.130). **Ethical Reasoning** is not a matter of whether someone is innately “good” or not. It is, rather, as Allison Ames, et.al. (2017, p. 78), assert, “a teachable skill that college students can (and should) learn.” It requires learning “the skills to make ethical decisions” (Horner, 2021, p. 124), both the development of strategies to apply in situations and reflections upon past behaviors or projected decisions: “Reflecting on one’s intuitive ethical decision-making, particularly alongside ethical frameworks, can build ethical reasoning skills” (Corple, et. al., 2020, p. 276). By practicing **Ethical Reasoning**, we can meet ethical dilemmas as they arise with a firm yet flexible sense of our own values and the ability to see alternatives and select one deliberately.

Most careers also have what are called professional ethics, which are the collective principles by which members of certain professions are expected to abide. Quite often, these are written by organizations that govern accreditation or licenses to practice. **Ethical Reasoning** skills can help with understanding codes of ethics and making decisions in situations in which perhaps individual ethics are in conflict with professional codes. Given these complexities, which can be different for each profession (see, for example, “Common Examples of Ethical Dilemmas in Nursing”), employers prize **Ethical Reasoning** skills in employees: “Publicly played out ethical quandaries, both recent and historical, make it easy to determine why researchers claim ethical reasoning as vital in an individuals’ professional and civic lives” (Ames, et. al., 2017, p. 78). And, indeed, many employers want their future employees to have more **Ethical Reasoning** training in college in their majors and general education (Horner, 2021, p. 124).

“Some students assume that ethics are handed down as complete, and others will think it’s a personal thing and rooted in one’s gut feelings. When you get students to see there are better and worse ways of answering ethical questions, we can start to think about how rationally defensible those answers are. Why should I accept that claim? Why should I agree with you? Once you get them to accept that, it opens up a new intellectual reality to them. At the end of the day, whether you’re talking about widgets or truth and beauty, thinking is thinking, and logic is logic. The target may change, but the skills and the abilities you hone and develop in a philosophy class do not. It’s very common for first-year students at a university or college to have no sense of what philosophy is. I hope this exposure leads them to fall in love with the subject, and the critical examination of important ideas.” – **Dr. David Svolba, Humanities,**

**Fitchburg State University (first published in Fitchburg State University *Contact*, Summer 2021)**

## Ethical Reasoning and Good, Necessary Trouble

“If you stop for a moment and listen closely, you can hear it. The steady pounding of demonstrators’ feet. The ruffling of protest signs being hoisted up and down. The echoing chant in the distance. It is the slow beating heart of American democracy.” – **Daniel Q. Gillion, *The Loud Minority: Why Protests Matter in American Democracy* (2020, p. 194)**

Protest has been a part of the American national experience since before the Revolutionary War, including famous protests like the Boston Tea Party, those against the Stamp Act, and one of the ones that turned most violent, the Boston Massacre – all events which influenced the First Amendment, which guarantees citizens the rights of assembly, speech, and petition. One of the most influential series of protests in our history came with the Civil Rights Movement, protests John Lewis specifically thought of as “good, necessary trouble.” Daniel Q. Gillion, in his book *The Loud Minority: Why Protests Matter in American Democracy* (2020, p. 188), estimates that by 2018 “one out of ten individuals [had] participated in some form of protest” in the United States. This number has likely increased since then.

In what they call a “surge to new levels,” the Armed Conflict Location and Event Data Project (ACLED) reports that from May 24 to August 2020, there were more than 10,600 demonstration events in the United States, with over 80% connected to Black Lives Matter (BLM) or COVID-19 (“Demonstrations and Political Violence in America: New Data for Summer 2020”). In ACLED’s report “A Year of Racial Justice Protests: Key Trends in Demonstrations Supporting the BLM Movement” with data covering January 2020 through April 2021, they found there were more than 11,000 Black Lives Matter demonstrations in around 3000 locations in the United States. Noting that numbers increase and decrease depending on waves of infection rates and new laws and mandates concerning social distancing, masking, and vaccination, ACLED in “A National Emergency: How COVID-19 Is Fueling Unrest in the United States” reported more than “25,000



political violence, demonstration, and strategic development events” related to COVID-19, both calling for protections of various communities as well as anti-restriction protests (against mandatory mask mandates, vaccinations, stay-at-home orders, online schooling, etc.), as of February 21, 2021. University researchers Erica Chenoweth and Jeremy Pressman estimate that, in the Women’s March of 2017, at least 4.2 million people participated in over 600 cities in the United States. It was what Chenoweth calls “the single largest day for a demonstration in the US” (Frostenson, 2017). These are only some of the statistics from the United States. The Global Peace Index of 2022 notes that the “number of protest movements and demonstrations has increased sharply across the world, particularly in recent years.” They have attributed much of this increase to the unrest and uncertainty of the pandemic.

The Global Peace Index 2022 notes worldwide protests have mostly been peaceful, although “instances of events incorporating violence – either perpetrated by demonstrators or by the security forces – are becoming more frequent [...with] the worst deterioration, changing by 49.6 per cent since 2008.” ACLED reports that “94% of all pro-BLM demonstrations have been non-violent, with 6% involving reports of violence, clashes with police, vandalism, looting, or other destructive activity” (“A Year of Racial Justice Protests,” 2021). They note, similar to the Global Peace Index, that it is not always easy to name the instigators of such activity: “some cases of violence or looting have been provoked by demonstrators, other events escalated as a result of aggressive police action, intervention from right-wing armed groups, and individual car-ramming attacks.” Even with such a predominance of non-violent BLM events and even an increase in peaceful protests since George Floyd’s death, “41% of Americans remain opposed to the movement,” which ACLED mostly attributes to disinformation campaigns against BLM (see Information Literacy in chapter 4.1). Gillion (p. 133) tells us that “the interactions of Black Lives Matter activists with the general electorate shows that the response of protest activity is not only an objective process of information dissemination but indeed an emotional one that changes individual attitudes and remains with individuals long after the activism has subsided.” He uses the protest by NFL players, led by Colin Kaepernick, in which they took a knee during the national anthem to protest against police killings of Black people, to illustrate the point that “the backlash seen by the public is not directed toward the substantive message of the protest but rather the very act of individuals protesting [...] The pushback [...] was focused on the actions of NFL players during the national anthem, labeling them disrespectful” (p. 137). Should people protest? And who has the right to protest?

Even during the Revolutionary War, people debated about what type of protest was necessary and who should be allowed to protest (see the Museum of the American Revolution Protest in Early America Discovery Cart). Gillion comments, “political protest is a form of communication that individuals can rely on to express the grievances of a community and push for change against the status quo. For some observers, this message will be embraced; it will inspire passionate support and even motivate actions. Others see the protest actions as an offense to their sensibilities that should be rooted out” (p. 133). How a person reacts to protests depends largely on an individual’s beliefs about or how much they are affected by the issue(s) at hand.

Personal ethics play a considerable role in the decision to participate in a protest. In “Is It Ethical to

Protest?”, Jennifer Baker (2020), a professor of philosophy at the College of Charleston, lays out some of the issues we might think about before joining a protest:

- personal safety and that of others
- concerns of whether we are in the “right”
- the fear of being perceived as “moral grandstanding”
- possible effects on social standing and careers
- concerns about the effectiveness of protest, especially the contributions of an individual
- concerns about the acts of others outside of our control, especially illegal actions

While personal ethics are involved in these decisions, various community beliefs can also have an influence – for instance, a person’s religion and their religious leaders. In a message from the president of the National Catholic Bioethics Center, titled “The Ethics of Protest,” Joseph Meaney (2023) extols the virtues of peaceful protest: “Peaceful protesting is a valid and even meritorious way to make one’s concerns and beliefs known to the wider public in a free society. In fact, we have an ethical duty to not simply allow injustices to continue.” But Meaney sets parameters based on what he claims is Judeo-Christian ethical tradition in that he states it is “ethically intolerable to allow violent protests or vandalism to go unchecked.” The definitions of “violence” and “vandalism,” however, are also a debate, and, like anything else, the question is: do these rules apply in every situation or are there exceptions and what are they? These are all ethical considerations to reason through.

## Discussion 5.3

- If you have already taken a course with a primary focus on **Ethical Reasoning**, think about what you were asked to do and what you learned. If you have not already taken an **Ethical Reasoning** course, think about the types of courses you could take.
- In what ways did or might the idea(s) or example(s) discussed above apply in such a course?
- What other ideas or examples would you add to the discussion?

## Media Attributions

- Ethical Reasoning Icon © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license
- Glass Human Head © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license

# PART 4: FINE ARTS EXPRESSION AND ANALYSIS

---



*By studying **Fine Arts Expression and Analysis**, we can articulate, by engaging with art, music, or theater, an understanding of the expressive languages and the technical craft they employ, and interpret their meaning and value, either through the creation or performance of works in art, music, or theater, or through an analysis of their relation to specific cultural, historical, and theoretical contexts.*

## Perspectives

“Who is the musician in Africa today? [...]et us single out that solo musician who is so often slighted in the [Western] stage show and see how he lives and makes music in his home setting. In so doing, we will be looking at a professional musician who is a member of that group of West African musicians referred to collectively as ‘griots’. They play a well-defined and important role in Manding, Wolof, Fula, and Songhai societies, to name only a few. It was these peoples who developed and maintained strongly hierarchical societies and very powerful empires at various times between the thirteenth and nineteenth centuries in the most westerly part of the continent (now Senegal, Gambia, Guinea, Mali, and Upper Volta). Music flourished in these empires, and today’s griots, known by different professional titles in each ethnic group, carry on the traditions of these times.” – **Roderic Knight, “The Jali, Professional Musician of West Africa” (1975, p. 8)**

A jali is a person, particularly in West African countries, who performs history and stories through singing and music (*jali* – or *jeliw* (sing. *jeli*) – is often the preferred term to *griot*, which is a French colonial word). They are, to a certain extent, “musical history books” (Arif, 2021). Jalis are recorded as far back as the thirteenth century; we can find them, for instance, in the *Epic of Sundiata*, a thirteenth-century poem about the founding of the Malian empire. This story reveals that, not only is a jali a musician, but also holds important positions such as political advisor, diplomat, entertainer, keeper of records, and presider over marriages and funerals.

These musicians traditionally are trained within families, with songs passed down from one generation of specialized performers to the next. Young apprentices learn the history and the rituals of their people. Creativity is encouraged, as long as it does not impede accuracy (Bortolot, 2003). They practice on such instruments as the kora, which is similar to the lute, learning how to educate audiences as well as entertain them. Although instrumental music is important in the jali’s work, the history is mainly told through vocals: “Music provided the vehicle for many of [their] activities, but instrumental music always took a subordinate role to the voice” (Knight, p. 10). The jali is a highly respected member of the community, whose music preserves culture and history that might otherwise be lost.

## View: “The Griot tradition of West Africa”



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://rotel.pressbooks.pub/whydoihavetotakethiscourse/?p=91#oembed-1>

## Concepts to Consider

**Fine Arts Expression and Analysis** places a focus on both creation and interpretation. The Americans for the Arts “Americans Speak Out About the Arts in 2018” (p. 3.) report compiles the benefits of practicing and studying the arts:

- **Aesthetic:** The arts create beauty and preserve it as part of culture.
- **Creativity:** The arts encourage creativity, a critical skill in a dynamic world.
- **Expression:** Artistic work lets us communicate our interests and visions.
- **Identity:** Arts goods, services, and experiences help define our culture.
- **Innovation:** The arts are sources of new ideas, futures, concepts, and connections.
- **Preservation:** Arts and culture keep our collective memories intact.
- **Prosperity:** The arts create millions of jobs and enhance economic health.

- **Skills:** Arts aptitudes and techniques are needed in all sectors of society and work.
- **Social Capital:** We enjoy the arts together, across races, generations, and places.

With the survey data that they collected for this report, they were able to make several interesting observations, among which are:

- An overwhelming majority of the American public (91 percent) agrees that the arts are part of a well-rounded [...] education—including 61 percent who “strongly agree.” (p. 10)
- 76 percent of those who engage in the arts believe they have a positive impact on their overall health and well-being. 68 percent of adults agree that the arts improve healing and the healthcare experience. (p. 8)
- 55 percent of employed adults say their job requires them to be creative and come up with ideas that are new and unique. (p. 9)
- 73 percent agree that the arts “help them understand other cultures better”, and another 72 percent agree the “arts unify us, regardless of age, race, and ethnicity” (p. 8) [...] People of color are slightly more likely than whites to be arts makers overall (49 percent vs. 45 percent) and significantly more likely to paint and read/write poetry. (p. 16)

What these findings reveal is that, beyond contributing to being fully educated, there are health (see Personal Wellness in chapter 5.7) and career benefits to engaging with **Fine Arts Expression and Analysis**. These skills also contribute to engaging with and developing empathy for Diverse Perspectives (see chapter 5.2).

In their 2021 report “Art for Life’s Sake: The Case for Arts Education,” the American Academy of Arts & Sciences echoes many of these benefits, stating that the arts play “a vital role in the personal and professional development of citizens and, more broadly, the economic growth and social sustainability of communities.” They describe increases in observation, problem-solving, innovation, critical thinking, and communication skills along with reduced intolerance and increased appreciation for other cultures.

Studies have also indicated specific benefits from individual arts. Adam T. Tierney, Jennifer Krizman, and Nina Kraus (2015) found that in-school music training accelerates neurodevelopment and literacy skills (see also Kraus & White-Schwoch for further studies on musicians’ brains and neuroplasticity). Those who practice music also see improvements in memory and memorization skills, hand-eye coordination, math and pattern recognition, auditory skills, spatial intelligence, and imagination and intellectual curiosity (“Important Benefits of Music In Our Schools,” 2014). The art of drawing has potential for health: “Picking up a pencil or charcoal and mindfully making marks connects us to our haptic skills, or sense of touch, and offers a respite or rest from the relentless digital drain, which is important for mental health” (D’Silva, 2023 – see also Mastandrea, Fagioli, & Biasi, 2019; see Ilari and Eun Cho, 2023, for similar results concerning performing music). Indeed, according to the study of Xuguang Jin and Yuan Ye (2022), fine arts education in general is associated with psychological well-being.

At the same time that we consider all of these benefits of **Fine Arts Expression and Analysis**, we do need to remember that participating in the arts can simply be enjoyable!

“The arts allow us to understand ourselves and others more profoundly, they give us an avenue for persuasively expressing ideas and emotions, and they equip us with valuable tools and skills for living. Since the arts both reflect and create culture, they provide us with the opportunity to consider who we are and what we value. They also challenge us with different points of view, compelling us to empathize with others. In addition, the expressive techniques of the arts are communicative tools, allowing us to articulate and receive messages of all kinds. The arts also allow us to develop essential skills for life, including interpretation (the ability to explicate and elucidate the possible meanings of a thing), critical thinking (the ability to question, reason, and form judgments beyond the passive acceptance of other people’s ideas), and creativity (the ability to generate new and unconventional possibilities). The arts are truly essential for us to reach our full individual and collective human potential.” – **Dr. Jonathan Harvey, Humanities, Fitchburg State University**



Mural depicting Greek deities Hades and Persephone outside Fitchburg Public Library; created by Monique Reverie, Fitchburg State University Alum, and Erin Cregg (Photo by Kisha G. Tracy)



## Fine Arts Expression and Analysis and Good, Necessary Trouble

A form of “good, necessary trouble” is what has been called creative resistance. Susan Karlin (2017) explains how creative resistance was a “strategy employed during [the] 1960s civil rights movement, whose architects coordinated novel clandestine tactics and revealed them at opportune times to throw opponents off guard.” The NPR series *We Insist* collected the protest songs and music videos produced during 2020. The Protest Plays Project identifies and shares protest-inspired short plays with calls for plays on #THEATREACTIONVOTE!, #THEATREACTIONIMMIGRATION, and #THEATREACTIONGUNCONTROL and advice on how to use plays and monologues during marches or other events. Even the logo for Black Lives Matter is an artistic rendering that has been used by other artists (see “How to Draw Black Lives Matter Fist” step-by-step video).

While some of this artistic work is more permanent or easy to document, some is not. The Creative Resistance Project is a “Showcase for Activist Art,” and its categories help us think a bit about what types of creative resistance there can be (although, in reality, there is no limit on creativity): music, visual art, poetry, performance art, animation, puppets, and protest signs. In the Women’s Marches, starting in 2017, art of all kinds was on display “from whimsical signs, costumes, and T-shirts, to unleashing satirical songs and drawings on social media, to theaters, art shows, and apparel raising money for such advocates as Planned Parenthood, American Civil Liberties Union, and the Southern Poverty Law Center” (Karlin). The Urban Art Mapping research documents and analyzes “street art responding to moments of friction and crisis,” and they have a digital database of “tags, graffiti, murals, stickers, and other installations on walls, pavement, and signs” that developed around the world after the death of George Floyd. Such art, while they “have the ability to capture raw and immediate individual and community responses,” they are “by nature ephemeral” with meaning that “shifts over time” (Shirey, 2020). Digital methods, such as photographs, social media, and homemade videos, certainly help to preserve acts of creative resistance that would otherwise be lost once the march is over.

There is some artwork that is itself all digital. Beautiful Trouble is a project that trains people in creative tactics for social movements and grassroots organizing. One of these tactics is guerilla projection, the act of projecting messages or other images on the side of buildings, which is relatively low-tech, can be immediately changed, and is easy to transport. Beautiful Trouble does offer advice on potential risks. In the case of guerilla projection, it is mostly an ethical concern: “The technology is very powerful, ‘spectacular’ in nature, and often under the control of one person or a small group who could potentially manipulate a large and impressionable crowd. This power needs to be kept accountable to the broader group, and should be wielded with great care” (see Ethical Reasoning in chapter 5.3.). The positive is that there is a smaller chance of destruction of property with light projection.

On June 7, 2023, the Commonwealth of Massachusetts raised a Pride flag over the state house with political leaders unofficially declaring Massachusetts a safe haven for LGBTQ+ people. Drag performers were invited

to that event, marking the political nature of drag art, particularly in light of legislation and bans on drag performances (and drag story hours) around the country. As a result, drag performance has become a form of protest (in truth, it has always been) and, as such, has also become a dangerous form of artistic expression in some circumstances with performers fearing acts of violence. Bans also threaten the livelihood of these artists (Hall, 2023).

There has been a trend in recent climate change protests of vandalizing famous works of art in order to draw attention to the issue. These incidents have included protestors gluing themselves to Johannes Vermeer's seventeenth-century *Girl With a Pearl Earring*, others throwing soup on Vincent Van Gogh's *The Sower* (1888), and tossing paint on Claude Monet's *The Artist's Garden at Giverny* (1900). This particular form of protest has drawn quite a bit of discussion and mixed responses. Some have likened these incidents to performance art, while many people question the ethics of such acts that potentially could harm world heritage (see Ethical Reasoning in chapter 5.3).

"Art is a powerful tool for dissent [...] provoking constructive dialogue and creating space for debate beyond mainstream bodies of political discourse." – **Human Rights Foundation Art in Protest**

*See also the Met's collection of "Art, Protest, and Public Space" with protest art from the eighteenth century to the present.*

## Discussion 5.4

- If you have already taken a course with a primary focus on **Fine Arts Expression and Analysis**, think about what you were asked to do and what you learned. If you have not already taken a **Fine Arts Expression and Analysis** course, think about the types of courses you could take.
- In what ways did or might the idea(s) or example(s) discussed above apply in such a course?
- What other ideas or examples would you add to the discussion?

## Media Attributions

- Fine Arts Icon © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license
- Mural depicting Greek deities © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution



NonCommercial ShareAlike) license

# PART 5: HISTORICAL INQUIRY AND ANALYSIS

---



*By studying **Historical Inquiry and Analysis**, we can engage with and answer questions about the past by evaluating historiographical interpretations; identifying, contextualizing, and critically reading historical evidence; and considering the relevance of chronology, causation, and perspective.*

## Perspectives

“A particularly heinous event occurred in Charlottesville, Virginia, on August 11 and 12, 2017: the Unite the Right rally. There are many reasons to abhor what happened there, not the least of which was the murder of Heather Heyer and the injuring of many others. For medievalists, it became a wake-up call. Photos of white supremacists carrying various types of medieval imagery – shields, Deus Vult crosses, heraldry – flooded our news feeds. While many of us were certainly aware of the appropriation and misuse of the medieval before this event, ‘Charlottesville’ forced us to evaluate exactly how serious the ramifications of this appropriation truly are. If Charlottesville was a wake-up call, the 2021 attack on the Capitol building in Washington, DC, was a tragic reinforcement of that call. Once again, medieval and medieval-esque representations abounded, displayed next to an array of hate symbols. Prominent among these were the horned helmet and tattoos of Jacob Anthony Chansley, known as the “Q Shaman.” Photos of Chansley displayed his tattooed Thor’s hammer, the Valknut, and the World Tree all over the news and social media [...] The Ku Klux Klan call themselves the

American Knights, and the name of their newspaper is *The Crusader*. This imagery was also common in Nazi Germany, with typical pictures such as Hitler depicted in armor, as were arguments about race attributed to the Middle Ages, which were in reality eighteenth- and nineteenth-century inventions. [...] These obviously erroneous and limited interpretations of this period in history are echoed in conventional misunderstandings that get perpetuated through repetition and media representations.” – **Kisha G. Tracy, *Why Study the Middle Ages?* (2022, pp. 77-79)**

*For further thoughts on representations of the Middle Ages, see “Why Study the Middle Ages? Because #MedievalSo...MuchMore.”*

## Concepts to Consider

“‘Doing’ history is like completing a puzzle or solving a mystery. Imagine asking a question about the past, assembling a set of clues through documents, artifacts, or other sources, and then piecing those clues together to tell a story that answers your question and tells you something unexpected about a different time and place. That’s doing history.” – **“Why should you study history?”, University of Wisconsin-Madison**

Massachusetts State Representative Michael Kushmerek, alum of Fitchburg State University, has commented on his history studies, “From the classics to modern political and U.S. history, it allowed me to take a broad based look at the interconnectedness of the world” (first published in Fitchburg State University *Contact*, Summer 2021). Kushmerek’s remark emphasizes a particularly important aspect of **Historical Inquiry and Analysis** skills and their ability to help us recognize connections and contexts across time and geography. James Grossman (2016) states that to “think historically is to recognize that all problems, all situations, all institutions exist in contexts that must be understood before informed decisions can be made.” Grossman continues that people with **Historical Inquiry and Analysis** skills “sift through substantial amounts of information, organize it, and make sense of it. In the process they learn how to infer what drives and motivates human behavior from elections to social movements to board rooms.” There are so many situations that

benefit from someone knowing how to think historically, how to find and evaluate contexts to provide insights or conclusions.

The evidence that historians use can range from quantitative to qualitative, primary to secondary, written to spoken, artistic to utilitarian, and they need to be able to analyze all of this information (see Information Literacy in chapter 4.1 and Quantitative Reasoning in 4.2). They look at all matter of artifacts that humans produce and that remain in existence for us to interpret. These can be as personal as journals or private letters or as public as government and church records. In other words, an historian works with a large variety of sources and, thus, is prepared to work with any artifact, past or present, that they might encounter, a skill that can be applied to many personal and professional contexts.

Training in **Historical Inquiry and Analysis** teaches us to question rather than uncritically accept statements as truth: “Historical inquiry and thinking are distinct but related and both involve active investigation and analysis rather than passive acceptance of knowledge” (Blevins, Magill, & Salinas, 2020). When we hear a claim that something happened or was true “in history” – for instance, something like “there were no LGBTQ+ people in history” – our “historian-sense” starts to tingle. We need to research for ourselves if such assertions are true and what the complexities or consequences of such statements are, not to mention the contexts in which they were said. Identifying what questions to ask is a much more complicated skill than it seems. How to find evidence that speaks to those questions is a further useful skill. At the same time, **Historical Inquiry and Analysis** also helps us give voices back to historically marginalized – and silenced – peoples.

**Historical Inquiry and Analysis** is essential to being an informed citizen (see Civic Learning in chapter 5.1). Michael A. Rebell (2018, p. 21) places history foremost in a list of knowledge needed for civic participation: “whether as voters, jurors, or people working together to make a change in the community – [being a citizen] requires a working knowledge of many subjects, including history, politics, economics, science, and technology.” We cannot make changes in the present without an understanding of what took place in the past and how we got to our current situation.

At the same time that we consider all of these benefits of **Historical Inquiry and Analysis**, we do need to remember that history can simply be learning about fascinating events and people!

## View: “What Is History For?”



*One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://rotel.pressbooks.pub/whydoihavetotakethiscourse/?p=94#oembed-1>*



The Drake Home, a stop on the Underground Railroad, in Leominster, Massachusetts (Photo by Kisha G. Tracy)

**“Historical Inquiry and Analysis** provides students with hands-on experience in critical thinking, reading, and argumentation. Not only do students gain an appreciation for how historical perspectives provide a more nuanced understanding of the human experience and how the past shapes the present, but they also gain the ability to analyze the value and limitations of various sources as evidence for argumentation; the ability to consider multiple perspectives on events and evaluate competing interpretations and accounts; and develop research skills and the ability to synthesize complex explanations and information. Moreover, students engaging in **Historical Inquiry and Analysis** develop skills in constructing persuasive, evidence-driven arguments in multiple formats, from oral to written as well as digital and visual. For example, in an introductory survey of U.S. history since 1877, one professor uses the boxes on a paystub as a lens for exploring the development of the industrial economy, the regulatory and welfare state, and the politics of work as the U.S. transforms into an industrial economy and toward a service and information-based economy in the late twentieth century. Through that exploration, students explore policy developments and primary sources that reflect how American residents experienced new policies. In exploring the implementation of tax withholding, students encounter how policymakers in World War II

convinced Americans that paying their taxes was a patriotic act, using propaganda films by Walt Disney featuring Donald Duck to equate income taxes with patriotic sacrifice that would be rewarded with consumer benefits in peacetime.” – **Dr. Kate Jewell, Economics, History, and Political Science, Fitchburg State University**

## Historical Inquiry and Analysis and Good, Necessary Trouble

“I think most people have tended to study a moment like the Black Death as the history of the very dead and gone that leaves behind a compelling record, but when you re-read that record in light of our own experience, it sounds different, doesn’t it?” – **Paula Findlen, Stanford University (De Witte, 2021)**

The time between 2020 to 2023 was hectic, and not only because of COVID-19. History is in the making all the time, but, in these three years, it felt like history was being made at warp speed. **Historical Inquiry and Analysis** skills have been essential to contextualizing new situations that seemingly popped up in our social media feeds daily, if not hourly. Fiona Griffiths at Stanford University commented, “We hear a lot about living in unprecedented times. Studying history can help nuance these claims and challenge assumptions of contemporary exceptionalism. A historic perspective can enable or enhance critical attention to contemporary events – much of what we saw happen in the news this past year built on long-standing power dynamics, whether domestic or international, that are not always self-evident” (De Witte, 2021). Applying historical skills can give us much-needed perspective on our own time.

We could look at many examples, but one is the discussion around the destruction of statues or monuments. In July 2013, after Trayvon Martin’s killer was acquitted, the hashtag #BlackLivesMatter (BLM) became viral on social media. It led to protests and demonstrations, particularly about police violence against Black victims. In May 2020, George Floyd was murdered in Minneapolis by a police officer. Following this tragedy, protests began in Minneapolis and spread around the world. During this civil unrest, many statues and monuments with problematic contexts and symbolism, especially those with ties to racism or slavery, were defaced or torn

down in protest. Statues of Christopher Columbus and those dedicated to the Confederacy were particularly a focus.

There are examples of statues that have been taken down after discussion, rather than physical action. The “Emancipation Group” (1879) in Boston, Massachusetts, is a copy of the Freedmen’s Memorial in Washington, D.C. (1876), both sculpted by Boston artist Thomas Ball (see also Asch & Musgrove, 2020). We can see in the photo above, taken before it was removed in 2020 from Park Square and put in storage, that the statue depicts a standing Abraham Lincoln holding the Emancipation Proclamation while gesturing to a kneeling, half-dressed, former slave freed from his shackles. The original in D.C. was commissioned by former slaves, and Frederick Douglass was at its dedication, although he expressed concern over its design (“Emancipation Group”). In the years following the installation of the “Emancipation Group,” many, like Douglass, have presented concerns to the city, citing the way it depicts the Black man in a continued subservient position with a lack of clothes, which are symbols of civilization, especially in contrast to the suited Lincoln. The city of Boston’s site dedicated to the statue acknowledges that its design is “perpetuating harmful prejudices and obscuring the role of Black Americans in shaping the nation’s freedoms” and announces the removal of the “Emancipation Group” in 2020.

Tearing down statues in protest is not a new act. We have examples of iconoclasm from ancient times on – for instance, the Egyptian pharaoh Akhenaten (reigning c. 1353-1336 BCE) is famous for wanting to convert Egypt from polytheism, the worship of many gods, to monotheism, the worship of one god. After his death, those who disagreed with this change tried to erase him from history by destroying his statues. A phrase for this act is *damnatio memoriae*, “damn the memory,” especially memories which are distressing.

Recognizing that destruction or defacement of monuments and statues has a long tradition as well as the reasons that people have done so can help us provide context for why Black Lives Matter protesters might choose to do the same today.

## Text Attributions

The section contains material adapted from *Heritages of Change* by the same author.

## Discussion 5.5

- If you have already taken a course with a primary focus on Historical Inquiry and Analysis, think about what you were asked to do and what you learned. If you have not already taken a Historical Inquiry and Analysis course, think about the types of courses you could take.
- In what ways did or might the idea(s) or example(s) discussed above apply in such a course?
- What other ideas or examples would you add to the discussion?

## Media Attributions

- Inquiry and Analysis Icon © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license
- Drake Home © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license



# PART 6: LITERARY INQUIRY AND ANALYSIS

---



*By studying **Literary Inquiry and Analysis**, we can engage with and answer questions associated with diverse literary texts in relation to historical periods, themes, genres, and/or critical theories using literary analysis, critical evaluation, and theoretical interpretations.*

## Perspectives

Built around the 3rd century BCE, one of the most famous libraries that lives in world memory is the Library of Alexandria in Egypt. Legend has it that the library was catastrophically burned down; however, the truth is more that it suffered major setbacks over several years, including a potentially accidental fire (by Julius Caesar’s armies), changes in economic support, and exile of the main librarians. Libraries are repositories of books and knowledge, but they have many vulnerabilities. Indeed, during its lifespan, the Library of Alexandria, which is believed to have held over half a million documents in its time, represents many of these that libraries face: fire, floods, other natural disasters, political and economic upheaval, loss of patronage and staff, and violent conflict. (See ***List of Destroyed Libraries***.)

Tragically, there are many who seek to damage books and the knowledge they can communicate, and libraries are at times deliberately vandalized to prevent that knowledge from being accessible. Richard Ovenden in *Burning the Books: A History of the Deliberate Destruction of Knowledge* (2020) remarks that the “significance of books and archival material is recognised not only by those who wish to protect knowledge, but also by those who wish to destroy it. Throughout history, libraries and archives have been subject to attack. At times librarians and archivists have risked and lost their lives for the preservation of knowledge” (p. 8). An example of individuals protecting libraries takes us back to the library of Alexandria – the modern one built to replace and commemorate the ancient one. In 2011, there was a great deal of civil unrest in Egypt. To protect the library, students, librarians, and others formed a human chain holding hands around the building. Karen Leggett

Abouraya and Susan L. Roth wrote a children's book *Hands Around the Library: Protecting Egypt's Treasured Books* about this event.

## View: "Hands Around The Library"



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://rotel.pressbooks.pub/whydoihavetotakethiscourse/?p=96#oembed-1>

In the fourteenth through the sixteenth century, the city of Timbuktu in modern Mali, designated a UNESCO World Heritage Site in 1988, was a renowned center of learning where books were a sign of wealth and social standing: "In Timbuktu, literacy and books transcended scholarly value and symbolized wealth, power, and baraka (blessings) as well as an efficient means of transmitting information" (Singleton, 2004, p. 3). Even though we do not have an accurate count of exactly how many libraries and books existed in Timbuktu, there were many. Timbuktu scholars traveled all over the Muslim world to copy books in other libraries to bring back, and they hosted many scholars themselves in their own city: "The majority of Muslim libraries maintained a tradition of open access to scholars from around the world" (p. 7). Timbuktu remained a center of scholarship until several of its libraries were looted with many manuscripts dispersed across Africa, although many more – perhaps even more than 350,000 – managed to remain in the city. In 2012, Islamist extremists took over Timbuktu, and, along with destroying religious sites, they targeted these manuscripts as they "portrayed Islam as practiced in this corner of the world as a blend of the secular and the religious — or they showed that the two could coexist beautifully [...] So it was tremendously important [...] to protect and preserve these manuscripts as evidence of both Mali's former greatness and the tolerance that that form of Islam encouraged" (NPR Staff, 2016). Timbuktu Librarian Abdel Kader Haidara resolved not to let anything happen to these books, so he and others began collecting and smuggling as many of the manuscripts as possible out of the city. They used mule carts, boats, and anything else they could find to transport their precious cargo secretly to Bamako where they raised funding to keep them in climate-controlled storage and begin the process of digitization. (See the book *The Bad-Ass Librarians of Timbuktu* by Joshua Hammer for more of this story.)

## View: "Badass Librarians of Timbuktu"





One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://rotel.pressbooks.pub/whydoihavetotakethiscourse/?p=96#oembed-2>

## Text Attributions

The section contains material adapted from *Heritages of Change* by the same author.

## Concepts to Consider

“And the thing about poetry is that it’s not really about having the right answers, it’s about asking these right questions, about what it means to be a writer doing right by your words and your actions, and my reaction is to pay honor to those shoulders of people who used their pens to roll over boulders so I might have a mountain of hope on which to stand, so that I might understand the power of telling stories that matter no matter what.” – **Amanda Gorman, TED Talk, “Using your voice is a political choice”**

What the stories above reveal is the value humans have placed on literary knowledge and creativity in various geographies across the world and across vast amounts of time. We have built great repositories to house such documents, sacrificed to preserve them, and mourned their loss. In chapter 2.3, we encountered Irina Dumitrescu’s article “‘Frivolous’ humanities helped prisoners survive in Communist Romania” (2016) and how essential the liberal arts have been for political prisoners. In her example, literature was particularly mentioned in their memoirs: “Each one testified to the power of the liberal arts—especially literature and foreign languages – to help individuals maintain sanity and a sense of self in conditions designed to destroy them.” She tells us that prisoners “formed study groups, recalling the plots of novels and teaching each other history from memory. Forced into a program of ‘re-education,’ they created their own university instead.” People turn to books and literature in times of stress and difficulty; they look to find themselves in the stories of others and construct ways to call upon their own reserves of strength and resilience.

**Literary Inquiry and Analysis**, while containing elements of reading skills (see Reading in chapter 4.3), allows us to go deeper than comprehension into exploring and questioning human experience. We move beyond the words on the page to their implications, contexts, and applications. Sometimes big emotions and

big ideas can only be communicated or processed in literary form, in fiction or non-fiction, in allegory or satire, in poetry or prose. The human mind is so complex that it at times has to express itself through creativity and imagination, inviting fellow human beings insight into worlds that are not limited by the bounds of reality. If other general education skills teach us what and how the world is, **Literary Inquiry and Analysis** teaches us what we are capable of – positive, negative, and everything in between.

More practically, practicing **Literacy Inquiry and Analysis** combines creative and critical thinking (see Creative and Critical Thinking in chapter 5.10). While we have to think creatively to derive our own meaning from literary works, we also must think critically about the contexts in which they were written and the multiple contexts in which they are received. We learn to interrogate thoughts and ideas, asking more questions than finding answers, which develops comfort living with abstracts and ambiguities, perhaps even with conflicting ideas simultaneously.

Nadya Von Ebers (2017) from the Chicago Academy for the Arts explores literature as an art form and claims that analyzing it emphasizes that “art may involve self-expression, but to a greater purpose beyond the creator, whether to inform, to invoke empathy, to inspire, or simply to entertain.” **Literary Inquiry and Analysis** is a pathway to developing compassion and an understanding of diverse perspectives (see Diverse Perspectives in chapter 5.2). Truong Thi My Van, in “The Relevance of Literary Analysis to Teaching Literature in the EFL [English as a Foreign Language] Classroom,” argues, “Meaning is the result of the two-way relationship between texts and readers, depending on readers’ experience, the reading context, and the difficulty, style, and form of literary language. Meaning is also influenced by how students relate to the authors’ portrayal of identity, culture, gender, and social class” (2009, p. 8). Through literature, we encounter others with different life experiences and backgrounds and get to know them intimately, perhaps more intimately than we at times get to know many people in real life. We learn how to empathize and celebrate both difference and connection.

At the same time that we consider all of these benefits of **Literary Inquiry and Analysis**, we do need to remember that reading can simply be fun!

*View: “What Is Literature For?”*



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://rotel.pressbooks.pub/whydoihavetotakethiscourse/?p=96#oembed-3>



Statue of Black author Harriet Wilson in Milford, New Hampshire (Photo by Kisha G. Tracy)

“Who doesn’t love to read a good story? Who can resist the power of words and images that capture the essence of who we are? **Literary Inquiry and Analysis** may be considered the highest form of aesthetic appreciation that gives access to a variegated human experience through the multilayeredness of language. It creates a bond between diverse cultures and people across the world through the power of stories and literary expression. The diversity of literary genres and movements exemplifies the breathtaking heights of human imagination and articulation. Equally, literary analysis can be a powerful site for critical inquiry into issues of social justice and equity. More accessible than any other discipline, literary inquiry is a primordial appraisal of who we are as both individuals and social beings.” – **Dr. Aruna Krishnamurthy, English Studies, Fitchburg State University**

“Why do we develop ways of reading? Because we are human. Because the written and the spoken words that have come to us from other places and other times contain the collected ideals, thoughts, fears, sorrows, and triumphs of the echoing centuries of our collective experience. In short, they tell us what being human has meant to people who are not us. We learn, from our first stories, that there are treasures in hidden places and trolls in the woods (and worse, monsters in us)—that the world has potential that we didn’t know until a story told us so. Because books are magic, and like any magic there’s a trick and a miracle to them. The trick is that they are half a story, and the miracle is that we conjure the other half when we read them. Unlocking a meaning from the stories we’re given is how we learn, how we make another person’s thoughts knowable to us. By reading or listening vigorously, actively, we learn to fight the monsters, share the triumphs, conquer the fears. We find ourselves in common cause with the struggles of a stranger, or in honorable combat with ideas that we reject even as we understand them. Piece by piece, word by word, we gain entire worlds in the space between what we read and what we understand.” – **Dr. John Sexton, English, Bridgewater State University**

## Literary Inquiry and Analysis and Good, Necessary Trouble

Censorship is nothing new. We have authors as far back as Geoffrey Chaucer in the fourteenth century and John Milton in the seventeenth century writing against the banning of books. More recently, Salman Rushdie, Ibram X. Kendi, Ellen Hopkins, Ta-Nehisi Coates, Neil Gaiman, and many others have spoken out on the problems with censorship.

And, yet, the number of books bans or attempted book bans in the United States is on the rise:

- According to PEN America’s report “Banned in the USA: State Laws Supercharge Book Suppression in Schools,” “[d]uring the first half of the 2022-2023 school year, PEN America recorded 1,477 instances of individual books banned, an increase of 28 percent compared to the prior six months, January – June 2022. That is more instances of book banning than recorded in either the first or second half of the 2021-22 school year. Over this six-month timeline, the total instances of book bans affected is over 800 titles; this equates to over 100 titles removed from student access each month. The 1,477 instances of book bans PEN America tracked this school year affected 874 unique titles. Book bans continue to target books featuring LGBTQ+ themes or LGBTQ+ characters, characters of color, and books on race



and racism” (Meehan & Friedman, 2023).

- The American Library Association (ALA) reported in March 2023 “1,269 demands to censor library books and resources in 2022, the highest number of attempted book bans since [...] more than 20 years ago. The unparalleled number of reported book challenges in 2022 nearly doubles the 729 challenges reported in 2021. A record 2,571 unique titles were targeted for censorship, a 38% increase from the 1,858 unique titles targeted for censorship in 2021. Of those titles, the vast majority were written by or about members of the LGBTQIA+ community and people of color.”

The sheer number of book challenges, the calls to remove books from public and/or school libraries due to content and themes, is alarming enough, but the fact that books by and about LGBTQ+ people and people of color are the majority of these challenges is even more concerning, particularly as the former are being challenged under the guise that they contain more “explicit sexual material” than other books. Of the top most banned books in the period of PEN America’s report, “ten of eleven authors and illustrators are women or non-binary individuals” and “[f]our of the books are written by authors of color and four by LGBTQ+ individuals.” The “prize” for most banned title goes to *Gender Queer: A Memoir*, a 2019 graphic memoir by Maia Kobabe. PEN America also notes that 74% of book bans “are connected to organized efforts, mainly of advocacy groups; elected officials; or enacted legislation” with 20% of those “connected to organized advocacy groups.” These organized efforts have prompted the National Association for the Advancement of Colored People (NAACP) to argue that these book bans are an act of policy violence that “systematically and disproportionately impact Black youth who would benefit from the literary work’s interrogation of society as they shape their understanding of their people’s history” (Moss, 2023). These numbers also explain why in the past year there has been an increase in book challenges that include a list of multiple books instead of only challenging one title at a time.

Book challenges have been met with local community individuals and groups getting into “good, necessary trouble” by opposing the bans in public school or library board meetings, many of which have been reported to include very tense, even violent debate (see *Speaking and Listening* in chapter 4.4 and *Civic Learning* in chapter 5.1). Other methods of resistance have come from campaigns led by the leaders of and members of organizations. *This Story Matters: Standing Up for Students’ Right to Read in the Face of Censorship* is a database created by the National Council of Teachers of English (NCTE) that collects rationales written by experts to provide justification and resources to support teachers continuing to teach controversial books (see *Writing* in chapter 4.5). The American Library Association provided training at their 2023 meeting on book bans, how to confront them, and how to protect librarians against professional and personal attacks. In June 2023, the ALA also renewed the Freedom to Read Statement, which was originally adopted in 1953; the statement begins, “The freedom to read is essential to our democracy. It is continuously under attack.”

“What I tell kids is, don’t get mad, get even. Don’t spend time waving signs or carrying petitions around the neighborhood. Instead, run, don’t walk, to the nearest non-school library or to the local bookstore and get whatever it was that they banned. Read whatever they’re trying to keep out of your eyes and your brain, because that’s exactly what you need to know.” –

**Stephen King, American Author**

## Discussion 5.6

- If you have already taken a course with a primary focus on **Literary Inquiry and Analysis**, think about what you were asked to do and what you learned. If you have not already taken a **Literacy Inquiry and Analysis** course, think about the types of courses you could take.
- In what ways did or might the idea(s) or example(s) discussed above apply in such a course?
- What other ideas or examples would you add to the discussion?

## Media Attributions

- Literary Inquiry and Analysis Icon © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license
- Statue of Harriet Wilson © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license



# PART 7: PERSONAL WELLNESS

---



*By studying **Personal Wellness**, we can develop effective strategies to enhance personal wellness by applying physical, nutritional, and behavioral strategies to improve the quality or state of being healthy in body and mind.*

## Perspectives

During the heart of COVID, many universities canceled Spring Breaks in order to minimize exposure through travel. There was concern that this decision would have an adverse effect on **Personal Wellness** as that break is traditionally a chance for people to decompress before the end of the semester. Some schools addressed this issue by adding Wellness Days throughout the academic calendar. These days were intended to provide both a short break from typical daily activities as well as time to catch up on any work, which is itself an act of wellness. Fitchburg State University developed a campaign around Wellness Days to promote and educate about **Personal Wellness** and called it “Everything Is NOT Normal” to emphasize that it was okay *not* to be okay during a worldwide pandemic. Many university faculty and staff are advocating to continue this practice into future semesters, recognizing that **Personal Wellness** is essential to quality of life.



Logo from Spring 2021 Wellness Days “Everything Is Not Normal” campaign at Fitchburg State University

## Concepts to Consider

**Personal Wellness** is important for everyone – students included. Not only will you do better in school when your health is good, but you’ll be happier as a person. And the habits you develop now will likely persist for years to come. That means that what you’re doing now in terms of personal health will have a huge influence on your health throughout life and can help you avoid many serious diseases. Considerable research has demonstrated that the basic elements of good health – nutrition, exercise, not abusing substances, stress reduction – are important for preventing disease. You’ll live much longer and happier than someone without good habits.

Exercise is good for both body and mind. Indeed, physical activity is almost essential for good health and student success. Like good nutrition and exercise, adequate sleep is crucial for wellness and success. Sleep is particularly important for students because there seem to be so many time pressures – to attend class, study,

maintain a social life, and perhaps work – that most college students have difficulty getting enough. Yet sleep is critical for concentrating well.

Wellness involves feeling good in every respect, in mind and spirit as well as in body. Your emotional health is just as important as your physical health – and maybe more so. If you’re unhappy much of the time, you will not do as well as in college – or life – as you can if you’re happy. You will feel more stress, and your health will suffer. Still, most of us are neither happy nor unhappy all the time. Life is constantly changing, and our emotions change with it. But sometimes we experience more negative emotions than normally, and our emotional health may suffer. Emotional balance is an essential element of wellness. Emotional balance doesn’t mean that you never experience a negative emotion, because these emotions are usually natural and normal. Emotional balance means we balance the negative with the positive, that we can be generally happy even if we’re saddened by some things. Emotional balance starts with being aware of our emotions and understanding them.

Everyone knows about stress, but not everyone knows how to control it. Once you’ve learned how to reduce it where you can and cope with unavoidable stress, you’ll be well on the road to becoming the best person you can be. We all live with occasional stress. Since college students often feel even more stress than most people, it’s important to understand it and learn ways to deal with it so that it doesn’t disrupt your life. It is normal to experience negative emotions. College students face so many demands and stressful situations that many naturally report often feeling anxious, depressed, or lonely. These emotions become problematic only when they persist and begin to affect your life in negative ways. That’s when it’s time to work on your emotional health, just as you’d work on your physical health when illness strikes.

## Text Attributions

This section contains material taken from “Chapter I.8: Successful students take control of their health” and “Chapter I.9: Successful students practice mental wellness” in *A Guide for Successful Students* by Irene Stewart and Aaron Maisonville and is used under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.

## View: “Why Self Care Isn’t Selfish”



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://rotel.pressbooks.pub/whydoihavetotakethiscourse/?p=99#oembed-1>

“University students often face new complex challenges as they transition to a more independent lifestyle with new academic and social environments. As a result physical and emotional health can become an obstacle to maintaining a positive state of wellness. Learning about **Personal Wellness** and how to better manage our own health and fitness is pertinent to building a well-rounded individual. The Global Health Institute defines **Personal Wellness** as ‘the active pursuit of activities, choices and lifestyles that lead to a state of holistic health.’ **Personal Wellness** is multidimensional and includes physical, social, intellectual, emotional, environmental, financial, and spiritual well-being. An experience in our **Personal Wellness** classes will include topics like physical health and fitness, nutritional guidelines and techniques to eat well as a college student, time-management and organization skills, tools to manage emotional stress, and methods to achieve positive behavior changes. The class will often cover the health-related fitness components: cardiorespiratory fitness, muscular fitness, flexibility, and body composition and in relation to maintaining good health and fitness to reduce the risk of prevalent diseases in our society like cardiovascular disease and diabetes.” – **Dr. Jason Talanian, Exercise and Sports Science, Fitchburg State University**

## Personal Wellness and Good, Necessary Trouble

Getting in “good, necessary trouble” can exact a toll. Some of the price people pay may be due to unexpected violence. Certainly, we saw with John Lewis that he suffered for participating in the Civil Rights Movement, as did Harriet Tubman, who was attacked and hurt often in her career as a conductor on the Underground Railroad. Retaliation or counter-protests can be a real concern. It is important to consider issues of personal safety when attending protests, from self-defense to dehydration.

Protestors with disabilities may also have certain needs. The Liberty organization in the United Kingdom provides advice for marching while disabled, including wearing earplugs, being familiar with a march route, and bringing emergency medications. In 2020, *Teen Vogue* and Amnesty International offered advice for being an activist when you are unable to attend protests, noting the Disability March that organized online during the Women’s March of 2017.

A more common effect of feeling the need to participate in “good trouble” is mental. It can be exhausting to work for issues you care about, maybe rarely ever seeing immediate progress. Also, those affected most closely or directly by the issues are even more likely to feel stress, especially considering historically marginalized groups experience higher levels of emotional labor (Kelly, et. al., 2021) and worse health outcomes in almost every area of well-being (Leitch, et. al., 2021). Utah State University Counseling and Psychological Services

has a page on their website dedicated to “Black Lives Matter. Black Mental Health Matters” on which they begin by acknowledging those in their community “suffering from the painful effects of continuing violence against Black people and the systemic racism that pervades our society.” Mass Humanities provides a “Trauma Informed Discussion Guide” (2023) for their annual events “Reading Frederick Douglass Together,” acknowledging that racism is a public health risk and listening to or reading Douglass’ speech “What to the Slave Is the Fourth of July?” “forces us to reckon with the legacy of slavery and the promise of democracy” and “discussing its content and context can result [in] racial or historical traumatization and re-traumatization for participants and audience members.” What seem like relatively low-stress activities, such as a historical reenactment, can cause mental distress under the right circumstances.

On the other hand, some people have found that participating in “good trouble” is actually a benefit to mental health. Élodie C. Audet, et.al. (2022, p. 689), in their study “Better together: Family and peer support for Black young adults during the COVID-19 pandemic and the Black Lives Matter movement,” demonstrates that “engaging in political activism may act as a protective factor for certain young adults (Ballard et al., 2020) and is associated with higher levels of psychological well-being (Dwyer et al., 2019). Additionally, political activism may mitigate stress and isolation during intense periods of transition (Hope et al., 2018).” Some studies have concluded more mixed results. Parissa J. Ballard, Xinyu Ni, and Nicole Brocato (2020) note that “‘traditional’ forms of political engagement [voting, etc.] were related with better wellbeing while ‘non-traditional’ forms of political engagement [protesting, etc.] were unrelated or negatively related with wellbeing,” perhaps due to the stresses of protesting discussed above. Ballard, Ni, and Brocato found that there was a difference between politically-active Black and Latinx students in particular with the former reporting less stress and the latter reporting more symptoms of depression. Essentially, we all need to be aware of mental health and how it can affect people differently, never assuming that what we might consider uplifting is the same for everyone.

## Discussion 5.7

- If you have already taken a course with a primary focus on **Personal Wellness**, think about what you were asked to do and what you learned. If you have not already taken a **Personal Wellness** course, think about the types of courses you could take.
- In what ways did or might the idea(s) or example(s) discussed above apply in such a course?
- What other ideas or examples would you add to the discussion?

## Media Attributions

- Personal Wellness Icon © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license

- Wellness Days Logo © Fitchburg State University is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license

# PART 8: PROCEDURAL AND LOGICAL THINKING

---



*By studying **Procedural and Logical Thinking**, we can use a rational, systematic procedure to arrive at conclusions, examine or build underlying patterns and structures, or deduce further information.*

## Perspectives

You are playing a video game. For the sake of our story, we will say it is *Uncharted 4: A Thief's End* (no real spoilers ahead!). On the historic trail of famous pirates, at one point you find yourself in a clock tower with all kinds of cogs, levers, ropes, and bells. At first glance, it is very chaotic and difficult to decide what to do, other than knowing that you likely need to climb up the levels of the tower – no doubt dramatically, in true Nathan Drake fashion. But what is the trick? You can start pressing random levers, which might eventually and accidentally do something that would tell you what to do. Or you can think about the logic of the game.

First, you know your character has a journal that has helped before with other puzzles, so you pull that out. Sure enough, there are the same zodiac symbols you are seeing in the tower, and they are listed in a certain order. Second, now you can climb with a plan, and you systematically visit each symbol in order, skipping over ones you encounter that you will come back to later, and pull the lever on each one until the next path in the game unlocks.

While the chaotic pushing of buttons method *might* prove successful at some point, it would probably be unnecessarily time-consuming, not to mention frustrating, when you could be moving along to a more interesting part of the game. By thinking logically and following a procedure, the puzzle unfolds itself, allowing you to continue to hunt pirate treasure and fight villains.

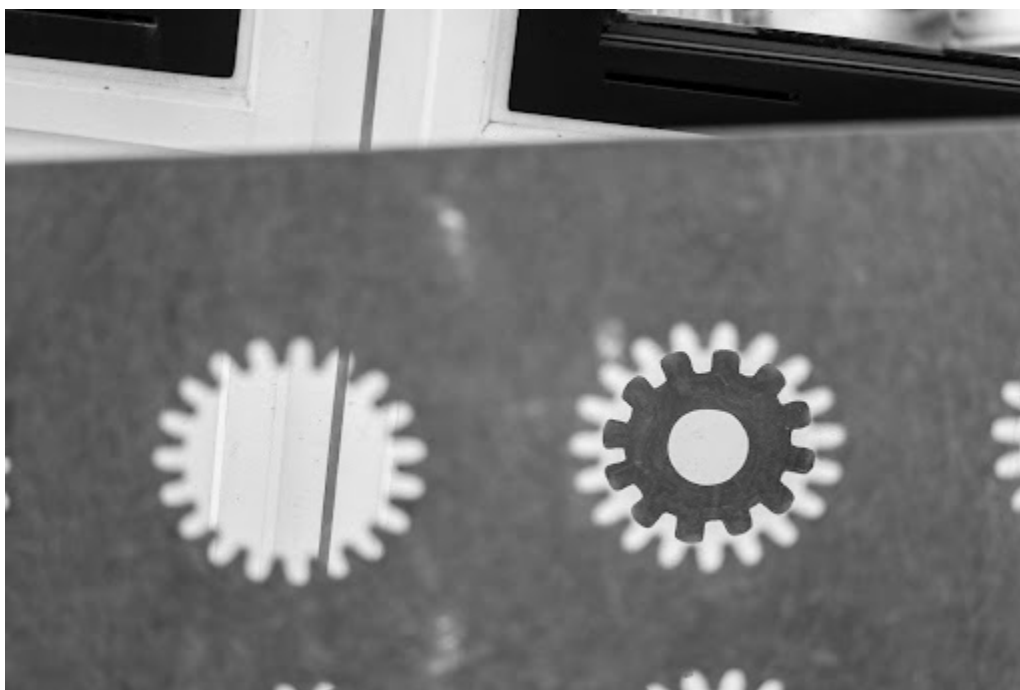
## Concepts to Consider

**Procedural and Logical Thinking** skills in other contexts may be more complex than a video game, but the principles are the same. While always focusing on the overarching skills the name implies, **Procedural and Logical Thinking** can vary in emphasis in different fields.

- In science, it can refer to “investigation design and looking for patterns and relationships” (Roberts, 2001, p. 116) or, in other words, “the knowledge about specific steps in scientific inquiry (e.g. formulating hypotheses, measuring dependent and varying independent variables, repeating measurements), and why they are essential (regarding objectivity, reliability, and validity)” (Arnold, Mühling, & Kremer, 2023, p. 372). (see Scientific Inquiry and Analysis in chapter 5.10)
- In computers and programming, it can be “a set of mental tools that help people break down a difficult problem into smaller subtasks, represent problems, interpret data, compose algorithms that a computer can execute, and take correctness into account when trying to solve a problem” (Veenman, Tolboom, & van Beekum, 2022).
- In mathematics, it can be defined as the “ability to apply procedures efficiently, flexibly, and accurately; to transfer procedures to different problems and contexts; to build or modify procedures from other procedures; and to recognize when one strategy or procedure is more appropriate to apply than another” (“Procedural Fluency in Mathematics”). (see Quantitative Reasoning in chapter 4.2.
- In terms of writing, it can be applied to the writing process and logical flow: “Readers don’t want bumps, unintended surprises or to feel threatened in any way. They don’t want to follow a train of thought, only for it to lead to a dead-end, or for a new idea to be dumped on them without warning. Just because your sentences have a literal stop between them, and a gap between paragraphs, doesn’t mean that readers want stops and gaps in the flow of logical thinking” (“Logical Flow”). (see Writing in chapter 4.5)

Other fields and skills have their own ways of applying **Procedural and Logical Thinking** skills, depending on what is needed in order to achieve their respective goals.





Logo of Mt. Washington Cog Railway in New Hampshire (Photo by Kisha G. Tracy)

**“Procedural and Logical Thinking** is a critical part, mostly of the integrative content in a general education program. This is required for problem solving, where the student is sometimes called to break down a larger problem into smaller ‘chunks.’ These sub-problems are analyzed, after which possible solutions are generated and evaluated before creating a final design or solution. Problem solving in STEM related fields, especially in the Health and Natural Sciences, leverages ‘Systems Thinking’ where laws of science and mathematics are applied in a specific sequence. Mathematical logic is critical in arriving at the solution of problems and is applied in logical steps that generally require increasing levels of cognitive ability.” – **Dr.**

**Soumitra Basu, Engineering Technology, Fitchburg State University**

## Procedural and Logical Thinking and Good, Necessary Trouble

The development of COVID vaccines provides us with an excellent example of **Procedural and Logical Thinking** over a long period of time, and knowing how that process worked is in itself an act of “good,

necessary trouble” considering misinformation and disinformation about vaccines (see Information Literacy in chapter 4.1).

The following is a combination taken from both the National Institutes of Health (NIH) timeline “Decades in the Making: mRNA COVID-19 Vaccines” and the Mayo Clinic timeline “COVID-19 and related vaccine development and research”:

- 1961 to 1990 – Scientists discover mRNA and how it can either activate or block protein production in cells. They start to study its use in medicine.
- 1984 – Paul A. Krieg, Ph.D., Douglas A. Melton, Ph.D., Tom Maniatis, Ph.D., and Michael Green, Ph.D. and colleagues at Harvard University use a synthesized RNA enzyme to make biologically active messenger RNA (mRNA) in a lab.
- 1987 – Robert W. Malone, M.D., M.S. mixes mRNA with fat droplets. He discovers that when human cells are added to this mixture, they absorb the mRNA and make proteins. Dr. Malone also finds that frog embryos absorb mRNA. These experiments are considered early steps in the eventual development of mRNA-based COVID-19 vaccines.
- 1990s – Researchers test mRNA as a treatment in rats and as an influenza and cancer vaccine in mice. [Note: there are ethical concerns with using animals in experiments.]
- Early 2000s – NIH scientists lay the foundation for structure-based vaccine design by finding that the structure of a protein on the surface of the human immunodeficiency virus allows it to enter human cells.
- 2005 – A laboratory breakthrough shows that modified mRNA can safely deliver instructions to cells without over-activating the body’s immune system.
- 2005 to 2016 – Scientists investigate the use of lipids as envelopes to deliver information to the cells of the body. These studies eventually lead to the creation of the lipid nanoparticles used as the outer envelopes for mRNA vaccines against COVID-19.
- 2013 – NIH scientists discover the structure of virus proteins that let viruses invade cells. This finding leads scientists to create the first stabilized proteins for use in vaccines that provoke a strong immune response to viruses such as RSV, a major cause of severe disease in infants and older adults.
- 2014 to 2018 – NIH’s response to the Ebola epidemic in the Democratic Republic of Congo helps establish pathways to streamline and speed up regulatory review and emergency use of investigational treatments during critical disease outbreaks.
- 2016 – By stabilizing the coronavirus “spike protein” that lets HKU1, a form of the common cold, invade cells, NIH scientists are able to better understand coronavirus immunity.
- 2016 – Scientists from NIH and Moderna begin to collaborate on a general vaccine design that uses viral mRNA.
- 2017 – NIH scientists stabilize the spike protein that MERS uses to invade cells, allowing researchers to better understand how to build an effective vaccine against coronaviruses.

- 2017 – Through study of a Zika virus DNA-based vaccine, NIH scientists discover that gene-based vaccines, such as those using mRNA, are safe and effective, paving the way for development of mRNA vaccines.
- 2019 – NIH and Moderna scientists plan for Phase 1 clinical trials to test the safety of mRNA vaccines for Nipah virus; the trials began in 2022.
- December 31, 2019 – The first cluster of people sick with what is now called COVID-19 is reported in Wuhan, China. Global response begins almost right away. The U.S. government comes together with private, non-governmental, and academic organizations to begin work on COVID-19 vaccines.
- January 2020 – Chinese scientists share the first genetic sequence of SARS-CoV-2 with the NIH database GenBank. Scientists from NIH and Moderna quickly pivot from studies of other viral vaccines to focus on a vaccine candidate for COVID-19, mRNA-1273, to respond to the outbreak. Researchers take what was previously learned from vaccine studies of SARS-CoV, MERS-CoV and other viruses to develop vaccines that prevent COVID-19. Researchers also study COVID-19 symptoms, long-term effects, diagnostic tests, antibody tests, treatments and drugs.
- March 16, 2020 – NIH clinical trials for the Moderna mRNA vaccine begin.
- April 17, 2020 – NIH launches Accelerating COVID-19 Therapeutic Interventions and Vaccines (ACTIV), a first-of-its-kind public-private partnership for developing COVID-19 treatments and vaccines.
- May 15, 2020 – Operation Warp Speed launches to coordinate federal government efforts that speed up the approval and production of reliable COVID-19 diagnostics, vaccines, and treatments.
- November 16, 2020 – A large-scale Phase 3 clinical trial of the Moderna mRNA vaccine shows promising interim results.
- December 11, 2020 – The FDA [the U.S. Food and Drug Administration] grants an emergency use authorization (EUA) to the Pfizer-BioNTech mRNA vaccine for people age 16 and older.
- December 18, 2020 – The FDA grants an EUA to the Moderna mRNA vaccine for people age 18 and older.
- August 23, 2021 – The FDA grants full approval to the Pfizer-BioNTech mRNA vaccine for people age 16 and older.
- March 14, 2022 – NIH launches Phase 1 clinical trials for three mRNA HIV vaccines. These vaccines apply lessons learned from the development of mRNA vaccines for COVID-19.
- August 31, 2022 – The FDA grants an EUA of the Moderna and Pfizer-BioNTech COVID-19 vaccines to authorize bivalent formulations for use as a booster dose. These updated boosters contain mRNA components for both the original strain of SARS-CoV-2 and its Omicron variant.

What this (incomplete) timeline reveals is the procedural and logical process the development of the COVID vaccines underwent. Rather than springing out of nowhere, they are the product of a complex process of experimentation (see Scientific Inquiry and Analysis in chapter 5.9) and logical application over decades.

## Discussion 5.8

- If you have already taken a course with a primary focus on **Procedural and Logical Thinking**, think about what you were asked to do and what you learned. If you have not already taken a **Procedural and Logical Thinking** course, think about the types of courses you could take.
- In what ways did or might the idea(s) or example(s) discussed above apply in such a course?
- What other ideas or examples would you add to the discussion?

## Media Attributions

- Procedural and Logical Thinking Icon © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license
- Cog Railway Logo © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license

# PART 9: SCIENTIFIC INQUIRY AND ANALYSIS

---



*By studying **Scientific Inquiry and Analysis**, we can engage with and answer questions about the natural and physical world using scientific practices including collecting, analyzing, and interpreting data.*

## Perspectives

When your father is a high school biology teacher, you are pretty much expected to participate in middle and secondary school science fairs. Your experiments are of a bit higher quality than your peers. You have actual hypotheses and research methods. You do literature reviews. You learn how to write an abstract.

But, as a child or young adult, it is difficult to fully comprehend the benefits of this kind of practice. It can seem burdensome to follow certain protocols, to make sure all the conditions of an experiment are thought through, to repeat tests over and over again. It is not until years later, when you find yourself using principles of the scientific method to narrow down the causes and treatment of an illness or when you question the validity of the methods used in popular science claims, that you realize how the skills you learned apply to everyday life.

## Concepts to Consider

Studying **Scientific Inquiry and Analysis** is about more than memorizing the periodic table or being able to identify parts of a cell. As Ros Roberts (2001, p. 113) tells us, “science education should be more than just [...] the ‘things’ that scientists know and have found out. It should enable [students] to ‘think like scientists’ and understand ‘the nature of science’.” Bruce Alberts (2022, p. 154-155) defines **Scientific Inquiry and Analysis** as helping to develop people “who investigate the world as scientists do [and who routinely solve their

everyday problems as scientists do], using experiment, logic and evidence.” In other words, **Scientific Inquiry and Analysis** goes beyond content knowledge, although that is important as well, and trains a person to apply a scientific lens to the world. And, as the National Academies of Sciences, Engineering, and Medicine “Call to Action for Science Education: Building Opportunity for the Future” (2021) avows, **Scientific Inquiry and Analysis** is “essential for *all people* navigating the world, not just for scientists and other science, technology, engineering, and mathematics (STEM) professionals” (see also Marincola, 2006). These skills are not only for professionals working in specific fields. We can all benefit.

In 2011, the National Science Teaching Association adopted the “Quality Science Education and 21st-Century Skills” position statement. They note in that statement that “science education can offer a rich context for developing many 21st-century skills, such as critical thinking, problem solving, and information literacy especially when instruction addresses the nature of science and promotes use of science practices,” all of which “not only contribute to the development of a well-prepared workforce of the future but also give individuals life skills that help them succeed” (see Information Literacy in chapter 4.1 and Critical Thinking in 5.10). The American Chemical Society produced their own “Science Education Policy” position statement in 2023, asserting, “Science literacy and expertise are essential to the function of modern society. Understanding concepts and processes of science, including chemistry, help to make sense of and to address the complex challenges encountered every day” and promotes a desire to “prepar[e] current and future learners with scientific knowledge and skills to contribute to society and to address global health, environmental, and economic challenges.” These are ambitious goals that elevate the significance of engaging in **Scientific Inquiry and Analysis**.

In an article arguing that every college student needs to take science courses, Chad Orzel (2015) highlights that, beyond that it tells us literally what physically makes up a human, science is part of what makes us human in that scientific inquiry is an essential aspect of the human experience and that scientific thinking is a part of our everyday activities. He also notes that, no matter how we personally feel about science, it will be a part of our future lives and affect us in a “deep and profound way.” Thus, we might want to be familiar with **Scientific Inquiry and Analysis** to meet those issues.

At the same time that we consider all of these benefits of **Scientific Inquiry and Analysis**, we do need to remember that science can simply be exciting to study!



Mushroom in a private yard in Ayer, Massachusetts (Photo by Kisha G. Tracy)

“We live in an era of misinformation and constant news cycles. How, as citizens, can we distinguish between reliable and unsupported claims and make evidence-based decisions that will positively impact our health, our communities, and our planet? Understanding the scientific process gives us the confidence to question what we read and break complex information into smaller, more digestible components. Many of us have heard about the ‘scientific method’ in high school, but further developing our aptitude in scientific literacy and analysis allows us to apply those higher-level, critical thinking skills in multiple aspects of our lives. For example, suppose you are diagnosed with a mild health condition where there are several treatment possibilities. Having the ability to make evidence-based decisions gives you an advantage when working with your health care team. This is highly advantageous when making a logical treatment choice based on medical advice as well as published research on the efficacy, side effects, and long-term risks of each treatment. **Scientific Inquiry and Analysis** in the general education curriculum teaches you how to test hypotheses, approach problems in a strategic way, and develop creative solutions based on data and evidence. Whether you are in a STEM field or are focused on the humanities, each of us has the opportunity to apply the scientific



process in our careers to make new discoveries that help solve the many societal challenges that we face.” – **Dr. Erin Rehrig, Biology and Chemistry, Fitchburg State University**

## Scientific Inquiry and Analysis and Good, Necessary Trouble

The COVID-19 pandemic emphasized in many ways the necessity of **Scientific Inquiry and Analysis**. From understanding how the virus was transmitted to choosing ways to protect ourselves, “know the science” became almost a daily mantra. The National Academies of Sciences, Engineering, and Medicine “Call to Action for Science Education” states that scientific thinking helps “people to address complex challenges [and] rein in life-threatening problems such as those wrought by a global pandemic.” If we learned anything from COVID-19, it was that we can need new areas of knowledge and skills at any given time.

The science of masking, in particular, took center stage. The science on masks falls into various phases. In the first phase, right before and after the pandemic was declared, when everyone and everything was in chaos, masks were advised, but they were scarce, particularly hospital-grade ones. At this time, with hospitals filling up and infection rates and the number of deaths skyrocketing, it was strongly encouraged to save masks and other personal protective equipment (PPE) for healthcare personnel. Research was focused on building on already existing studies of masks on other diseases like tuberculosis and influenza. Joseph M. Courtney and Ad Bax (2021) posited that masks, in addition to their traditional function of preventing spread of disease, also could contribute to the build-up of humidity, which can delay and/or reduce lower respiratory tract infections.

In the second phase, non-healthcare personnel were encouraged to use any face covering available: non-surgical masks, bandanas, any cloth over the nose and mouth (see Howard, et. al., 2021). There was a surge in people making their own masks, both with and without filters. In April 2021, research on states with mask mandates versus ones without revealed that “high adherence to mask wearing could be a key factor in reducing the spread of COVID-19” (Fischer, et. al., 2021). The science at this time began to indicate that SARS-CoV-2 was spread through large droplets that settled and stayed on surfaces, indicating that close contact was more concerning than airborne transmission.

In the third phase, in May 2021, scientists discovered that SARS-CoV-2 actually could indeed linger in the air and spread through airborne transmission. This realization indicated that it could be inhaled more than six feet away, which meant that advice on “close contact” needed to be reevaluated. There was then a focus on masks with respirators for those who worked in close proximity to a lot of other people, especially in an enclosed environment without good ventilation. There was more of a focus on N95s or KN95s, which



seal to the face, as opposed to surgical masks. N95s and KN95 were now more accessible to all people and not only healthcare workers, meaning that homemade masks or the like were no longer advised. Research by Jeremy Howard, et. al. (2021), also suggested a focus on “mask wearing by infectious people (‘source control’) with benefits at the population level, rather than only mask wearing by susceptible people, such as healthcare workers.” Prior to this type of study, the focus was more on the healthy not being infected, rather the already infected spreading the disease to others.

In convincing research, Jason Abaluck, et. al., conducted a “large, cluster-randomized trial in Bangladesh involving hundreds of thousands of people” that also studied the effect of public interventions on mask-wearing compliance and published in late 2021 that increased mask usage “reduced symptomatic SARS-CoV-2 infections, demonstrating that promoting community mask-wearing can improve public health.” Other studies support these conclusions (see Tufekci, 2023).

Unfortunately, there has been a great deal of controversy over masks and their efficacy. There have been protests against mask mandates, violent incidents when people have refused to wear masks in situations prescribed by law or common sense, and, even still ongoing, altercations between individuals who hold conflicting beliefs about mask-wearing. These situations indicate how science, particularly misinformation and disinformation about science, intersects with civic and social issues (see Information Literacy in chapter 4.1 and Civic Learning in 5.1). Some have pointed to the evolving guidance on masking as evidence that science is, if not wrong, at least unreliable, yet this view misunderstands the scientific process and would benefit from knowledge of how science works, with hypotheses, experiments, more experiments, and taking new information into consideration as it becomes available, especially in a rapidly-changing health crisis (see Piper, 2023; Oliver, Ungrin, & Joe Vipond, 2023).

## Discussion 5.9

- If you have already taken a course with a primary focus on **Scientific Inquiry and Analysis**, think about what you were asked to do and what you learned. If you have not already taken a **Scientific Inquiry and Analysis** course, think about the types of courses you could take.
- In what ways did or might the idea(s) or example(s) discussed above apply in such a course?
- What other ideas or examples would you add to the discussion?

## Media Attributions

- Scientific Inquiry and Analysis Icon © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license
- Mushroom in Yard © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license

## PART 10: DEVELOPING SKILLS

---

Besides honing Foundation skills further and applying them in a variety of contexts when taking Exploration general education courses, there are three other skills that we develop along the way: Creative Thinking, Critical Thinking, and Digital Literacy.

### Creative Thinking



*By studying **Creative Thinking**, we can combine or synthesize existing ideas, images, or expertise in original ways; think, react, and work in imaginative ways; engage in innovation, divergent thinking, and risk taking.*

“Creative thinking is the way of thinking that leads to the generation of valuable and original ideas. All people are capable of engaging in creative thinking and practicing ‘everyday’ creativity (addressing everyday activities in a non-conventional way). Creative thinking can be applied not only to contexts related to the expression of imagination, such as creative writing or the arts, but also to other areas where the generation of ideas is functional to the investigation of issues, problems or society-wide concerns [...] Creative thinking can have a positive influence on students’ academic interest and achievement, identity and socio-emotional development by supporting the interpretation of experiences, actions and events in novel and personally meaningful ways. Beyond the classroom, creative thinking can help students adapt to a constantly and rapidly changing world. Supporting students’ creative thinking can help them to contribute to the development of the society they live in, today and as future workers: organisations [sic] and societies around the world increasingly depend on innovation and

knowledge creation to address emerging and complex challenges, giving urgency to innovation and creative thinking as collective enterprises.” – **Organisation for Economic Co-operation and Development Programme for International Student Assessment**

## Critical Thinking



*By studying **Critical Thinking**, we can develop and practice the mental habit of comprehensively exploring ideas, artifacts, and evidence before formulating an opinion or conclusion, as well as allowing previously held opinions or conclusions to be adjusted with the introduction of new information.*

### “The Problem

Everyone thinks; it is our nature to do so. But much of our thinking, left to itself, is biased, distorted, partial, uninformed or down-right prejudiced. Yet the quality of our life and that of what we produce, make, or build depends precisely on the quality of our thought. Shoddy thinking is costly, both in money and in quality of life. Excellence in thought, however, must be systematically cultivated.

### A Definition

Critical thinking is that mode of thinking – about any subject, content, or problem – in which the thinker improves the quality of his or her thinking by skillfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them.

### The Result

A well cultivated critical thinker:

- raises vital questions and problems, formulating them clearly and precisely;
- gathers and assesses relevant information, using abstract ideas to interpret it effectively, and comes to well-reasoned conclusions and solutions, testing them against relevant criteria and standards;
- thinks open mindedly within alternative systems of thought, recognizing and assessing, as need be, their assumptions, implications, and practical consequences; and
- communicates effectively with others in figuring out solutions to complex problems.

Critical thinking is, in short, self-directed, self-disciplined, self-monitored, and self-corrective thinking. It presupposes assent to rigorous standards of excellence and mindful command of their use. It entails effective communication and problem solving abilities and a commitment to overcome our native egocentrism and sociocentrism.” – **Richard Paul and Linda Elder, *The Miniature Guide to Critical Thinking Concepts and Tools***

## Digital Literacy



*By studying **Digital Literacy**, we can effectively use information and communication technologies to explore ideas, solve problems, and find, evaluate, create, and communicate information in ways that require both cognitive and technical skills.*

“In today’s rapidly advancing digital landscape, digital literacy has emerged as a vital skill set for individuals. Its importance lies in the numerous advantages it offers. Digital literacy enables individuals to effectively access and evaluate the vast amount of information available online. With the ability to navigate websites, search engines, and online databases, individuals can locate accurate and reliable information, facilitating learning and informed decision-making. Digital literacy equips individuals with the necessary communication and collaboration skills to thrive in the digital era. From email etiquette to video conferencing and collaborative platforms, these skills enhance personal and professional interactions, fostering productivity and teamwork. Furthermore, digital literacy nurtures critical thinking by empowering individuals to discern between credible sources and misinformation. It enables them to evaluate the reliability, accuracy, and bias of digital content, encouraging a discerning approach to information consumption. Digital literacy also plays a pivotal role in ensuring online safety and privacy. By understanding privacy settings, recognizing online threats, and adopting secure online practices, individuals can safeguard their personal information and protect themselves from cyber threats. Additionally, digital literacy has become increasingly valued by employers, as it enhances employability and career prospects. Proficiency in digital tools, software, and online platforms opens up a plethora of job opportunities in various industries. Lastly, digital literacy empowers individuals to actively engage in and participate in democratic processes. Access to government services, staying informed about social and political issues, and contributing to public discussions through digital platforms promote active citizenship and societal progress. In essence, digital literacy is a critical skill that enables individuals to navigate, comprehend, and harness the benefits of the digital realm, while also being equipped to address its challenges effectively.” – **Ralph Fasano, Director of Digital Learning, Fitchburg State University**

## Discussion 5.10

- Think about courses you have taken in college or high school and how Creative Thinking, Critical Thinking, and Digital Literacy was a part of them.
- In what ways did or might the idea(s) or example(s) discussed above apply in such courses?
- What other ideas or examples would you add to the discussion?

## Media Attributions

- Creative Thinking Icon © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license
- Critical Thinking Icon © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license
- Digital Literacy Icon © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license

## PART 11: FINAL THOUGHT

---

Exploration courses do exactly what they claim; they give us the opportunity to explore, to discover new subjects and fields of study that we may never have encountered before and for which we may find we have a passion or a desire to know more. Combined, they present us with a toolbox of perspectives and ways of thinking to address personal and professional problems, interpret the situations and experiences we encounter, and appreciate the rich diversity of life.

## PART 12: REFERENCES AND FURTHER READING

---

- Abouraya, Karen Leggett, & Susan L. Roth. 2012. *Hands around the library: Protecting Egypt's treasured books*. Dial.
- Abouraya, Tharwat. 2020, March 24. Hands around the library. *YouTube*. Retrieved from <https://youtu.be/VvaZxlvBu8>.
- Abaluck, Jason, et. al. 2021. Impact of community masking on COVID-19: A cluster-randomized trial in Bangladesh. *Science*, 375(6577). Retrieved from <https://doi.org/10.1126/science.abi9069>.
- Advancing civic learning and engagement in democracy. 2012, January. *U.S. Department of Education*. Retrieved from <https://www.ed.gov/sites/default/files/road-map-call-to-action.pdf>.
- Alberts, Bruce. 2022. Why science education is more important than most scientists think. *Federation of European Biochemical Societies Letters*, 596, pp. 149-159. Retrieved from <https://febs.onlinelibrary.wiley.com/doi/epdf/10.1002/1873-3468.14272>.
- Americans speak out about the arts in 2018. 2018, September. *Americans for the Arts*. Retrieved from <https://www.americansforthearts.org/node/101584>.
- Ames, Allison, Kristen L. Smith, Elizabeth R. H. Sanchez, Lori Pyle, Tim Ball, & William J. Hawk. 2017. Impact and persistence of ethical reasoning education on student learning: results from a module-based ethical reasoning educational program. *International Journal of Ethics Education* 2, pp. 77–96. Retrieved from <https://doi.org/10.1007/s40889-016-0031-x>.
- Amnesty International USA. 2020, May 31. How to be an activist when you're unable to attend protests. *Teen Vogue*. Retrieved from <https://www.teenvogue.com/story/how-to-be-an-activist-when-youre-unable-to-attend-protests>.
- Arif, Zara. 2021, December 27. The jalis of west Africa. *Right for Education Foundation*. Retrieved from <https://rightforeducation.org/2021/12/27/the-jalis-of-west-africa/>.
- Arnold, Julia C. , Andreas Mühling, & Kerstin Kremer. 2023. Exploring core ideas of procedural understanding in scientific inquiry using educational data mining. *Research in Science & Technological Education*, 41(1), pp. 372-392. Retrieved from <https://doi.org/10.1080/02635143.2021.1909552>.
- Art for life's sake: The case for arts education. 2021, September. *American Academy of Arts & Sciences*. Retrieved from <https://www.amacad.org/publication/case-for-arts-education>.
- Asch, Chris Myers, & Derek Musgrove. 2020, August 5. A monument to black resistance and strength. *Perspectives on History*. Retrieved from <https://www.historians.org/research-and-publications/perspectives-on-history/summer-2020/a-monument-to-black-resistance-and-strength-considering-washington-dcs-emancipation-memorial>.



- Audet, Élodie C., Julie Leboeuf, Anne C. Holding, John Davids, Xiaoyan Fang, & Richard Koestner. 2022. Better together: Family and peer support for Black young adults during the COVID-19 pandemic and the Black Lives Matter movement. *Trends in Psychology*, 30, pp. 688–705 (2022). Retrieved from <https://doi.org/10.1007/s43076-022-00157-8>.
- Ballard, Parissa J., Alison K. Cohen, & Joshua Littenberg-Tobias. 2016. Action civics for promoting civic development: Main effects of program participation and differences by project characteristics. *American Journal of Community Psychology*, 58(3), pp. 377–390. Retrieved from <https://doi.org/10.1002/ajcp.12103>.
- Ballard, Parissa J., Xinyu Ni, & Nicole Brocato. 2020. Political engagement and wellbeing among college students. *Journal of Applied Developmental Psychology*, 71. Retrieved from <https://doi.org/10.1016/j.appdev.2020.101209>.
- Baker, Jennifer. 2020, July 27. Is it ethical to protest? *Psychology Today*. <https://www.psychologytoday.com/us/blog/the-love-wisdom/202007/is-it-ethical-protest>.
- Biden, Joe. 2023, June 29. Remarks by President Biden on the Supreme Court’s decision on affirmative action. *The White House*. Retrieved from <https://www.whitehouse.gov/briefing-room/speeches-remarks/2023/06/29/remarks-by-president-biden-on-the-supreme-courts-decision-on-affirmative-action/>.
- Black mental health matters. *Utah State University Counseling and Psychological Services*. Retrieved from <https://www.usu.edu/aggiwellness/caps/black-mental-health-matters>.
- Blevins, Brooke, Kevin Magill, & Cinthia Salinas. 2020. Critical historical inquiry: The intersection of ideological clarity and pedagogical content knowledge. *Journal of Social Studies Research*, 44(1), pp. 35–50. Retrieved from <https://doi-org.fitchburgstate.idm.oclc.org/10.1016/j.jssr.2019.09.003>.
- Bortolot, Alexander Ives. 2003, October. Ways of recording African history. *The Met Heilbrunn Timeline of Art History*. Retrieved from [https://www.metmuseum.org/toah/hd/ahis/hd\\_ahis.htm](https://www.metmuseum.org/toah/hd/ahis/hd_ahis.htm).
- Bychowski, Gabrielle. 2018, November 1. Were there transgender people in the Middle Ages? *The Public Medievalist*. Retrieved from <https://publicmedievalist.com/transgender-middle-ages/>.
- Byers, David S., & Mary Cerulli. 2021. Staying in their own lane: Ethical reasoning among college students witnessing cyberbullying. *Journal of Diversity in Higher Education*, 14(4), pp. 508–518. Retrieved from <https://doi.org/10.1037/dhe0000180>.
- Cineas, Fabiola, & Ian Millhiser. 2023, June 29. The SCOTUS decision on affirmative action in colleges, explained. *Vox*. Retrieved from <https://www.vox.com/policy-and-politics/23405267/affirmative-action-supreme-court-ruling-race-harvard-unc-chapel-hill>.
- Civic engagement. *Maryland Civic Education Coalition*. Retrieved from <https://www.mdcivics.org/>.
- Civic engagement: Terminology. *Up to Us*. Retrieved from <https://www.itsuptous.org/blog/10-ways-practice-civic-engagement-home>.
- Civic learning. *Massachusetts Department of Education*. Retrieved from <https://www.mass.edu/strategic/civic.asp>.
- Civics Academy SA. 2019, May 14. Why is civic education important? *YouTube*. Retrieved from [https://youtu.be/FWxOt\\_ZxEUU](https://youtu.be/FWxOt_ZxEUU).

- Corple, Danielle J., Carla B. Zoltowski, Megan Kenny Feister, & Patrice M. Buzzanell. 2020. Understanding ethical decision-making in design. *Journal of Engineering Education*, 109(2), pp. 262–280. Retrieved from <https://doi.org/10.1002/jee.20312>.
- Courtney, Joseph M., & Ad Bax. 2021. Effect of relative humidity on hydrogen peroxide production in water droplets. *Biophysical Journal*, 120, pp. 994–1000. Retrieved from <https://doi.org/10.1016/j.bpj.2021.02.002>.
- COVID-19 and related vaccine development and research. *Mayo Clinic*. Retrieved from <https://www.mayoclinic.org/diseases-conditions/history-disease-outbreaks-vaccine-timeline/covid-19>.
- Decades in the making: mRNA COVID-19 vaccines. *National Institutes of Health*. Retrieved from <https://covid19.nih.gov/nih-strategic-response-covid-19/decades-making-mrna-covid-19-vaccines>.
- Demonstrations and political violence in America: New data for summer 2020. 2020, September 3. *Armed Conflict Location and Event Data Project*. Retrieved from <https://acleddata.com/2020/09/03/demonstrations-political-violence-in-america-new-data-for-summer-2020/>.
- De Witte, Melissa. 2021, December 16. Stanford historians put 2021 into its historical context. *Stanford University*. Retrieved from <https://news.stanford.edu/2021/12/16/history-can-tell-us-2021/>.
- D'Silva, Beverley. 2023, July 2. Sketching and drawing have grown in popularity in recent years – why? Beverley D'Silva explores the healing power of mindful drawing. *BBC*. Retrieved from <https://www.bbc.com/culture/article/20230630-how-drawing-can-make-you-happier-and-calmer>.
- Dumitrescu, Irina. 2016, May 25. “Frivolous” humanities helped prisoners survive in Communist Romania. *Zócalo Public Square*. Retrieved from <http://www.zocalopublicsquare.org/2016/05/25/frivolous-humanities-helped-prisoners-survive-communist-romania/ideas/nexus/>.
- Emancipation group. *City of Boston*. Retrieved from <https://www.boston.gov/departments/arts-and-culture/emancipation-group>.
- Fischer, Charlie B., et. al. 2021. Mask adherence and rate of COVID-19 across the United States. *PLOS ONE*, 16(4). Retrieved from <https://doi.org/10.1371/journal.pone.0249891>.
- Frostenson, Sarah. 2017, January 31. The Women's Marches may have been the largest demonstration in US history. *Vox*. Retrieved from <https://www.vox.com/2017/1/22/14350808/womens-marches-largest-demonstration-us-history-map>.
- Future of Life Institute. 2023, March 22. Pause giant AI experiments: An open letter. Retrieved from <https://futureoflife.org/open-letter/pause-giant-ai-experiments/>.
- Garcia, Raymond. 2023, March 22. American Library Association reports record number of demands to censor library books and materials in 2022. *American Library Association*. Retrieved from <https://www.ala.org/news/press-releases/2023/03/record-book-bans-2022>.
- Gillion, Daniel Q. 2020. *The loud minority: Why protests matter in American democracy*. Princeton University Press.
- Gordon, Cindy. 2023, April 30. AI ethicist views on ChatGPT. *Forbes*. Retrieved from <https://www.forbes.com/sites/cindygordon/2023/04/30/ai-ethicist-views-on-chatgpt/>.

- Grossman, James. 2016, May 30. Op-Ed: History isn't a 'useless' major. It teaches critical thinking, something America needs plenty more of. *Los Angeles Times*, <https://www.latimes.com/opinion/op-ed/la-oe-grossman-history-major-in-decline-20160525-snap-story.html>.
- Guerilla projection. *Beautiful Trouble*. Retrieved from <https://beautifultrouble.org/toolbox/tool/guerrilla-projection/>.
- Hall, Jake. 2023, June 30. Drag artists are workers, and protests are putting them in danger. *Xtra\**. Retrieved from <https://xtramagazine.com/culture/drag-performers-protests-bills-safety-income-253731>.
- Hammer, Joshua. 2016. *The bad-ass librarians of Timbuktu*. Simon & Schuster.
- Hate in the bay state: Extremism & antisemitism in Massachusetts, 2021-2022. 2023, May 22. *Anti-Defamation League*. Retrieved from <https://www.adl.org/resources/report/hate-bay-state-extremism-antisemitism-massachusetts-2021-2022>.
- Heilweil, Rebecca. 2022, December 7. AI is finally good at stuff, and that's a problem. *Vox*. Retrieved from <https://www.vox.com/recode/2022/12/7/23498694/ai-artificial-intelligence-chat-gpt-openai>.
- History in Five. 2016, March 6. Badass librarians of Timbuktu. *You Tube*. Retrieved from <https://youtu.be/VrhosBGhiVM>.
- Horner, Tara. 2021. Strengthening college students' confidence in their ethical reasoning ability. *Journal of Leadership Education*, 20(4), pp. 124-132. Retrieved from <https://doi.org/10.12806/V20/I4/R9>.
- Howard, Jeremy, et. al. 2021. An evidence review of face masks against COVID-19. *PNAS*, 118(4). Retrieved from <https://doi.org/10.1073/pnas.2014564118>.
- Howe, Amy. 2023, June 23. Supreme Court strikes down affirmative action programs in college admissions. *SCOTUSblog*. Retrieved from <https://www.scotusblog.com/2023/06/supreme-court-strikes-down-affirmative-action-programs-in-college-admissions/>.
- Hurtado, Sylvia. 2019. "Now is the time": Civic learning for a strong democracy. *Daedalus*, 148(4), pp. 94-107. Retrieved from <https://www.jstor.org/stable/48563394>.
- Ilari, Beatriz, & Eun Cho. 2023. Musical participation and positive youth development in middle school. *Frontiers in Psychology*, 13. Retrieved from <https://doi.org/10.3389/fpsyg.2022.1056542>.
- Important benefits of music in our schools. 2014, July 21. *National Association for Music Education*. Retrieved from <https://nafme.org/important-benefits-of-music-in-our-schools/>.
- Institute for Economics and Peace. 2022, June. Global peace index 2022: Measuring peace in a complex world. *Vision of Humanity*. Retrieved from <https://www.visionofhumanity.org/wp-content/uploads/2022/06/GPI-2022-web.pdf>.
- Jin, Xuguang, & Yuan Ye. 2022. Impact of fine arts education on psychological wellbeing of higher education students through moderating role of creativity and self-efficacy. *Frontiers in Psychology*, 13. Retrieved from <https://www.frontiersin.org/articles/10.3389/fpsyg.2022.957578/full>.
- Jones, Bethany Alice, Jon Arcelus, Walter Pierre Bouman, & Emma Haycraft. 2017. Sport and transgender people: A systematic review of the literature relating to sport participation and competitive sport policies. *Sports Medicine*, 47(4), pp. 701-716. Retrieved from <https://doi.org/10.1007/s40279-016-0621-y>.

- Jones, Jeffrey M. 2022, February 17. LGBT identification in U.S. ticks up to 7.1%. *Gallup*. Retrieved from <https://news.gallup.com/poll/389792/lgbt-identification-ticks-up.aspx>.
- Karlin, Susan. 2017, January 23. The Women's March and the art of creative resistance. *Fast Company*. Retrieved from <https://www.fastcompany.com/3067430/the-womens-march-and-the-art-of-creative-resistance>.
- Kelly, Bridget Turner, Paige J. Gardner, Joakina Stone, Ashley Hixson, & Di-Tu Dissassa. 2021 Hidden in plain sight: Uncovering the emotional labor of Black women students at historically White colleges and universities. *Journal of Diversity in Higher Education*, 14(2), pp. 203–216. Retrieved from <https://doi.org/10.1037/dhe0000161>.
- Knight, Roderic. 1975. The jali, professional musician of West Africa. *The World of Music*, 17(2), pp. 8-13. Retrieved from <https://www.jstor.org/stable/43615756>.
- Kolodner, Meredith. 2023, June 15. Many flagship universities don't reflect their state's Black or Latino high school graduates. *The Hechinger Report*. Retrieved from <https://hechingerreport.org/many-flagship-universities-dont-reflect-their-states-black-or-latino-high-school-graduates/>.
- Kraus, Nina, & Travis White-Schwoch. The argument for music education: Musicians' brains show striking benefits. *American Scientist*. Retrieved from <https://www.americanscientist.org/article/the-argument-for-music-education>.
- Leitch, Stephanie, et. al. 2021. Black Lives Matter in health promotion: moving from unspoken to outspoken. *Health Promotion International*, 36(4), pp. 1160–1169. Retrieved from <https://doi.org/10.1093/heapro/daaa121>.
- "LGBTQ+ Americans Under Attack." 2023, June 8. *Human Rights Campaign*. Retrieved from <https://hrc-prod-requests.s3-us-west-2.amazonaws.com/Anti-LGBTQ-Legislation-Impact-Report.pdf>.
- Linton, Caroline. SFFA v. Harvard dissents. *Scribd*. Retrieved from <https://www.scribd.com/document/656189604/SFFA-v-Harvard-Dissents>.
- Logical flow: The key to compelling writing. *The Writer's College Times Blog*. <https://www.writerscollegeblog.com/create-perfect-logical-flow-in-your-writing/>.
- Marincola, Elizabeth. 2006. Why is public science education important? *Journal of Translational Medicine*, 4(7). Retrieved from <https://doi.org/10.1186%2F1479-5876-4-7>.
- Mastandrea, Stefano, Sabrina Fagioli, & Valeria Biasi. 2019. Art and psychological well-being: Linking the brain to the aesthetic emotion. *Frontiers in Psychology*, 10. Retrieved from <https://doi.org/10.3389/fpsyg.2019.00739>.
- Meaney, Joseph. 2022, July 14. The ethics of protesting. *The National Catholic Bioethics Center*. Retrieved from <https://www.ncbcenter.org/messages-from-presidents/the-ethics-of-protesting>.
- Meehan, Kasey, & Jonathan Friedman. 2023, April 20. Banned in the USA: State laws supercharge book suppression in schools. *PEN America*. Retrieved from <https://pen.org/report/banned-in-the-usa-state-laws-supercharge-book-suppression-in-schools/>.
- Moreno, Carolina. 2015, October 2. Junot Diaz on why it's so important to read authors who don't look like

- you. *HuffPost*. Retrieved from [https://www.huffpost.com/entry/junot-diaz-breaks-down-the-importance-of-reading-authors-from-diverse-backgrounds\\_n\\_560edbbae4b0af3706e0c355](https://www.huffpost.com/entry/junot-diaz-breaks-down-the-importance-of-reading-authors-from-diverse-backgrounds_n_560edbbae4b0af3706e0c355).
- Moss, Phelton. 2023, May 15. Book bans: An act of policy violence promoting anti-blackness. National Association for the Advancement of Colored People. Retrieved from <https://naacp.org/articles/book-bans-act-policy-violence-promoting-anti-blackness>.
- Nam, Jane. 2023, July 3. Affirmative action statistics in college admissions. *BestColleges*. Retrieved from <https://www.bestcolleges.com/research/affirmative-action-statistics/>.
- National Academies of Sciences, Engineering, and Medicine. 2021. *Call to action for science education: Building opportunity for the future*. The National Academies Press. Retrieved from <https://doi.org/10.17226/26152>.
- A national emergency: How COVID-19 is fueling unrest in the United States. 2021, March 4. *Armed Conflict Location and Event Data Project*. Retrieved from <https://acleddata.com/2021/03/04/a-national-emergency-how-covid-19-is-fueling-unrest-in-the-us/>.
- NPR Staff. 2016, April 23. Timbuktu's 'badass librarians': Checking out books under Al-Qaida's nose." *NPR*. Retrieved from <https://www.npr.org/2016/04/23/475420855/timbuktus-badass-librarians-checking-out-books-under-al-qaidas-nose>.
- Oliver, Matthew, Mark Ungrin, & Joe Vipond. 2023, May 5. Masks work. Distorting science to dispute the evidence doesn't. *Scientific American*. Retrieved from <https://www.scientificamerican.com/article/masks-work-distorting-science-to-dispute-the-evidence-doesnt/>.
- Orzel, Chad. 2015, September. Why every college student needs to take science courses. *Forbes*. Retrieved from <https://www.forbes.com/sites/chadorzel/2015/09/10/why-every-college-student-needs-to-take-science/#3f29245b6a36>
- Ovenden, Richard. 2020. *Burning the books: A history of the deliberate destruction of knowledge*. Belknap Press.
- Phillips, Katherine W. 2014, October 1. How diversity makes us smarter. *Scientific American*. Retrieved from <https://www.scientificamerican.com/article/how-diversity-makes-us-smarter/>.
- Piper, Kelsey. 2023, February 22. The new scientific review on masks and Covid isn't what you think. *Vox*. Retrieved from <https://www.vox.com/future-perfect/2023/2/22/23609499/masks-covid-coronavirus-cochrane-review-pandemic-science-studies-infection>.
- PISA 2022 creative thinking. *Organisation for Economic Co-operation and Development Programme for International Student Assessment*. Retrieved from <https://www.oecd.org/pisa/innovation/creative-thinking/>.
- President, Sierra. 2023, April 17. The ethics of college students using ChatGPT. *University of North Carolina at Chapel Hill Office of Ethics and Policy Blog*. Retrieved from <https://ethicspolicy.unc.edu/news/2023/04/17/the-ethics-of-college-students-using-chatgpt/>.
- Procedural fluency in mathematics. *National Council of Teachers of Mathematics*. <https://www.nctm.org/Standards-and-Positions/Position-Statements/Procedural-Fluency-in-Mathematics/>.
- Quality science education and 21st-century skills. 2011, June. *National Science Teaching Association*. Retrieved from <https://www.nsta.org/nstas-official-positions/quality-science-education-and-21st-century-skills>.



- Rebell, Michael A. 2018. Preparation for capable citizenship 'The schools' primary responsibility. *The Phi Delta Kappan*, 100(3), pp. 18-23. Retrieved from <https://www.jstor.org/stable/26552459>.
- Roberts, Ros. 2001. Procedural understanding in biology: the "thinking behind the doing." *Journal of Biological Education*, 35(3), pp. 113–117 Retrieved from <https://doi.org/10.1080/00219266.2001.9655758>.
- The School of Life. 2014, October 31. What is history for? *YouTube*. Retrieved from <https://youtu.be/hLE-5ElGIPM>.
- The School of Life. 2014, September 18. What is literature for? *YouTube*. Retrieved from <https://youtu.be/4RCFLobfqcw>.
- Science education policy. 2023. *American Chemical Society*. Retrieved from <https://www.acs.org/policy/publicpolicies/education/educationpolicies.html>.
- Shirey, Heather. 2020, December 3. Art and social justice: A digital archive of street art & protest." *Americans for the Arts*. Retrieved from <https://blog.americansforthearts.org/2020/12/03/art-and-social-justice-a-digital-archive-of-street-art-protest>.
- Singleton, Brent D. 2004. African bibliophiles: Books and libraries in medieval Timbuktu." *Libraries & Culture*, 39(1), pp. 1–12. Retrieved from <http://www.jstor.org/stable/25549150>.
- Tactics and techniques of the National Woman's Party suffrage campaign. *Library of Congress Women of Protest: Photographs from the Records of the National Woman's Party*. Retrieved from <https://www.loc.gov/static/collections/women-of-protest/images/tactics.pdf>.
- TED. 2009, October 7. Chimamanda Ngozi Adichie: The danger of a single story. *YouTube*. Retrieved from <https://youtu.be/D9Ihs241zeg>.
- TED. 2021, January 20. Amanda Gorman: Using your voice is a political choice. *YouTube*. Retrieved from <https://youtu.be/zaZBgqfEa1E>.
- TEDxTalks. 2020, May 6. "Why self care isn't selfish" | Jessica Brubaker | TEDxGrandCanyonUniversity. *YouTube*. Retrieved from <https://youtu.be/kShBhnnvJRU>.
- TEDxTalks. 2015, July 7. The Griot tradition of West Africa | Sibou Bangoura | TEDxSydney. *YouTube*. Retrieved from <https://youtu.be/QdrPmZwsXiM>.
- Thériault, Anne. 2019, September 5. Geel, Belgium has a radical approach to mental illness. *Broadview*. Retrieved from <https://broadview.org/geel-belgium-mental-health/>.
- Tierney, Adam T., Jennifer Krizman, & Nina Kraus. 2015. Music training alters the course of adolescent auditory development. *Proceedings of the National Academy of Science*, 112(32), pp. 10062-10067. Retrieved from <https://doi.org/10.1073/pnas.1505114112>.
- Tracy, Kisha G. 2022. *Why Study the Middle Ages?* Arc Humanities Press.
- Trauma informed discussion guide. 2023. *Mass Humanities*. Retrieved from <https://masshumanities.org/wp-content/uploads/2023/03/RFDIT-Trauma-Informed-Discussion-Guide-Final-2023.pdf>.
- Truong, Thi My Van. 2009. The relevance of literary analysis to teaching literature in the EFL [English

- as a Foreign Language] classroom. *English Teaching Forum*, 47(3), pp. 2-9, 17. Retrieved from <https://eric.ed.gov/?id=EJ923454>.
- Tufekci, Zeynep. 2023, March 10. Here's why the science is clear that masks work. *The New York Times*. Retrieved from <https://www.nytimes.com/2023/03/10/opinion/masks-work-cochrane-study.html>.
- Veenman, Kim, Jos L.J. Tolboom, & Olivier van Beekum. 2022. The relation between computational thinking and logical thinking in the context of robotics education. *Frontiers in Education*, 7. Retrieved from <https://doi.org/10.3389/feduc.2022.956901>.
- Von Ebers, Nadyja. 2017, March 17. The importance of teaching literary analysis. *Chicago Academy for the Arts*. Retrieved from <https://www.chicagoacademyforthearts.org/news/2017/3/10/the-importance-of-teaching-literary-analysis>.
- We are here: Understanding the size of the LGBTQ+ community. 2021, December 9. *Human Rights Campaign*. Retrieved from <https://hrc-prod-requests.s3-us-west-2.amazonaws.com/We-Are-Here-120821.pdf>.
- Welding, Lyss. 2023, March 27. Half of college students say using AI on schoolwork is cheating or plagiarism. *BestColleges*. Retrieved from <https://www.bestcolleges.com/research/college-students-ai-tools-survey/>.
- A year of racial justice protests: Key trends in demonstrations supporting the BLM movement. 2021, May. *Armed Conflict Location an Event Data Project*. Retrieved from <https://acleddata.com/2021/05/25/a-year-of-racial-justice-protests-key-trends-in-demonstrations-supporting-the-blm-movement/>.





# PART VI

# INTEGRATION



# PART 1: INTEGRATIVE LEARNING

---

## Learning Objectives

By the end of this chapter, you will be able to:

- define Integration learning outcomes.
- discuss how general education learning outcomes and skills can be integrated together, utilizing multiple areas of knowledge and multiple modes of inquiry and benefiting from multiple perspectives.

Integration courses provide the opportunity to combine what we learn in general education and major courses to think about more advanced ideas and problems. We learn how to take knowledge and skills from different perspectives and apply them in new ways. These courses also include high-impact experiential learning experience, ranging from community engagement and study abroad to independent research and internships.



*By studying **Integrative Learning**, we can integrate and apply knowledge from different disciplines and experiences to solve problems.*

While we think about different skills and areas of knowledge separately at times, especially when we take courses in subjects with specific disciplinary names, in reality, they all work together. Throughout the previous two chapters, there were notes pointing to other chapters and sections. These notes indicate some of the connections between ways of thinking that can be effective as we consider certain issues or try to address certain

problems. The ability to combine knowledge and skills from different disciplines and experiences, even ones that seem on the surface to be completely disconnected, is Integrative Learning.

In some ways, **Integrative Learning** is the answer to the question “why do I have to take this course?” Since all learning is connected in some fashion and one type of knowledge supports and enhances another, taking different courses that develop a varied skill base is building the toolbox necessary for making applications outside and beyond the classroom. The Carnegie Foundation’s Integrative Learning Project (2007) calls “the abilities to integrate learning – over time, across courses, and between academic, personal, and community life [...] one of the most important goals and challenges of higher education.” **Integrative Learning** allows us to transfer what we learn in one situation to others, potentially finding creative and innovative ways to connect one type of learning with another.

Most activities involve using more than one type of learning. For example, when we write, we are not simply using Writing skills. We write about a topic or multiple topics about which we need to have some familiarity (for instance, if we are writing about civics, history, literature, the fine arts, science, or wellness – or combinations of these or others). We will need to find and evaluate information to use, which is Information Literacy, and then use Reading skills to process that information. Depending on what type of evidence is needed, that might entail Quantitative Reasoning. Certain arguments will require Ethical Reasoning or an understanding of Diverse Perspectives. The writing process, including drafting, feedback, and revision, uses Procedural and Logical Thinking. If we eventually present what we have written, that involves Speaking and Listening. While most tasks do require multiple skills, some are more complex than others, asking us to use methodologies of different disciplines in conjunction with each other. Another word for this approach is *interdisciplinary*.

### View: “The Importance of Integrative Learning”



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://rotel.pressbooks.pub/whydoihavetotakethiscourse/?p=111#oembed-1>

“Integrative learning is vital because it mirrors the reality in which we all live and work on a daily basis. We break knowledge down into subjects and majors, but that’s not how things work outside of school. For example, if we want to maintain our democracy, that’s not just political science, it’s also about social media, cybersecurity, psychology, history, and philosophy. Addressing climate change can’t be done with science alone, we also need psychology, rhetoric,

engineering, ethics, law, and more. This shows how integrative learning helps us apply knowledge from different subjects to real-life situations. We often discuss the importance of 'critical thinking' and '21st-century skills' and it's integrative learning that helps us develop those. It gets us comparing, synthesizing info, and solving complex problems that require knowledge from different areas. How can we take all of the things that we're learning across a wide variety of often very different courses and use that to build a coherent understanding of how the world works? New information comes in, and we need to adjust our understanding. So, by helping us think critically, apply knowledge, and stay open to life-long learning, integrative learning is a powerful tool for navigating our complex world." – **Dr. J.J. Sylvia, Communications Media, Fitchburg State University**



The Giralda (began in 1184), the bell tower of Seville Cathedral in Spain; consists of the former minaret of the mosque on the site, converted later to a bell tower, and a belfry added in the sixteenth century with the statue “El Giraldillo” representing the Christian faith (Photo by Kisha G. Tracy)

## Activity 6.1

- Examine the photograph above and read its caption.
- Think about how this image symbolically represents Integrative Learning.

# Integrative Learning and Good, Necessary Trouble

“Professor Elizabeth Gordon of the Earth and Geographic Sciences Department [now the Environmental, Geographic, and Public Health Sciences Department] and Professor Benjamin Lieberman of the Economics, History, and Political Science Department have co-taught a course on climate change and human history for several years. The course looks at climate change from the perspective of earth science as well as its effect on human societies. The professors co-authored a textbook in 2017 that explains how climate change has created opportunities for human societies as well as risks and challenges over the centuries. It concludes by outlining the key human role in bringing about accelerating climate change. ‘It’s great to see students learn how to integrate methods and evidence from two disciplines and put together final projects that draw deeply on both science and on research on history and human societies,’ Lieberman said” – **First published in Fitchburg State University *Contact*, Summer 2021**

The climate change crisis and what we can do to counter or raise awareness about it are examples of **Integrative Learning** that have become more and more important in recent years. Understanding how climate change works and the evidence supporting humans’ role in it are concepts based in Scientific Inquiry and Analysis: trends in climate patterns, analysis and predictions of temperature changes, environmental impacts, etc. (note: The NASA Global Climate Change project reports that 97% of publishing climate scientists agree that humans are causing climate change). This work requires experimentation, testing, and data modeling (all of which involve Quantitative Reasoning).

At the same time, however, we have only been collecting quantitative data on climate patterns for a certain amount of time. How do we gather data from before that? Certain researchers are studying what is called the Dantean Anomaly, conditions in the early 1300s in Europe that have remarkable similarities to the peculiar “seesaw conditions”

in the same region in 2018 and beyond. These rapid changes might have been partially responsible for the Great Famine and the Plague later in the century. A member of this research project, Dr. Martin Bauch, has commented that the “inclusion of humanities research clearly contributes to a better understanding of the social consequences of climate change in the past and to drawing conclusions for the future” (Leibniz Institute for Tropospheric Research, 2021). Climatologists are beginning to turn to experts in other fields in order to understand historic climate. Literature and storytelling are particularly effective sources as people tend to describe when there is something unusual with the weather or their environment, especially if it affects crops or other seasonal activities.

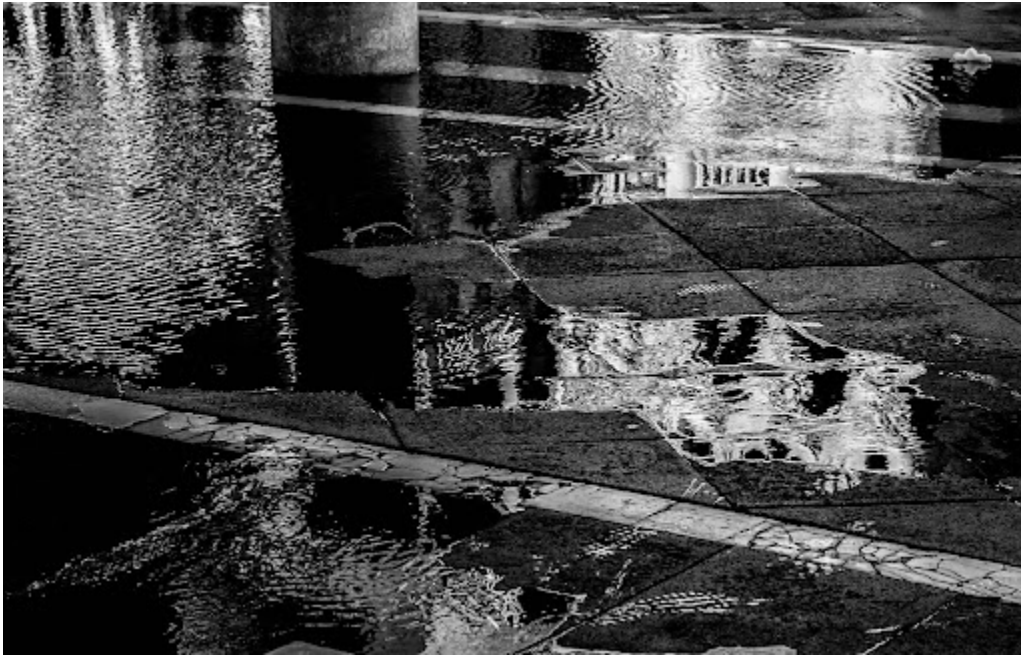
As an example, Conor Kostick, an historian at the University of Nottingham, was asked by a team of scientists researching ice cores to determine if volcanic activity caused severe cold snaps in Europe to parallel their work by looking at historic documents (Gao, Ludlow, Amir, & Kostick, 2016). He remembers, “I looked through my data and gave them a list of events, based not just upon obvious reports, such as eyewitness accounts of the eruption of Vesuvius in 472 CE, but also on more subtle evidence such as reports of the sun being dim, or discoloured. And the beauty of what happened next is that these examples formed a perfect match with the new ice-core data, even though I hadn’t seen their data and had no idea which years they were interested in” (Rayner 2015). Their combined work gave more precise dates for significant volcanic activity that led to climate fluctuations.

Modern climate science can also learn ancient and medieval methods from historians and archaeologists to counter modern climate change effects. The Mountain Institute, the only international, non-governmental organization to focus on mountain communities and the environmental issues they face, learned of mostly-forgotten water regulating systems, including silt dams, water reservoirs, and canals, that were built in the Peruvian Andes starting in 1000 CE to increase the amount of available water to alleviate the effects of droughts due to climate changes. As a result, the Mountain Institute created the award-winning “Ancestral Technologies and Climate Change” initiative to restore these water systems and to replicate them in other areas.

Raising awareness about climate change is another area in which **Integrative Learning** can be and is applied. In 2021, the University of Massachusetts Amherst, the Augusta Savage Gallery, the Arts Extension Service, and partners in Creative Women Leading Climate Action Virtual Symposium had an open call for art of any medium – including poetry, music, short story, spoken word, performance, or multidisciplinary work, among others – for the “Creative People Leading Climate Action” exhibition, intended to be a “response to the [climate change] crisis, to envision a new world, and to motivate positive action.” The photograph below was selected for that exhibition, and it represents fears in Venice, Italy, about increasing flooding due to climate change and the damage it can do to Venice’s vast cultural heritage, including St Mark’s Basilica, which is reflected brokenly in the pools of water. This exhibition and photograph are examples of Fine Arts Expression and Analysis and Creative Thinking being used to symbolize a scientific problem.

Climate change is an interdisciplinary issue that requires **Integrative Learning** to address.





“Fragile Reflection,” St Mark’s Basilica in Venice, Italy, reflected in water; included in “Creative People Leading Climate Action” Exhibition, University of Massachusetts Amherst, April-June 2021 (Photo by Kisha G. Tracy)

## Discussion 6.1

- If you have already taken a course that emphasizes **Integrative Learning**, think about what you were asked to do and what you learned. If you have not heard about **Integrative Learning** before, think about the types of courses you could take.
- In what ways did or might the idea(s) or example(s) discussed above apply in such courses?
- What other ideas or examples would you add to the discussion?

## Media Attributions

- Integrative Learning Icon © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license
- The Giralda © Kisha G. Tracy
- Fragile Reflection © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license

## PART 2: INTEGRATIVE HIGH IMPACT PRACTICES

---



The course described in the previous section on climate change and human history, in addition to being an example of Integrative Learning, is also an example of an **Integrative High Impact Practice** as it is co-taught by two experts in different fields, Earth Science and History. Team-teaching is a form of high impact practice (HIP). HIPs were first defined by George D. Kuh in his book *High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter* in 2008. In his research, Kuh found that academic experiences that are active and engage in deep, reflective learning are “beneficial for college students from many backgrounds – especially students of color and first-generation students” (“Why HIPS Matter”). Integrative HIPs emphasize, in particular, applying learning across multiple types of knowledge and experiences.

Scott D. Wurdinger and Julie A. Carlson (2010, p. 8) highlight the main principles of experiential learning, another type of HIP, as “promoting hands-on learning, using a problem solving process, addressing real world problems, encouraging student interaction with each other and the content, engaging in direct experience, and using multiple subjects to enhance interdisciplinary learning.” They affirm that “[w]hen students interact with one another and learn how to solve real world problems that have significance to them, they become excited about coming to school every day” (p. 7). HIPs allow us the opportunity to use what we have learned in other courses in new ways and immerse ourselves in the learning experience. The following are, in addition to team-taught courses, thoughts on various types of HIPs with reflections on their benefits.

### Creative Projects

A creative project encourages students individually or collaboratively to develop one or more substantive, independent creative products.

“A student-faculty creative project challenges you to think like an artist, musician, writer, or performer. Creative fields require the development of specific skills, but also personal vision and flexible thinking. Courses in creative fields at the introductory level place an emphasis on developing the basic craft of each artform, so that you have the essential building blocks for your creative work, but at the level of a student-faculty creative project, the emphasis is more on developing your personal creative vision under faculty mentorship, and on using the appropriate elements of craft to give the fullest possible expression to your vision. In basic music theory classes, for instance, you learn about the range of musical structures that make up the language of music, and do some elementary creative projects to develop appropriate skills, but at the level of a student-faculty creative project you would actually compose music, learning how to use the elements of music for your personal expressive goals. For students interested in pursuing creative work beyond graduation, this kind of creative mentorship has obvious benefits as it provides a guided experience for working with the creative process and developing the skills needed to support your evolving vision. Even for students who have totally different career goals, however, this deep engagement with the creative process fosters an approach to creative problem solving and flexible thinking that you will find helpful throughout your life and across a range of careers. Creativity is an engine for growth, both personal and professional, no matter what you do.” – **Professor Petri Flint, Humanities, Fitchburg State University**

## Internships

An internship is a direct experience in a work setting with the benefit of supervision and coaching from professionals in the field.

“Participating in an internship during your undergraduate career offers many benefits to students. Students that participate in an internship have the opportunity to apply skills and knowledge learned in the classroom to real world contexts. This helps to solidify learning and give valuable context to ideas learned in the classroom. Students that participate in internships also have the opportunity to build marketable professional skills that are strongly desired by

employers. These skills can be field specific like getting hands-on experience with a particular software or gaining experience with particular client populations as well as soft skills, like working in a professional team, professional communication, and project management. In addition to building knowledge and skills, students that participate in internships get the chance to try out various fields and positions to see if it is a good fit for them. Students can confirm career fields of interests and rule out options that are a poor fit. It is just as valuable to learn what is not a good fit for you professionally in order to know what next steps to explore. For many students internships are a foot in the door to a career field or even a specific company for hiring entry level positions. Internships are great opportunities for students to learn more about themselves, their strengths and the field they plan to go into after graduation and if that's not enough, participating in internships improves career outcomes for students. Students that participate in internships have greater odds of being employed in their field of interest within six months of graduation and tend to have higher starting salaries than their peers that did not participate in internships.” – **Lindsay Carpenter Connors, Director of Career Services and Advising Center, Fitchburg State University**

## Study Abroad

A study abroad experience in another country or in another part of the United States provides first-hand experience engaging with language, culture, and history beyond what we have experienced before. Study abroad experiences can be of any length of time, from short-term, maybe over Spring Break, to an extended period, such as an entire semester.

“Studying abroad is a crucial part of the undergraduate experience. Whether it is a short term faculty-led program, semester, or internship abroad, international experiences allow students to gain global competencies and network for professional opportunities. Studying abroad is a life-changing experience that will stay with a student well beyond their undergraduate years. In many cases, it encourages them to work/live abroad after they graduate. Interacting and navigating different cultures during a study abroad experience allows students to develop a better understanding of the world they live in and become more accepting of societies other

than their own. Students often describe studying abroad as eye-opening and one of the best experiences of their lives!” – **Nicole Salerno, Assistant Director of Study Abroad, Fitchburg State University**

## Community Engagement

It’s difficult to argue with the benefits of being actively engaged in experiential, hands-on learning while also benefiting the community. The principles of community engagement – or its other names, civic engagement or service learning – are sound and incredibly effective. The emphasis, according to Wurdinger and Carslon (p. 67), is on community partnerships and the “learning that comes from the service experience, and not simply the service.” Service learning, in particular, depends upon the practice of reflection during and after interactions with the community.

“Civic engagement is taking responsibility for improving your community. It refers to addressing any social problem. When students practice civic engagement, they contribute to the creation of a community of excellence. According to Up to Us (2023), Many people begin participating in civic engagement by connecting with others who share the same mission and values. It can be as simple as starting a conversation about local issues (in-person or on social media). In 2004, the University of Maryland’s Coalition for Civic Engagement and Leadership (CCEL) stated that students prepared for civic engagement can:

- Contribute to their communities in ways that are similar to their own values;
- Demonstrate the knowledge, awareness, and understanding necessary to contribute to a culturally diverse world;
- Identify core personal values and base their own actions on those values;
- Apply academic and disciplinary knowledge, as well as personal experiences to addressing social problems.

When students engage and work together through civic engagement as a high impact practice, they can provide value and improve the quality of life for the community, thus providing social

change through collective action and political involvement and awareness. As students practice civic engagement they understand their community and themselves; they heighten economic and community development by enriching the lives of their neighborhood residents and local business, thus improving the lives of the community in general.” – **Dr. William Cortezia, Education and Coordinator of the Douglas and Isabelle Crocker Center for Civic Engagement, Fitchburg State University**

## Student Research

A research project is one in which students individually or collaboratively help shape the research question, refine the research techniques, collect novel information, data or observations, and produce a research paper, poster, and/or presentation. Undergraduate research is crucial especially for those who are planning on going to graduate school, but it is an experience that can change anyone’s entire understanding of the college experience. Undergraduate research days provide a venue for sharing such work (Lewis, 2017).

“Student research at the undergraduate level offers a plethora of benefits to students. Benefits include theoretical application, student engagement, problem solving, and collaboration. When students participate in research, it requires them to apply what they have learned from lectures, readings, and class activities to a more tangible, real world situation. Often the research process allows what the student has learned to seemingly ‘come to life’ and ignite student passion and motivation for topics of interest. The research process is almost always accompanied by obstacles the researcher must overcome, which allows students to make use of problem solving skills. Additionally, research requires various degrees of collaboration. Often students will need to collaborate with peers at different stages of the research process. At the undergraduate level, students will also need to work with, to some extent, professors and/or research advisors. The collaborative process allows for the student to interact with both peers and professors in different ways than they may be used to and in ways that are more closely related to how they will interact once they leave a university setting. The above mentioned benefits of undergraduate student research can be found through the entirety of the process, from identifying the problem to sharing findings. The entire research process is a great experience to

prepare students for either future graduate study and/or future careers.” – **Dr. Jessica Alsup, Exercise and Sport Science Department and Former Co-Chair of the Undergraduate Conference for Research and Creative Practice Committee, Fitchburg State University**

## Writing Intensive

The American Association of Colleges and Universities defines writing intensive courses as those that “emphasize writing at all levels of instruction and across the curriculum” and in which students “are encouraged to produce and revise various forms of writing for different audiences in different disciplines.”

“Writing is an integral part of engaged learning within and beyond the university, across the entirety of one’s life. Students write for classes, of course, but they also write in academic contexts that focus on transitions to spaces beyond the classroom, such as when they write at internship sites or keep a practicum log. Writing also happens in workplaces and civic spaces. We write in our daily lives, often for non-obligatory purposes, when we reply to social media posts, journal, or engage in personal interests like contributing to fanfiction sites or sharing travel tips on a blog.” – **Julia Bleakney, Julia, Jessie L. Moore, and Paula Rosinski, eds., *Writing Beyond the University*, 2022, p. 1**

“Depending on the chosen field, college graduates will spend at least 20% of their time writing various pieces of communication (e.g., emails, reports, resumes, and letters) (Anderson, 2014). In addition to the amount of time graduates will spend writing, employers tend to look for candidates who have more developed writing skills and are more likely to hire, retain, or promote those who have higher writing skills (Anderson, 2014; Faigley, Daly, & Witte, 1981).” – **Laura M. Fischer and Courtney Meyers, “Determining Change in Students’ Writing**

**Apprehension Scores in a Writing Intensive Course: A Pre-Test, Post-Test Design,”  
2017, p. 69**

## Media Attributions

- Integrative High Impact Practice Icon © Kisha G. Tracy is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license



## PART 3: FINAL THOUGHT

---

**Integrative Learning** and **Integrative High Impact Practices** emphasize how interesting and exciting learning is! Once we develop knowledge and skills in so many different areas, what we can do with them is limitless. They can be used separately or, more often, together to give us unbelievable experiences, to help us solve personal and professional problems, and to enrich our lives in innumerable ways. The benefits of learning are endless, and it can be an adventure finding out where general education courses can lead us.

# PART 4: REFERENCES AND FURTHER READING

---

- Ancestral technologies and climate change. The Mountain Institute. Retrieved from <http://mountain.org/ancestral-technologies-climate-change/>.
- Bleakney, Julia, Jessie L. Moore, & Paula Rosinski, eds. 2022. Writing beyond the university. Elon University Center for Engaged Learning. Retrieved from <https://www.centerforengagedlearning.org/wp-content/uploads/2022/08/writing-beyond-the-university-2022-10-04-revised.pdf>.
- Creative people leading climate action. 2021. University of Massachusetts Amherst. Retrieved from [https://fac.umass.edu/Online/default.asp?BOparam::WScontent::loadArticle::permalink=cwlca&BOparam::WScontent::loadArticle::context\\_id=](https://fac.umass.edu/Online/default.asp?BOparam::WScontent::loadArticle::permalink=cwlca&BOparam::WScontent::loadArticle::context_id=).
- Do scientists agree on climate change? NASA Global Climate Change. Retrieved from <https://climate.nasa.gov/faq/17/do-scientists-agree-on-climate-change/>.
- Fischer, Laura M., & Courtney Meyers. 2017. Determining change in students' writing apprehension scores in a writing intensive course: A pre-test, post-test design. *Journal of Agricultural Education*, 58(1), pp. 69-84. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1138980.pdf>.
- Gao, Chaochao, Francis Ludlow, Or Amir, & Conor Kostick. 2016. Reconciling multiple ice-core volcanic histories: The potential of tree-ring and documentary evidence, 670–730 CE. *Quaternary International*, 394, pp. 180-193. Retrieved from <https://www.sciencedirect.com/science/article/abs/pii/S1040618215013464>.
- High-impact practices. The American Association of Colleges and Universities. Retrieved from <https://www.aacu.org/trending-topics/high-impact>.
- Integrative learning: Opportunities to connect. 2007. Association of American Colleges and Universities and The Carnegie Foundation for the Advancement of Teaching Integrative Learning Project, edited by Mary Taylor Huber, Cheryl Brown, Pat Hutchings, Richard Gale, Ross Miller, & Molly Breen. Retrieved from <http://gallery.carnegiefoundation.org/ilp/>.
- Kuh, George D. 2008. High-impact educational practices: What they are, who has access to them, and why they matter. American Association of Colleges and Universities.
- Leibniz Institute for Tropospheric Research. 2021, January 5. Drought of the century in the Middle Ages – with parallels to climate change today? *Phys.org*. Retrieved from <https://phys.org/news/2021-01-drought-century-middle-ageswith-parallels.html>.
- Lewis, Elise C. 2017. Promoting undergraduate research through integrative learning. *International Journal of*

- Teaching and Learning in Higher Education, 29(3), pp. 545-550. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1150796.pdf>.
- NASH TS3 HIPs. 2020, March 9. The importance of integrative learning. YouTube. Retrieved from <https://youtu.be/3Pa2fjT3e0>.
- Rayner, Emma. 2015, July. Medievalist helps scientists rewrite climate records. Medievalists.net. Retrieved from <https://www.medievalists.net/2015/07/medievalist-helps-scientists-rewrite-climate-records/>.
- Why HIPS matter. National Association of System Heads High Impact Practices: An Educator's Guide. Retrieved from <http://hips.nashonline.org/>.
- Wurdinger, Scott D., & Carlson, Julie A. 2010. Teaching for experiential learning: Five approaches that work. Rowman & Littlefield Education.



PART VII

# WHAT ABOUT AFTER GRADUATION?



# PART 1: HOW TO HUMAN (EFFECTIVELY!)

## 102

---

### Learning Objectives

By the end of this section, you will be able to:

- articulate and reflect where in your general education curriculum skills and knowledge that it takes to be a human being were addressed and enhanced.

### Activity 7.1



- Let's return to our imagined class from Activity 2.2, "How to Human (Effectively!) 101." You are now ready to take "How to Human (Effectively!) 102."
- Think about the list you created of what we need in order to "human effectively."
- Now think about all the general education courses you have taken.
- Where in these courses did you learn skills and knowledge that it takes to be a human being? Create another list.

## Media Attributions

- How to Human 102 © Fitchburg State University is licensed under a CC BY-NC-SA (Attribution NonCommercial ShareAlike) license



## PART 2: LIFELONG LEARNING

---

### Learning Objectives

By the end of this section, you will be able to:

- define lifelong learning.
- articulate the value of being prepared as a lifelong learner.

There are many different definitions of lifelong learning. The American Association of Colleges and Universities Foundations and Skills for Lifelong Learning VALUE Rubric, which many universities use to assess learning on their campuses, defines lifelong learning as “all purposeful learning activity, undertaken on an ongoing basis with the aim of improving knowledge, skills, and competence.” Felicia Blow (2022) defines it as “[c]ontinuously taking advantage of and pursuing opportunities in a wide range of activities and settings in order to improve personal and professional skills.” Eugenia Proctor Gerdes (2022) talks about “creative and intellectual activities that expand [...] horizons, invigorate [...] minds, stimulate curiosity and the joy of learning, and provide opportunities for social interaction.” All of these definitions emphasize that learning never ends. Graduating from college does not mean that all knowledge has been acquired, but rather that we are better able to meet whatever faces us and perhaps meet it with confidence and excitement.

In reality, lifelong learning is difficult both to define and to quantify. For one, as the name indicates, it is learning that takes place across a person’s lifespan. How can we study that? At the beginning of a person’s life, it is an ideal, something to aspire to or think about – or even be skeptical about. At the end of a person’s life, it is a matter of reflection. What was useful to me? What did I change my mind about as I got older? How did I meet different challenges and opportunities? How did my passions and interests change? These are questions we cannot have answers to early in life, but they are the transformations that we will go through as we age.

Perhaps then lifelong learning is about preparation, being equipped to learn more, exercising our brain so that it is ready for different challenges, and developing skills so that we are prepared enough to accomplish anything. Joyce Hinckley, former president of Adult Learning in the Fitchburg Area (ALFA), comments, “Today’s students are going to have to be lifelong learners. They’re not going to have just one career in their lifetimes. I ended up being a clinical psychologist, but I started as an English major. I taught at Northeastern

University, I practiced, and I consulted. Because I had a liberal arts education, it made me flexible” (first published in Fitchburg State University *Contact*, Summer 2021). That flexibility is essential to personal and professional success.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Lifelong Learning emphasizes lifelong learning as a human right and as “a foundation for transforming our societies.” They indicate that the habits of lifelong learning promote awareness of diverse perspectives and the need for peaceful communication between human beings. Indeed, lifelong learning is about more than whether we keep up with the latest technologies, but how we can continue to empathize with others even as our own experiences and beliefs change.

## PART 3: "SELLING" GENERAL EDUCATION

---

### Learning Objectives

By the end of this section, you will be able to:

- begin to articulate to future employers and other audiences the benefits you gained from a liberal arts and sciences education.

This book has attempted to articulate why we take general education courses, both more broadly and specifically by learning outcomes, in order to help us think carefully about why we take classes and what the personal benefits of those classes are. Beyond that, it can also help “sell” your general education skills to future employers or other audiences. All too often, when we are looking for jobs, we forget to emphasize all of the knowledge and skills we have gained in college beyond the very obvious and specific ones related to our major. But going to a liberal arts and sciences institution has other benefits (discussed in chapter 2) that, if we consider and organize them, could help employers get a better picture of who we are and what we can do.

The following activity will lead you through the process of reflecting on your general education learning and building a general education résumé that can be combined with your regular résumé or can prepare you to talk about general education skills in job interviews.

### Activity 7.3

- Download the Personal General Education Reflection template.
- Fill in the blank columns with your personal general education journey, including course information, relevant coursework, and connected activities.
- Once completed, study your reflection. Highlight patterns, learning that specifically stood out to you, or memorable moments.
- Now create a job résumé that tells your general education story.

## PART 4: FINAL THOUGHT

---

In the end, each person will have a different general education experience and will have different goals for completing it. What is important is to think about at the beginning of the journey what general education is all about in order to be open to the experiences you will encounter and then to reflect upon that journey when you are ready to graduate.

## PART 5: REFERENCES AND FURTHER READING

---

- Blow, Felicia. 2022, April 25. The importance of lifelong learning. *Public Relations Society of America*. Retrieved from <https://www.prsa.org/news/2022/04/25/the-importance-of-lifelong-learning>.
- Gerdes, Eugenia Proctor. 2022. Make lifelong learning real. *AAC&U Liberal Education*. <https://www.aacu.org/liberaleducation/articles/make-lifelong-learning-real>.
- UNESCO Institute for Lifelong Learning annual report. 2022. *UNESCO Institute for Lifelong Learning*. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000384704>.



# PART VIII

# FOR INSTRUCTORS





## PART 1: WHY ASK WHY?

---

“We have been persuaded by some that are careful of our safety, to take heed how we commit ourselves to armed multitudes, for fear of treachery; but I assure you I do not desire to live to distrust my faithful and loving people. Let tyrants fear, I have always so behaved myself that, under God, I have placed my chiefest strength and safeguard in the loyal hearts and good-will of my subjects; and therefore I am come amongst you, as you see, at this time, not for my recreation and disport, but being resolved, in the midst and heat of the battle, to live and die amongst you all; to lay down for my God, and for my kingdom, and my people, my honour and my blood, even in the dust. I know I have the body but of a weak and feeble woman; but I have the heart and stomach of a king, and of a king of England too, and think foul scorn that Parma or Spain, or any prince of Europe, should dare to invade the borders of my realm; to which rather than any dishonour shall grow by me, I myself will take up arms, I myself will be your general, judge, and rewarder of every one of your virtues in the field. I know already, for your forwardness you have deserved rewards and crowns; and We do assure you in the word of a prince, they shall be duly paid you. In the meantime, my lieutenant general shall be in my stead, than whom never prince commanded a more noble or worthy subject; not doubting but by your obedience to my general, by your concord in the camp, and your valour in the field, we shall shortly have a famous victory over those enemies of my God, of my kingdom, and of my people.” – Queen Elizabeth I, “Speech to the Troops at Tilbury”

*Note: This version of Elizabeth’s speech was taken from Joseph Black, et al. (Eds.). 2011. The Broadview Anthology of British Literature: Concise ed, volume A. 2nd ed. Peterborough, Ontario: Broadview.*

When I teach this speech given by Elizabeth I in 1588 to her English troops as the ill-fated Spanish Armada bears down on their island, I often imagine it as the queen’s response to a soldier asking, “Why do I have to fight in this battle?” In my British literature survey courses, which are also general education courses, we focus on the multiple ways in which Elizabeth encourages the investment of her English soldiers in what they think is an upcoming invasion by the Spanish. She addresses their faith, demonstrating that their enemy is the enemy of their God (ironic as that is given the staunch Catholicism of Spain at the time). She addresses their patriotism, highlighting the presumption of Spain for attempting to invade her/their country and alluding to their need to protect their own people and lands. She addresses their potential period-typical concern at following a female leader by assuring them she has the “heart and stomach of a king” and that she herself “will take up arms,” or rather will appoint a “lieutenant general” who is a “noble” and “worthy subject.” Then, if all that is not enough to get them into the spirit of battle, she addresses the “rewards and crowns” that will “be duly paid” to them. Truly, there is something for everyone.

Why am I beginning a discussion of teaching the significance of general education courses and curriculum with a speech by Elizabeth I? Besides the fact that I am an early British literature specialist and that is what I do, the purpose in beginning over four hundred years ago is that Elizabeth’s speech highlights in a rather dramatic fashion being aware of, addressing, and creating solutions to issues of investment in a group of people. The soldiers are about to embark upon a dangerous undertaking that will require motivation and purpose, as do

any soldiers going to war. Elizabeth does not provide one, but several reasons – personal, religious, political, monetary, etc. – for the English to dedicate to their cause.

## But Really... Why?

We, especially those of us who teach general education courses, have heard the dreaded student question: “Why do I have to take this course?” Sometimes the question is verbalized, and sometimes we see it in the quality of work or in attitudes in the classroom. The question can certainly be a “wet blanket” that can affect the dynamics of a course and sap our motivation. We see value in what we do. Sometimes the material is what we have dedicated our lives to learning and sharing with others. How dare someone question why. This is important stuff! Yet, students are skeptical. They frequently do not see the value in courses not directly tied to their majors, courses with subjects in which they are not traditionally interested, courses they are *made* to take, or courses that they believe have no bearing on “real life” or getting that first job after graduation. In other words, general education courses – or at least how they perceive general education courses.

When our students ask that familiar question – “Why do I have to take this course?” – we would do well to remember Elizabeth’s example. While research has pretty well debunked the “myth of learning styles” (see, for instance, Christopher Pappas, “The Myth of Learning Styles”), it is true that the reasons or motivations for students to invest in their learning are not one size fits all. Due to the level of interest in the subject, background, capabilities, etc., what speaks to one will not necessarily speak to another. In fact, only one motivation may not be enough for even one student. This is encouraging; it suggests diversity, complexity, and individualism. P. Seldin (1995, p. 105) states, “Valuing diversity means acknowledging that diversity and oppression exist and affect our lives. Diversity is not about lowering our standards; it is about creating ways for all students to meet the standards of academic excellence.” My goal is to treat every student with the same respect. Different students have different abilities and start at different levels of cognitive ability and experience, but, nonetheless, every student deserves the education they are receiving and to do so in a safe environment. As J.A. Banks, et. al. (2001, p. 198), asserts as one of their principles of diversity: “Schools should ensure that all students have equitable opportunities to learn and to meet high standards.” I doubt very much if a roomful of instructors would identify the same motivations to learn. Why would students? Furthermore, what speaks to us as instructors will not necessarily speak to them and vice versa. This is due both to our training in our field and passion for it (I hope!) as well as our varying stages of life and experience. We see the grand plan as we are cogs in it, but, more often than not, our students don’t – intuitively, especially. Susan A. Ambrose, etc., in *How Learning Works: Seven Research-Based Principles to Smart Teaching* (2010, p. 99) call the gap between instructor and student the “expert blind spot,” when “expert instructors are blind to the learning needs of novice students.” In terms of my point here, I would replace “the learning needs of novice students” with “what novice students need in order to invest in learning.”

This concept may be, on the surface, rather simple, but incorporating it into our teaching philosophies,

strategies, and instructional design is more complicated. It requires us to consider varying methods of creating, building, and sustaining investment in our courses, in the material, in the lessons, in the activities, and in individual class periods. It requires checking in to make sure that the methods are working, tweaking and revising when they aren't. There is no doubt that fostering student investment requires instructor investment. This can be exhausting if we let it.

We can, on the other hand, choose to look at the need to foster student investment in a different light. In addition to the university-distributed course evaluations at the end of the semester, I always have students fill out a feedback form with additional questions I have devised. In my general education literature courses, I ask students if they feel they gained a “liberal arts and sciences experience” in the course. One memorable response from an anonymous student was: “Not really. There wasn't any science.” My first reaction was one of dismay. Remember, despite the fact that we had indeed delved into science on a couple of occasions, this was a literature course, and I was dumbfounded at the response that seemed to miss the point of not only my course, but the design of the university's curriculum and mission in general. Once beyond my initial melancholy, I realized that this student was serious; they genuinely did not understand my question, the terminology, or how what they studied was relevant. Recognizing this, I further concluded that, without that understanding, how could this student transfer skills and lessons from my course to another and, as we hope, to their life? There was more at stake here than content or retaining subject matter. Here was a student asking me, quite legitimately, “Why?”

When I was a child, I was one of those who wouldn't complete a task unless I knew the reason for it. While I have no doubt that this trait could be annoying to my parents, I was more involved and more enthusiastic once I had been given an explanation that made sense to me. When I mentioned previously that students are skeptical, what they really are doing is questioning. They are examining, if at varying levels of consciousness, stubbornness, and seriousness, what is important about what they are being asked to learn. While we might cringe at their methods of asking and the tone of their questions, isn't questioning what we want our college students to do? Aren't we trying to help them think critically, to encourage them not to follow blindly (even when we *know* what is good for them)? Elizabeth F. Barkley, in *Student Engagement Techniques: A Handbook for College Faculty* (2010, p. 7), defines, “One of the goals of a college education is to help students move beyond dualistic thinking to more complex stages as they learn to deal with uncertainty and relativism. As experiences challenge their thinking, students begin to see that truth is contextual and relative, and since there is not a single correct answer, everyone has a right to his or her own opinion.” “Why do I have to take this course?” is a step in this development.

## PART 2: STUDENTS ARE PEOPLE TOO

---

### Some Sobering Statistics

In a podcast for *Teaching in Higher Ed*, Stephen Brookfield (2016) comments, “College students of any age should be treated as adults.” While I laud this statement, I would make a slight, but, I think, important revision. College students of any age *are* adults. They might not have had much practice at it, depending on what age they are, but they are indeed adults. Many of them have or are experiencing the beginnings of adult problems and responsibilities. Consider the following:

- The Center for Law and Social Policy in the “Children, Young Adults Stuck in Poverty: Census Data Show Millions Left Behind, September 2018 reports, “The poverty rate for children remains the highest for all age groups at about one in six children (17.5 percent), with no change from 2016, and significantly contrasting with major progress from 2014 to 2016. For young adults, ages 18-24, the poverty rate also remained flat at 16.1 percent after a steep decrease in the previous two years and remains higher than average poverty rates for all. The profound consequences of poverty, especially for young children, are well documented and include negative outcomes during childhood and in education, employment, and earnings into adulthood.”
- According to the 2021 HOPE Center Survey “Basic Needs Insecurity during the Ongoing Pandemic,” “Among survey respondents at two-year colleges, 38% experienced food insecurity in the 30 days prior to the survey, with just over 16% experiencing low food security and a little more than 22% experiencing very low food security [...] At four-year colleges, 29% of students reported experiencing food insecurity.” It also reports, “These patterns are consistent with another national survey conducted in November 2020, which found that approximately three in 10 college students missed a meal at least once per week since the start of the pandemic.”
- According to the 2019–20 National Postsecondary Student Aid Study that looks at the “First Look at the Impact of the Coronavirus (COVID-19) Pandemic on Undergraduate Student Enrollment, Housing, and Finances,” “Students who identified as genderqueer, gender nonconforming, or a different identity had difficulty finding safe and stable housing at three times the rates (9 percent) of students who identified as male or female (3 percent each).” Also, “Black students, Hispanic or Latino students, American Indian or Alaska Native students, and students of two or more races had difficulty accessing food or paying for food at higher rates (10 to 14 percent) than either White or Asian students (7 percent).”
- According to the 2022 “College Enrollment and Work Activity of Recent High School and College

Graduates” from the U.S. Bureau of Labor Statistics, 42.4 percent of full-time college students and 81% of part-time college students are employed. 44 percent of students at four-year colleges and 55.5 percent of students at two-year schools are employed.

- According to the Institute for Women’s Policy Research 2014 “4.8 Million College Students Are Raising Children” report, “Approximately 2.1 million student parents attend 2-year institutions, representing 30 percent of the entire community college student body. An additional 1.1 million student parents attend four-year institutions (public and private not-for-profit), representing 15 percent of the total four-year undergraduate student body.”
- According to the National Center for Learning Disabilities 2017 “The State of Learning Disabilities: Understanding the 1 in 5” report, “Learning and attention issues are more common than many people think, affecting 1 in 5 children.” They also report that “[s]uccess in college and the workplace is heavily influenced by internal resilience factors such as temperament and self-perception. Low self-esteem and stigma help explain why young adults with learning disabilities—who are as smart as their peers—enroll in four-year colleges at half the rate of all young adults. Lack of self-advocacy and self-regulation skills may explain why students with learning disabilities who attend any type of postsecondary school are less likely to graduate than students without disabilities.”
- According to the American College Health Association National College Health Assessment Fall 2022 Executive Summary, 33.9% of university students surveyed had been diagnosed with anxiety (60.1 of trans/gender non-conforming respondents), 26.3% reported being diagnosed with depression (55.4% of trans/gender non-conforming respondents), and 30.4% had a positive suicide screening (65.2% of trans/gender non-conforming respondents).

There are endless statistics I could provide, but these alone illustrate that a majority of students have serious adult concerns: parenthood, poverty level, and employment, among others. For students with disabilities or mental health issues, they are constantly facing the challenge of deciding for themselves for the first time whether to request services. Veterans are returning from the military’s high-responsibility, high-anxiety life, perhaps with some form of disability, to (re)enter the classroom. As a side note, it is also possible for veterans to go from deployment to the classroom within as little as *three days*. Those students who do not fit any of the above markers are still struggling with learning how to become an adult, how to negotiate new freedoms and identities. I especially like how Ronald Barnett in *A Will to Learn* (2007, p. 2) looks at the experience of college students as “a project that calls for considerable effort and even anxiety on their parts, and it is a project where success cannot be assured...Just how is it that students keep going?” He echoes my own awe of students who continue to show up in spite of potential and often multiple challenges. Our job is to move them from “showing up” to “investing,” to the point that they become immersed in their learning and embrace a liberal education.

## Making Choices

More than adults, students are people – with the concerns, the emotional tangles, and the physical realities that any person may have. I think we can all agree that we struggle to teach when, for example, our child is sick, we have been up all night working, we’re not sure if we’ll have enough money to eat that week (which, unfortunately, is all too common among adjunct faculty, in particular), or we have a physical or mental health issue. The 2013 “Higher Stress: A Survey of Stress and Well-Being Among Staff in Higher Education” (p. 34) by the University and College Union in the United Kingdom concludes that stress is a major cause for concern in higher education settings. Maggie Berg and Barbara K. Seeber note in *The Slow Professor* (2016, p. 6) that “faculty stress directly affects student learning. We know from experience that when we walk into a classroom breathless, rushed, and preoccupied, the class doesn’t go well; we struggle to make connections with the material and our students.” It is just as difficult – arguably, perhaps more so given the type of cognitive activity – for students to “do their job,” to learn, under such circumstances in their own lives. Judy Willis (2006, p. 58) provides the science that the brain cannot learn and process information effectively, especially in terms of remembering, when it is dealing with stress. Despite books such as the humorously-titled *Professors Are from Mars®*, *Students Are from Snickers®* (which actually is a useful book on how to break down barriers between instructors and students with humor), we have far more in common than we usually admit.

At the same time as we need to acknowledge our commonalities with students, we do need to be aware of critical differences. In general, we don’t teach students like us. We must remember that we chose to spend several years immersed in a specific discipline, probably because we had investment in it (either naturally or awakened later) as well as affinity for it (either naturally or developed). We have spent a great deal of time with our subjects, and we’re passionate about them. We’re also, at this point, experts, and it’s likely we have forgotten what it means to be a beginner. I mentioned the “expert blind spot” that Susan A. Ambrose, etc., identify in *How Learning Works: Seven Research-Based Principles to Smart Teaching* (2010, p. 99). If we acknowledge that we think differently than our students and yet we have common human needs and experiences, we can be more empathetic to them.

Thinking of students as people and adults can change how we perceive their requirements of education. Chet Meyers and Thomas Jones (1993, pp. 7-8) tell us rightly that adults “do not suffer fools gladly.” When a student does not complete readings or assignments or demonstrates apathy at having to take a course outside their major, there is every possibility they chose not to do so because they simply do not see the worth of the work. Consciously or unconsciously, they may be choosing not to waste their time on it.

## The Space and Ability to Invest

Faith Kurtyka (2013) comments that “students [should] have a role in the university and an ethos that means that they can ask for something from their education [...] have the power to shape their educational experiences



as opposed to feeling like victims to whatever the university or their instructors want to do.” Let’s focus on the words “ethos,” “power,” and “victims.”

“Victims” first. Consider some more statistics:

- The Centers for Disease Control and Prevention find that “almost two-thirds of surveyed adults report at least one ACE (Adverse Childhood Experiences, such as emotional, physical, or sexual abuse), and more than one in five reported three or more ACEs,” which various studies associate with having “lasting effects on...graduation rates [and] academic achievement.”
- The 2021 Annual Report of the Center for Collegiate Mental Health concludes that “Stress and Academic Performance showed increases in 2020-2021” and “Eating Concerns and Family Distress slightly increased.”
- According to Bruce Sharkin (2006, pp. 4-5), “In a survey conducted by the American College Health Association (as cited in Voelker, 2003), a high percentage of students reported feeling hopeless and depressed to the point where they could barely function.”
- According to Barredo, et al., in “Stress and Stressors: The Impact of the COVID-19 Pandemic on Students, Faculty and Staff at a Historically Black College/University” (2023, p. 279), “Inequities about the impact of COVID-19 among racial groups have been widely reported in the United States and they show that minorities and people of color are more adversely and disproportionately affected than their White counterparts.”
- According to the Victims of Crime “2015 NCVRW Resource Guide” on school and campus crime, “Of youth ages 12 to 18 in 2012, 52.4 per 1,000 students were victimized at school: 28.8 per 1,000 students experienced some form of violent victimization, with 3.4 per 1,000 students experiencing serious violent victimization.” Also, “Twenty-eight percent of students age 12 to 18 in 2011 reported being bullied at school during the school year.” More so, “In a 2011 study that included youth in grades 6 through 12, 64 percent of lesbian, gay, bisexual, or transgender (LGBT) respondents said they felt unsafe in school because of their sexual orientation, and 44 percent felt unsafe because of their gender expression” while “[e]ighty-two percent of LGBTQ youth respondents in 2011 had been verbally harassed at school because of their sexual orientation, 38.3 percent had been physically harassed (e.g., pushed or shoved), and 18.3 percent had been physically assaulted because of their sexual orientation.” On college campuses, “[i]n 2012, 88,444 crimes were reported.” The data does not get separated out, but, “[o]f the hate and bias crimes reported on school and college campuses in 2012, 52.0 percent were hate crimes based on race, 20.3 percent were hate crimes based on sexual orientation, 16.8 percent were hate crimes based on religion, 10.1 percent were hate crimes based on ethnicity, and 0.8 percent were hate crimes based on disability.”
- The National Sexual Violence Resource Center reports that “[o]ne in five women and one in 71 men will be raped at some point in their lives” and “[o]ne in four girls and one in six boys will be sexually abused before they turn 18 years old.” Additionally, “[o]ne in 5 women and one in 16 men are sexually

assaulted while in college” and “[m]ore than 90% of sexual assault victims on college campuses do not report the assault.”

- According to Z Nicolazzo in *Trans\* in College* (2017), “Studies now indicate that 50% or more of trans\* people will experience intimate partner or sexual violence in their lifetimes (Calton, Cattaneo, & Gebhard, 2015; Marine in press-b) and that trans\* college students at the undergraduate and graduate levels face more victimization than cisgender men or women (Cantor et al., 2015; New, 2015)...[A]lmost 60% of trans\* undergraduates, and a little more than 60% of trans\* graduate students, felt a report of sexual violence would not be taken seriously by campus administrators.”

These numbers are staggering, even more so when considering what the people sitting in front of us in our classes have experienced, are experiencing, or will experience. Essentially, as difficult of a subject as it is to consider, many of our students are intimately aware of what feeling like a victim means. To recreate that scenario in their educational experiences, even unintentionally, reinforces the image that learning is, at best, a burden and, at worst, abuse.

Given these statistics, it is fair to extrapolate that many of our students have experienced powerlessness in one form or another, either short- or long-term, quite often at the hands of people in authority or people who should have had their best interests at heart. Many were not allowed to question their environment, which, if we think about it, is often true in college as well – not from nefarious intentions, but simply logistics in most cases. Registrars pick the rooms for classes, departments pick times and credits, governing bodies pick what are required courses. Many students before they reach us were not allowed to question the rules made for them. Again, this is often the case in traditional college classes – we set the rules, choose the readings, set the assignments. Even for individuals who have not experienced abuse, college is the first time they have chosen to be in a classroom. Or maybe not – maybe their families required them to enroll. “Power” has not exactly been a standard in their lives before we meet them.

That leaves us with “ethos,” specifically, continuing with Kurtyka, “an ethos that means that they can ask for something from their education.” This returns to the “students are people too” mantra, but it cannot be overstated. If we want our students to question, to be involved with their own learning, then we have to embrace questions of all kinds, even ones we don’t like. We have to listen to them when they ask to be a part of their education. We have to enable them to exercise the power to affect their experiences. We have to create the environment that will allow them the space and the ability to invest.

Not going to lie. This is not easy.

For one, there is the perception that increasing the power of students in the classroom entails giving up some of our own. For some, it can be difficult to give over this power. I have never really bought into this belief. Is there a finite amount of power to go around that means only so much percentage for the students and for the instructor? Yes, I understand that engaging in learner-centered teaching and active learning is to transfer power to students. And the whole point of learner-centered teaching is to put control over learning into the hands of the student. But control in the hands of students does not mean that an instructor has no control. Inviting



students into the process of learning does not diminish the role of the instructor. Instead, it amplifies it because being “guide on the side” can take more effort and energy than being a “sage on the stage.”

Which leads to a second point: time. Preparing a classroom experience about course content, delivering that experience, and testing students on that experience takes a great deal of time. Engaging students in what it means to learn, how to learn, and investing in learning takes time. On top of time spent preparing students for active learning, guiding them through it, assessing it, thinking about how to redesign, etc. – then starting over again. Certainly, as Berg and Seeber (2016, p. 7) point out, “many situations identified as sources of work stress are about lack of time,” which I would argue is true of students as well. It is a commitment, but certainly one that yields dividends in student learning, which may, in the end, counteract any stress by increasing pleasure in what we do, and, it is important to remember that Berg and Seeber (p. 34) find “pleasure – experienced by the instructor and the students – is the most important predictor of ‘learning outcomes’.” This qualitative statement is supported by science. Judy Willis (2006, p. 58) reports that it has been found in “neuroimaging studies of the amygdala, the hippocampus, and the rest of the limbic system and through measurement of dopamine and other brain chemical transmitters, students’ comfort level [such as self-confidence, trust and positive feelings for teachers, and supportive classroom and school communities] has a critical impact on information transmission and storage in the brain.” In short, pleasure good, stress bad.

There is also a burden of care. If we recognize that every student has different reasons for investing or not and if we accept that any of the statistics listed above (and the many more not discussed here) can have a profound effect on a student’s ability and/or willingness to invest, then there is quite a bit of an onus upon us to consider how to reach as many students as possible each time we step into a classroom. Depending on our own experiences and background, this awareness can take its toll, which is often termed “burnout.” Thomas M. Skovholt and Michelle Troter-Mathison (2016, pp. 108-109) delineate between meaning burnout and caring burnout. The former refers to the point when the work of helping others no longer provides any meaning to the individual. The latter is the inability to reattach and create relationships due to being too depleted. Skovholt and Troter-Mathison use a battery analogy that, when it’s “drained enough, there is no spark, no life.” In more extreme cases, burnout may become “compassion fatigue,” which is, as Beverly Diane Kyer (2016, p. 39) defines it, “a syndrome which consists of various symptoms that mirror post-traumatic stress disorder (PTSD) and is the suffering and secondary trauma experienced by a caregiver or service worker who deals with people who are the victims of trauma.” The stress of university faculty was high even before COVID, and there has not been enough adequate studies to quantify what that stress looks like post-pandemic. There are strategies to prevent or remedy burnout or compassion fatigue, particularly self-care practices, but these depend on the individual and even access to these practices. Hopefully, a return on student learning can at the least lighten this burden.

## We're in This Together

Derek Black, the son of Stormfront founder Don Black and the godson of David Duke, disavowed his white supremacist upbringing after attending a liberal arts college. As he remembers (2016):

Several years ago, I began attending a liberal college where my presence prompted huge controversy. Through many talks with devoted and diverse people there — people who chose to invite me into their dorms and conversations rather than ostracize me — I began to realize the damage I had done.

Paul Corrigan, professor at Southeastern University, posted on his blog thoughts from a graduating student, Emilee Rosell, who tells a moving story about her own educational experience (2016):

Now, at the very end of my college career, I recognize that I have often brought some amount of resistance into courses such as these—the ones that seek most to change and enrich lives...But what I found most threatening about “liberal” ideas was not the fear of being politically misled. Instead, what I resisted so deeply was this transformation of mind and heart. It involves an abolition of the old as well as a beautiful creation of the new, and this was a risk I did not want to take. Indeed, I never expected to find myself as transformed and changed as I am today. And it was sometimes just as agonizing, frightening, and painful as I imagined. But every heartache and every joy that comes with caring more deeply and thinking more profoundly has been worth the cost.

You might argue: these are exceptional cases! And, certainly, in the case of Black, that would be true. But, exceptional or not, what they illustrate is that our students can come to us with all forms of resistance. For Black and Rosell, their upbringing and backgrounds affected how they approached learning. We have plenty of studies that indicate other reasons for resistance, including previous educational experiences and fixed mindsets. For students who grow up in working-class families, there is a strong emphasis on getting a college degree in order to get a job, which sometimes creates a resistance to any course that does not appear to have a direct influence on this goal. All in all, whether they seem logical to us or not, there are many reasons why a student may be resistant to what we teach.

That resistance can take a number of forms. Questioning is certainly one of them. “Why do I have to take this course?” “Why do I have to do this assignment?” “Why does it matter whether we do this or not?” These may or may not be asked with a belligerent tone – in fact, they may or may not be asked at all – but they can make us feel defensive. Michael Linsin, in his post “How to Handle Students Who Question Your Methods” (2016), cautions against that defensiveness, stressing that classrooms are “most effective when students buy-in” and “when they believe you have their best interest at heart and appreciate what it’s like being in their shoes.” He’s talking about K-12 classrooms here, but I argue that the idea is even more valid when teaching adults. It has certainly been my experience, and is supported by P. Sven Arvidson and Therese A. Huston (2008, p. 13 ), that, when an instructor is respectful, students respond in kind. The opposite is also true.

As A.J. Juliani, in *Learning By Choice: 10 Ways Choice and Differentiation Create An Engaged Learning Experience for Every Student* (2014, p 5), reminds us, “We typically tell students what they have to read and learn, then lead them through teacher created activities, and finally test them traditionally on what they

understand. There is no chance of falling into such a deep state of learning that they would forget their lunch!” Getting a college student to forget their lunch is rather an ambitious goal! I try for something more attainable by instilling investment. I would be naïve if I claimed that we can reach every student, address every concern, and pre-empt every form of resistance, but thinking about and implementing strategies that speak to investment can certainly help to overcome the resistance or apathy we might sense in our students in our general education courses. Even the act of offering students the opportunity to invest can spur a willingness to engage in their own learning. As James Lang remarks in *Small Teaching* (2016, pp. 174-5), “If we can help create that sense of purpose in our students and can ensure that their purpose aligns with what we want them to learn, we are likely to heighten their attention and cognitive capacities in our courses and to turn their minds in productive directions.”

Michael Gundlach (2016), in an article with a title that I promise did not influence my mantra, “Students are People, Too: Supporting Students Academically and Personally,” dubs students “fellow Spartans.” Such an outlook eliminates the “us vs. them” attitude that sadly is prevalent in higher education. I would advocate replacing that attitude with a “we’re in this together” attitude, which is far more encouraging for students to engage in the kind of work necessary for deep, significant learning.

## PART 3: HOW CAN WE COMMUNICATE THE SIGNIFICANCE OF GENERAL EDUCATION?

---

### Why *Do* They Have to Take Our Courses?

When I started my full-time university position, it came with the usual responsibility of advising. With that great responsibility often comes great skepticism. Students, confronted with the sheer number of courses they are required to take, will express doubt about the necessity of one requirement or another. I developed at the time what I thought was a clever response. “Why not?” I would ask. “Why not take courses in these subjects supposedly unrelated to your major? Will it hurt you to have more knowledge?” I had not intended to be flippant – although perhaps I did intend to be sarcastic (leopard and spots, after all) – but I realized later that is exactly what my answer sounded like, not all that different in the long run from the “learn math to balance your checkbook” argument many of us heard as children. I am comforted that my response frequently led to more productive conversations about the nature of general education, but there are certainly more thoughtful and useful, not to mention respectful, ways to get there.

One of those ways requires us to ask of ourselves: why *DO* students need to take our courses? Even more broadly, we need to ask ourselves why students need to take every required course in our curriculum. The first question is difficult enough – as easy as it may seem on the surface. The second question can be more complicated depending on the design of our general education curriculums and whether or not we as individual instructors either understand or buy into requirements.

Our first task is to understand thoroughly why students should take our own courses. As with any other aspect of teaching, it begins with being able to fully articulate what we are trying to convey. With content, this understanding is usually almost second nature, or, in the case of material with which we are less familiar, we are capable of connecting it to previous knowledge or of educating ourselves on the topics. When it comes to the reflective, even meta-, exercise of thinking about the significance of what we teach, it is perhaps less readily apparent.

Instead of allowing student questions concerning the need for our courses to undermine our own motivation, I suggest that they are an opportunity. After making the realization above during advising, I reconsidered my courses, coming to the (albeit painful) conclusion that I was not being transparent about what I wanted my students ultimately to “get” by being in my classrooms. I made assumptions about students’ self-motivation and their ability, without experience or background, to connect the dots, within the context of the course and to outside material. I began asking myself, “Why *do* they have to take this course?” In doing so,

I could take a fresh look at my approach to course design and take into consideration my students' need for investment.

In this reassessment process, however, I did not want to make the mistake of simply providing a step-by-step guide that leads in one direction – *my* direction. As I said before, what I consider motivation for investment may not be what students consider motivation. More importantly, it rather defeats the purpose of respecting their questioning if I immediately shut it down with a rigid answer that may or may not make sense to them (thinking personally here of my own past development). My goals, which are reflected in my learning outcomes, are to encourage more critical questioning and to provide multiple tools that will help students design their own answers with the benefit of insight and information and embrace their own investment in their learning.

Maryellen Weimer in an article for *Faculty Focus* aptly titled “Those Magical and Mysterious Learning Moments” (2014) quotes William Reinsmith as remarking, “not even the most outstanding teacher can summon a *learning moment*. The most we can do is fashion a context for them.” One of my interpretations of “fashioning a context” is to provide opportunities that are consciously and deliberately designed to help students invest in general education learning. It is in the design and redesign of courses that we can think about how to incorporate issues of student investment into our learning activities and assessments, making it an overarching, ubiquitous goal in course and curriculum frameworks.

I suggest sharing whatever form your articulation about the purposes and significance of your courses takes with colleagues, other instructors, and advisors. Sometimes we can work at cross purposes across our campuses if we are each unable to discuss – not shallowly and theoretically, but with in-depth understanding – with our students the value of other courses and requirements. Reinforcing stereotypes of English majors avoiding math, biology majors who don't need to read fiction, or business majors who don't need to know how to write – even if this reinforcement is passive and unintentional – only hinders the principles of general, liberal education. By sharing with others our expertise and our understanding of our fields and courses, other instructors and advisors will be informed advocates and be able to discuss the significance of required courses beyond generic platitudes and having to fall back on the old “it's required” argument. What would it be like if we could all help each other reinforce the significance of not only our individual corner of education but education as a whole? It really can only start with communication.

In the first part, I commented that we as instructors can see the grand plan because we are cogs in it, but our students often don't. Faith Kurtyka (2013) quotes from a student writing sample from a first-semester composition course: “Why should students have to pay for overcrowded classes that have nothing to do with their major? General education courses should be treated like samples at a coffee shop: if somebody doesn't want to indulge in a sample, then they should not be forced to.” It's a curious metaphor, of course, but to keep the student's image going: what if the barista knew that the coffee they were selling contained a cure for a major disease? Yet, they persisted in marketing the coffee as “great tasting with an interesting flavor,” “one you *should* try,” “because it's *good* for you,” without highlighting its significant health benefits? We would find this strategy ludicrous, and, yet, in the above student's defense, it is not all that different from how we explain

general education courses to our students. They are courses they “should” try because they are “good” for them. If all else fails, we fall back on “because it’s required.”

Instead of resorting to such vague explanations, which I would argue would not convince even instructors to do something about which they were unclear of the value (perhaps a good example of this is the frequent discussions concerning what makes an effective learning outcome and why they matter anyway), one solution is to let students in on the secret: that there are real, clear, proven reasons for studying a variety of subjects, for developing the skills that are emphasized in the liberal arts education. For instance, the University of Idaho (Henscheid, et al., 2009), in making changes to their general education program, found that “to convince students that the humanities are important, they must, first, rethink the traditional content of humanities instruction and, second, ask instructors *to do more to make student aware of the particular contributions the humanities make to intellectual growth*” (p. 279, emphases added). There is one word missing here that I believe is the crux of how to accomplish this goal: to make students *explicitly* aware of the contributions the [insert discipline here] make to intellectual growth.

## How Can We Explicitly Teach Students the Value of Our Courses and Curriculum?

Explicit. Related: transparent. You will frequently hear about “embedding” skills into our curriculum, about what our students “get” out of our courses above and beyond the stated learning outcomes. While it is undeniably true that there are skills and material that students gain from courses that are not our main focus or are even unintended, it seems counter-productive to keep these skills labeled as “important” a mystery, almost asking students to go on a scavenger hunt to find them, following clues (some more effective than others) that we leave scattered here and there. Why not simply let our students know what we are teaching and what we expect them to learn?

The same is true of “the bigger picture.” Why not simply provide students with opportunities to assemble the jigsaw puzzle that is university curriculum? Each piece is designed to make a whole, to create an image of a “well-rounded” student, of a “life-long learner.” Yet, if you can’t see the image, then it’s nigh impossible for most people to put the puzzle together. It’s just a jumble of odd-shaped pieces. If all students are confronted with is the jumble with no indication of the end goal, then putting the pieces together is less appealing and certainly less fulfilling.

Let’s imagine that each student, on the first day or week of every course, spent time thinking about why they are taking the course (beyond the content), how it fits into their college career (the whole, not just the major), how it leads to a richer life (job-wise, citizen-wise, person-wise) after graduation. They are provided with readings, activities, discussion – time – that emphasize explicitly what is at stake, the “contributions to their intellectual growth.” If every course did this, what would be the outcome? I imagine the following: students who are able to articulate for themselves and others why they are taking each course and how courses work

together. This is perhaps my personal educational utopia, and it would not be simple to implement on a large scale. Still, it is thought-provoking to contemplate what the ramifications of such wide-spread transparency would be.

How can we begin to create this transparency for our students?

Share with them. Share not the vague, elusive “it’s good for you” statements – which, by the way, they heard repeatedly as children (remember that “balance your checkbook” argument for math?) and it didn’t work for them then either. Share the deeper thoughts, the viewpoints of scholars and more popular thinkers. Let them know your own thoughts about why they are in your class and why you teach what you do. Bring in evidence, and let them analyze it, question it, discuss it, and even doubt it. Each student will find different evidence compelling, but, in order for that to happen, they need to have access to that evidence and the time to consider it. Even a half hour in class spent in this endeavor will give them context they didn’t have before.

One of the reasons students resist general education courses is that they perceive them as discrete topics that have little to do with each other or with their majors. In other words, they aren’t privy to the bigger picture and purpose. According to Anne Beaufort (2012), “the three principles for facilitating transfer of learning that consistently show up in the research on transfer” are:

1. Teach learners to frame specific tasks and learnings into more abstract principles (i.e. concepts of discourse community, genre, rhetorical situation, etc.) that can be applied to new situations (Cormier and Hagman; Foertsch; Gick and Holyak; Hatano and Oura; Sternberg and Frensch);
2. Give learners numerous opportunities to apply key concepts to different problems and situations (Foertsch; Hatano and Oura; Perkins and Salomon; Salomon and Globerson; Brooks and Dansereau; Wardle, “Understanding ‘Transfer’”);
3. Teach the practice of mindfulness, or meta-cognition, to facilitate awareness of learning and transferable knowledge and skills (Brooks and Dansereau; Wardle “Understanding ‘Transfer’”).

I want to reframe the first point as, rather than emphasizing abstract concepts, instead focusing on explicit teaching of these “abstract principles.” Before we teach learners to frame tasks into “abstract principles,” we need to be explicit about what those principles are. As Elizabeth Wardle (2009, p. 770) notes concerning teaching writing, it is up to us as instructors in all different kinds of classes to teach students explicitly the connections between different types of writing. She specifically points out “one reason for lack of transfer is instruction that does not encourage it.” I like this because it puts it on us to design opportunities for transfer rather than expecting it as a natural by-product or as something that students already know how to do.

The second point concerning giving multiple opportunities to apply learning in a variety of contexts is relevant both to individual courses as well as curriculums in general. In terms of curriculums (general education or majors), this requires instructors to talk to each other and be on the same page – “to align,” in the language of pedagogy. Communication allows instructors to use similar language to describe related concepts, highlighting to students that what they are learning is connected.



As college instructors and students, our worlds revolve around the semester (or the quarter). At the beginning of a semester, there seems like so much time. At the middle, we begin to panic as the clock ticks down. And, at the end, we realize there was no time at all. In those fourteen weeks (or less if in a different system), we have to accomplish what feels like everything. This drive to keep adding more and doing more despite the logic of pedagogical research is what Andrew Miller (2017) calls “The Tyranny of Being on Task.”

It’s useful to step back and remember that, as a colleague once told me, “we aren’t here to finish students – we’re here to begin them.” Our class is not the only class they will take, and they will learn for the rest of their lives. While it can be tempting to fall into the trap of believing that, if students don’t get “x” in your class, they will never get it, that is likely not the case. And I say this as the lone medievalist in my department and almost my campus, which I find inspiring – there is content in my class that they will likely never have encountered anywhere else. Still, having said that, I do like to remember that college is a combination of experiences: a deliberate curriculum. Taking some time for my students to consider the bigger picture or to reflect on what they have learned is far too important to pass over in favor of another quick content lesson (which they honestly probably won’t remember if it’s that rushed). It’s a matter of choosing what is the priority. Cultivating investment in general education learning is worth the time and the investment.

Being honest with students will yield more dividends than almost any other strategy. They respect it, and they feel respected. They don’t want to feel like the university is playing some (very unpleasant) game with them, making them guess what they need to achieve to make some nebulous set of individuals happy. And, in case it isn’t clear, that kind of attitude is about as far from learning as it is possible to get. It might be just fine for getting grades or a diploma, but it has little to do with deep learning. Also, be honest about the limitations or the negatives of academia – let them in our secrets.

Being honest with yourself is probably even more difficult in some ways. It’s important to be honest with yourself about the significance of your course and why students should be there. If we can’t explain it to ourselves, then it is next to impossible to communicate it to our students.

One of the most under-utilized resources in understanding how to communicate the significance of general education learning is probably the most obvious: the students. Students themselves are rarely asked about what they want or need. Yes, certainly, we are the experts in the room, but, to be honest, that expertise is generally about content, not teaching strategies. There is no “loss of power” in asking a group of adults what they believe about a certain strategy, what they need from the curriculum as a whole in order to understand it, what they think of the progress of their learning, and what they think can be improved. There are a variety of methods to do this. There is, of course, just asking! I have developed more teaching strategies and honed more classroom activities after informal discussions with students and in-class feedback sessions than in any other way. There are then more formal methods, such as feedback surveys. I would encourage students to read about and participate in national discussions about their learning in order to influence those who are developing the practices *about* them. In fact, sometimes that participation can be built into courses.

If this chapter does nothing else, I want it to emphasize that students are people. They have concerns, responsibilities, tragedies, and triumphs. They have other interests and other parts of their lives beyond our



courses. Sometimes those lives can adversely affect what happens in the classroom or the trajectory of their college careers, just as our lives can affect the quality of our teaching. In addition, students respond to different motivators just as we do. Expecting each of them to respond the same or to respond as we do is a futile endeavor. And, ultimately, that kind of thinking only serves to limit our teaching strategies. Accepting the diversity in our classrooms forces us to consider different ways to reach our students and engage their learning. Embrace student differences. And embrace their humanness.

And when students ask, “Why do I have to take this course?” Answer them.

## Example Strategy: Why Do We Have to Study Early World Literature?

The following strategy is one I use in my early world literature courses, which seem to feature even more initial skepticism from students as to their value than other courses. In this instance, I incorporate a two-week unit at the beginning of the semester devoted to researching the question of why they are taking this course.

In this case, I select several book chapters, news articles, and videos that speak to the idea of cultural heritage as well as invite relevant presenters, such as the executive directors of the Integrated Heritage Project and the local historical society. These materials provide details of intentional destruction of one group’s cultural artifacts by another group: for instance, Henry VIII’s dissolution of the monasteries in England, the Nazi plunder of Jewish artifacts, the burning of libraries, and the destruction of cultural heritage by ISIS in the Middle East. It is essential for this unit to incorporate both historical, current, and inclusive examples in order to broaden the relevance of the discussion. It is also essential that it include examples of the efforts of people to preserve cultural heritage. The guiding questions: if these peoples find it so important to destroy the artifacts of others, then should we not seek to preserve them through the act of study? If other people were willing to risk their lives or their livelihood to save these artifacts, what significance should we give them? This unit ends with the students writing their own “resolutions” concerning their future attitudes and behavior towards cultural heritage, especially early literature. They are asked to revisit these resolutions at the end of the semester, refining them based upon our course.

In asking students to assess this approach, one commented, “Unit 1 helped me to understand why the preservation of world literature is so important. This in turn helped me to appreciate the material that we read in class. I took this course as a requirement and honestly wasn’t expecting to learn so much about cultural values. Starting with that unit allows students to reflect on their cultural values.” Another wrote, “Unit 1 definitely helped me understand why I took this course. A lot of courses I’ve taken have been simply because I had to and I always ask how is this going to relate to the real world. Unit 1 answered that question right from the start. I honestly do not think I would have enjoyed early world literature as much if I had not gained the understanding and appreciation of cultural heritage.”

## PART 4: REFERENCES AND FURTHER READING

---

- Ambrose, Susan, et al. 2010. *How learning works: Seven research-based principles for smart teaching*. San Francisco: Wiley.
- American College Health Association National College Health Assessment. 2022, Fall. Executive Summary of the Undergraduate Student Reference Group. Retrieved from [https://www.acha.org/documents/ncha/NCHA-III\\_FALL\\_2022\\_UNDERGRADUATE\\_REFERENCE\\_GROUP\\_EXECUTIVE\\_SUMMARY.pdf](https://www.acha.org/documents/ncha/NCHA-III_FALL_2022_UNDERGRADUATE_REFERENCE_GROUP_EXECUTIVE_SUMMARY.pdf)
- Arvidson, P. Sven, and Huston, Therese A. 2008. Transparent teaching. *Currents in Teaching and Learning*, 1(1), 4-16.
- Banks, J.A., et. al. 2001, November. Diversity within unity: Essential principles for teaching and learning in a multicultural society. *Phi Delta Kappan*, 196-203.
- Barkley, Elizabeth F. 2010. *Student engagement techniques: A handbook for college faculty*. San Francisco: Wiley.
- Barnett, Ronald. 2007. *A will to learn: Being a student in an age of uncertainty*. New York: McGraw-Hill.
- Barnett, Ronald, and Coate, Kelly. 2005. *Engaging the curriculum in higher education*. New York: McGraw-Hill.
- Barredo, Ronald, Mohamed Kanu, Jemal Gishe, et al. 2023. Stress and stressors: The impact of the COVID-19 pandemic on students, faculty and staff at a historically black college/university. *Journal of Community Health* 48, 269–285.
- Barr, Michele L. 2013. Encouraging college student active engagement in learning: The influence of response methods. *Innovative Higher Education*, 39(4), 307-319.
- Bash, Lee. 2003. *Adult learners in the academy*. Bolton, MA: Anker Publishing Company, Inc.
- Beaufort, Anne. 2012. College writing and beyond: Five years later. *Composition Forum*, 26. Retrieved from <http://compositionforum.com/issue/26/college-writing-beyond.php>
- Berg, Maggie, and Seeber, Barbara K. 2016. *The slow professor: Challenging the culture of speed in the academy*. Toronto: University of Toronto Press.
- Berg, Maggie, and Seeber, Barbara K. 2016. *The slow professor: Challenging the culture of speed in the academy*. Toronto: University of Toronto Press.
- Berk, Ronald A. 2003. *Professors are from Mars®, Students are from Snickers®: How to write and deliver humor in the classroom and in professional presentations*. Sterling, VA: Stylus.
- Black, Derek R. 2016, November 26. Why I left white nationalism. *The New York Times*. Retrieved from [https://www.nytimes.com/2016/11/26/opinion/sunday/why-i-left-white-nationalism.html?\\_r=0](https://www.nytimes.com/2016/11/26/opinion/sunday/why-i-left-white-nationalism.html?_r=0)
- Bowen, Howard R. 1997. *Investment in learning*. Baltimore: Johns Hopkins University Press.

- Bray, Barbara, and McClaskey, Kathleen. 2015. *Make learning personal: The what, who, wow, where, and why*. Thousand Oaks, CA: Corwin.
- Brookfield, Stephen. 2016, April 28. The skillful teacher. *Teaching in Higher Ed*. Retrieved from <http://teachinginhighered.com/podcast/skillful-teacher/>
- Brookfield, Stephen D. 1995. *Becoming a critically reflective teacher*. San Francisco: Jossey Bass.
- Center for Collegiate Mental Health. 2021. Annual Report. Retrieved from <https://files.eric.ed.gov/fulltext/ED617358.pdf>
- Center for Law and Social Policy. 2018, September. Children, young adults stuck in poverty: Census data show millions left behind. Retrieved from [https://www.clasp.org/sites/default/files/publications/2018/09/2018\\_censusdatabrief.pdf](https://www.clasp.org/sites/default/files/publications/2018/09/2018_censusdatabrief.pdf)
- Centers for Disease Control and Prevention. 2016, April 1. Adverse childhood experiences (ACEs). Retrieved from <https://www.cdc.gov/violenceprevention/acestudy/index.html>
- Cook-Sather, A, Bovill, C, and Felten, P. 2014. *Engaging students as partners in teaching & learning: A guide for faculty*. San Francisco: Jossey-Bass.
- Horowitz, S. H., Rawe, J., & Whittaker, M. C. 2017. The state of learning disabilities: Understanding the 1 in 5. National Center for Learning Disabilities. Retrieved from <https://www.ncld.org/research/state-of-learning-disabilities/executive-summary/>
- Czerniawski, Gerry, and Kidd, Warren. 2011. *The student voice handbook: Bridging the academic/practitioner divide*. Bingley, UK: Emerald Group.
- Davis, Jessica. 2012, October. School enrollment and work status: 2011. *United States Census Bureau*. Retrieved from <http://www.census.gov/prod/2013pubs/acsbr11-14.pdf>
- Fink, L. Dee. 2013. *Creating significant learning experiences: An integrated approach to designing college courses*. San Francisco: Jossey-Bass.
- Gault, Barbara, Reichlin, Lindsey, Reynolds, Elizabeth, and Froehner, Meghan. 2014, November. 4.8 million college students are raising children. *Institute for Women's Policy Research*. Retrieved from <http://www.iwpr.org/publications/pubs/4.8-million-college-students-are-raising-children?searchterm=%23c424>
- Goldrick-Rab, Sarah, Broton, Katharine, and Eisenberg, Daniel. 2015. Hungry to learn: Addressing food & housing insecurity among undergraduates. Wisconsin HOPE Lab. Retrieved from [http://wihopelab.com/publications/Wisconsin\\_hope\\_lab\\_hungry\\_to\\_learn.pdf](http://wihopelab.com/publications/Wisconsin_hope_lab_hungry_to_learn.pdf)
- Gundlach, Michael. 2016, February 24. Students are people, too: Supporting students academically and personally. *Inside Teaching MSU*. Retrieved from <http://insideteaching.grad.msu.edu/students-are-people-too-supporting-students-academically-and-personally/>
- Henscheid, Jean, O'Rourke, Michael, and Williams, Gary. 2009. Embedding the humanities in cross-disciplinary general education courses. *Journal of General Education*, 58(4), 279-95.
- HOPE Center. 2021. Basic needs insecurity during the ongoing pandemic. Retrieved from <https://hope.temple.edu/sites/hope/files/media/document/HopeSurveyReport2021.pdf>

- Jensen, Eric. 2013. *Engaging students with poverty in mind: Practical strategies for raising achievement*. Alexandria, VA: Association for Supervision & Curriculum Development.
- Juliani, A.J. 2014. *Learning by choice: Ten ways choice and differentiation create an engaged learning experience for every student*. Ambler, PA: Press Learn Publishing.
- Kaiser, Leann M. R., Kaminski, Karen, and Foley, Jeffrey M. (Eds.). 2013. *Learning transfer in adult education*. San Francisco: Wiley.
- Kinman, Gail, and Wray, Siobhan. 2013. Higher stress: A survey of stress and well-being among staff in higher education. *University and College Union*. Retrieved from [http://www.ucu.org.uk/media/5911/Higher-stress-a-survey-of-stress-and-well-being-among-staff-in-higher-education-Jul-13/pdf/HE\\_stress\\_report\\_July\\_2013.pdf](http://www.ucu.org.uk/media/5911/Higher-stress-a-survey-of-stress-and-well-being-among-staff-in-higher-education-Jul-13/pdf/HE_stress_report_July_2013.pdf)
- Kurtyka, Faith. 2013. What does your money get you?: Active learning as an alternative to consumerism in the composition classroom. *Composition Forum* 27. Retrieved from <http://compositionforum.com/issue/27/active-learning.php>
- Kyer, Beverly Diane. 2016. *Surviving compassion fatigue*. Columbus: Gatekeeper.
- Lang, James. 2016. *Small teaching: Everyday lessons from the science of learning*. San Francisco: Jossey-Bass.
- Linsin, Michael. 2016, September 10. How to handle students who question your methods. [Web log post]. Retrieved from <https://www.smartclassroommanagement.com/2016/09/10/how-to-handle-students-who-question-your-methods/>
- McNair, Tia Brown. 2016. Designing purposeful pathways for student achievement through transparency and problem-centered learning. *Peer Review*, 18(1/2). Retrieved from <http://www.aacu.org/peerreview/2016/winter-spring/guesteditor>
- Meyers, Chet, and Jones, Thomas B. 1993. *Promoting active learning*. San Francisco: Jossey-Bass.
- Miller, Andrew. 2017, January 11. The tyranny of being on task. *edutopia*. Retrieved from <https://www.edutopia.org/article/tyranny-of-on-task-andrew-miller>
- Mulnix, Amy B. 2016, November 7. The power of transparency in your teaching. *Faculty Focus*. Retrieved from <http://www.facultyfocus.com/articles/instructional-design/power-transparency-teaching/>
- National Center for Education Statistics. 2011. Youth indicators 2011 – America’s youth: Transitions to adulthood. Retrieved from [https://nces.ed.gov/pubs2012/2012026/chapter3\\_31.asp](https://nces.ed.gov/pubs2012/2012026/chapter3_31.asp)
- National Center for Education Statistics. 2021, June. National postsecondary student aid study. Retrieved from <https://nces.ed.gov/pubs2021/2021456.pdf>
- National Sexual Violence Resource Center. 2015. Statistics about sexual violence. Retrieved from [http://www.nsvrc.org/sites/default/files/publications\\_nsvrc\\_factsheet\\_media-packet\\_statistics-about-sexual-violence\\_0.pdf](http://www.nsvrc.org/sites/default/files/publications_nsvrc_factsheet_media-packet_statistics-about-sexual-violence_0.pdf)
- Nicolazzo, Z. 2017. *Trans\* in college: Transgender students’ strategies for navigating campus life and the institutional politics of inclusion*. Sterling, VA: Stylus.
- Palmer, Parker J. 2007. *The courage to teach: Exploring the inner landscape of a teacher’s life*. San Francisco: Jossey-Bass.

- Pappas, Christopher. 2013, August 6. The myth of learning styles. *eLearning Industry*. Retrieved from <http://elearningindustry.com/the-myth-of-learning-styles>
- Popovic, C., and Green, D. A. 2012. *Understanding undergraduates: Challenging our preconceptions of student success*. New York: Routledge.
- Radwin, David, Wine, Jennifer, Siegel, Peter, and Bryan, Michael. 2013, August. 2011-12 national postsecondary student aid study. *National Center for Education Statistics*. Retrieved from <https://nces.ed.gov/pubs2013/2013165.pdf>
- Rosell, Emilee. 2016, December 22. What I learned from my “liberal” arts education. [Web log post]. Retrieved from <https://corriganliteraryreview.wordpress.com/2016/12/22/what-i-learned-from-my-liberal-arts-education-by-emilee-rosell/>
- Seldin, P. 1995. Capitalizing on diversity in the classroom. In *Improving College Teaching* (pp. 103-113). Bolton, MA: Anker Publishing.
- Sharkin, Bruce. 2006. *College students in distress: A resource guide for faculty, staff, and campus community*. New York: Routledge.
- Shoenberg, Robert. 2005. *Why do I have to take this course? A student guide to making smart educational choices*. Washington, DC: Association of American Colleges and Universities.
- Skovholt, Thomas M., and Trotter-Mathison, Michelle. 2016. *The resilient practitioner*. Third ed. New York: Routledge.
- U.S. Bureau of Labor Statistics. 2023, April 26. College enrollment and work activity of recent high school and college graduates. Retrieved from <https://www.bls.gov/news.release/hsgec.nr0.htm>
- Victims of Crime. 2015. NCVRW resource guide: School and campus crime. Retrieved from [http://victimsofcrime.org/docs/default-source/ncvrw2015/2015ncvrw\\_stats\\_school.pdf?sfvrsn=2](http://victimsofcrime.org/docs/default-source/ncvrw2015/2015ncvrw_stats_school.pdf?sfvrsn=2)
- Wardle, Elizabeth. 2009. “Mutt genres” and the goal of FYC: Can we help students write the genres of the university? *College Composition and Communication*, 60(4), 765-89.
- Weimer, Maryellen. 2014, September 3. Those Magical and Mysterious Learning Moments,” *Faculty Focus*. Retrieved from <http://www.facultyfocus.com/articles/teaching-professor-blog/magical-mysterious-learning-moments/>
- Werder, Carmen (Ed.). 2010. *Engaging student voices in the study of teaching and learning*. Sterling, VA: Stylus.
- Willis, Judy. 2006. *Research-based strategies to ignite student learning: Insights from a neurologist and classroom teacher*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Winkelmes, Mary-Ann. 2013. Transparency in teaching: Faculty share data and improve students’ learning. *Liberal Education*, 99(2). Retrieved from <https://www.aacu.org/publications-research/periodicals/transparency-teaching-faculty-share-data-and-improve-students>
- Zull, James E. 2002. *The art of changing the brain: Enriching the practice of teaching by exploring the biology of learning*. Sterling, VA: Stylus.



---

This is where you can add appendices or other back matter.