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Uncertainty as a Catalyst for Growth: Learning through Dialogue, Questioning, and Reflection

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Higher education institutions strive to turn out graduates that are well-rounded, engaged, and civic-minded individuals no matter their discipline or major. The authors believe that more can be done to ensure that this goal is attained. To address this issue, two librarians designed a learner-centered course that embraced the uncertainty found in today's information landscape through the use of dialog, questioning, and reflection. This article will describe the social and educational atmosphere at colleges that necessitates looking deeper into how and why colleges and universities need to build these new types of courses to meet their goals. From there, it will move into describing the foundational concepts that the class is built on which include Socratic discussion, team teaching, and a learner-centered classroom. It will also describe the specific methods, assignments, and goals used within so other educators may apply the course to their own institution. Marshall McLuhan's *Understanding Media*, famous for its aphorisms, is the course's foundational text and primed the class for discussion and questioning throughout the course. Discussion and questioning are seen as two of the keys to educating the next generation to be able to not only survive but thrive in the 21st century.

It is not uncommon for colleges and universities to have language in their mission statement indicating that they value a liberal education. As John Stuart Mill (1867) famously stated in his inaugural address to the University of St. Andrews, the "proper function" of a university education is to "make…capable and cultivated human beings" (p. 4). Administrators, legislators, and the boards that oversee these institutions hope that a liberal education gives students a broad perspective beyond their specific area of study, allowing students to see connections between disciplines, gain an understanding that what we know is not fixed in space or time, while also building students' critical thinking skills so they become responsible, valued citizens that make positive contributions to society (AAC&U, 2022; Churchill, 2021; Freedman, 2003; Giamatti, 1981; Graber, 2012; Griswold, 1959). Additionally, there is an underlying belief that a liberal education sets students up for success regardless of disciplinary degree. This goal is, in our opinion, a necessity in the information age we are in; however, the question many are asking is—are students achieving this?

Libraries and librarians have attempted to address their role in enhancing a college's liberal education mission through their own teaching programs. Information literacy, a foundational teaching concept for librarians, was first defined by the ALA Presidential Committee on Information Literacy in 1989 (ALA, 1989) but its place in the college librarian's teaching toolbox was not fully realized until after the 2000 release of *The Information Literacy Competency Standards for Higher Education* by the Association of College and Research Libraries (ACRL) (ALA, 2000). After a decade and a half of use, ACRL updated the profession's understanding of information literacy with the 2015 release of the *Framework for Information Literacy in Higher Education* (ACRL, 2015). This new framework seeks to address a "rapidly changing higher education environment, along with the dynamic and often uncertain information ecosystem in which all of us work and live" which "require[s] new attention to be focused on foundational ideas about that ecosystem" (ACRL, 2015). Instead of a *skills-based* approach to teaching and learning that is often very proscriptive, the framework focuses on *concepts* that are adaptable depending on the situation.

Although colleges and librarians have employed various methods to support their liberal education goals, we believe that there are too few instances where students actually get to make those connections between disciplines or address the questions and real-world issues that they are experiencing on a daily basis. This article will describe how we designed and deployed an interdisciplinary course that sought to address this educational gap through purposeful questioning, reflection, and embracing uncertainty. These concepts, we believe, need to be at the forefront of a 21st century education in order for students to be successful in an ever-changing world.

Librarian Challenges

Despite the availability of the ACRL *Standards* and *Framework*, librarians have struggled to incorporate the concepts and habits of mind described within them into the broader work that they do in helping the college achieve their liberal education goals. In many ways, librarians are hampered by a number of issues or challenges that make this difficult.

The first of these challenges is structural because much of the work a librarian does is tied to a faculty member's curriculum, not their own. From teaching

students how to find useful databases to building effective search strings, many of these instructional sessions have an assignment that guides what librarians are supposed to help students understand. As a result, expecting students to become information literate when the actual focus is on helping them successfully complete an assignment is not a realistic goal or expectation.

A second challenge is that librarians are usually limited to teaching one 50- or 75-minute class, also known within the profession as a "one-shot." Expecting information literacy to be taught and understood in that time frame is a fool's errand. To address this issue, many librarians have built information literacy into the curriculum through intentional, multi-stage partnerships with faculty. This scaffolded approach to building skills, knowledge, and abilities is done so each class builds off the last. This may take place within one class where a librarian sees students multiple times that semester or over multiple semesters and in multiple classes. And while scaffolding in multiple classes works particularly well in disciplines whose curriculum is arranged sequentially such as the hard sciences, it is harder to apply in other areas such as the humanities. Thus, while it does give librarians more time, it is limited in its applicability and does not address the structural challenge of the work that a librarian does being tied to someone else's curriculum or assignment.

Regardless of approach—one-shot or scaffolded—a third challenge in the way that many librarians teach is that it is still tied to specific tools (e.g., a library subscription database) and not concepts (e.g., skills for evaluating information), despite the *ACRL Framework* being the guiding force for information literacy whose focus is on concepts. In essence, this is the challenge that librarians face when so much of the work that they do is dependent on disciplinary faculty inviting librarians (some of whom have faculty status themselves) to the classroom instead of librarians having oversight over their own class and curriculum. As a result of these challenges which librarians are unlikely to fully overcome—librarians need a new way to teach information literacy which we believe is best done through a full-semester, interdisciplinary class. This could be taught as a separate class or as part of a large course team taught with a librarian and the other discipline's faculty.

A final challenge is that academic librarians do not teach credit-bearing classes as regularly as disciplinary faculty. Most of the literature on curricular development in librarianship focuses on the aforementioned one-shot library instruction because it is "a more common teaching method for librarians than credit-bearing library courses" (Benallack & Rundels, 2021, p. 2). One reason for that focus may be because not all librarians have faculty status, often a requirement necessary to teach such courses. According to ACRL (2022) only 51.1% of librarians have faculty status and Cohen et al.'s (2015) survey of US academic libraries found that only 19% of institutions offered credit-bearing information literacy classes. Of those credit classes, 76% were 1–2 credits, 69% elective, and 64% classified under the library (pp. 567–568). Davis et al.'s (2011) survey on attitudes of librarians toward course integrated (a.k.a. one-shot) or credit-bearing information literacy instruction indicated that the majority of respondents (54.2%) were neutral toward finding one methodology more effective whereas 30% agreed or strongly agreed that "for-credit information literacy courses are [more] effective than course-integrated information literacy sessions" while 15.8% disagreed or strongly disagreed with that statement (p. 691). The neutrality of so many may be a symptom of so few librarians teaching for-credit classes rather than them truly not finding one more effective than the other.

Social Challenges

In addition to the challenges that librarians are dealing with structurally, there is a social atmosphere that questions the need and value of libraries (e.g., Lane, 2019) when a world of information is seemingly always available and free. It is true that never before in history has this amount of information been available to the mass of society and the speed with which one can get news and information that may have been only available in a local library and only in print may lead some to question the need for these institutions. In fact, a Pew Research Center survey found that 86% of Americans get their news at least sometimes from digital devices compared to only 32% in print (Shearer, 2021). As Burke (1999) described, every change in information technology opens up information for more people and acts to transfer the power that information has to more of society whether they are ready or not. Librarians know that not all information is freely available because they are the ones who purchase and license books, e-books, journals, and e-journals that they loan or give access to their users. According to ACRL the average academic library spent $1.58 million (ACRL, 2022) on its collections which is no small drop in the bucket. But because today's students have grown up in the aforementioned information landscape with access at their fingertips in the form of their cell phone or laptop, the assumption by many educators is that the students have learned how to navigate and understand it.

David Foster Wallace (2009) summed up this atmosphere in his famous "This is Water" commencement address thusly:

> There are these two young fish swimming along and they happen to meet an older fish swimming the other way, who nods at them and says "Morning,

> boys. How's the water?" And the two young fish swim on for a bit, and then eventually one of them looks over at the other and goes "What the hell is water?" (p. 3)
>
> The immediate point of the fish story is merely that the most obvious, ubiquitous, important realities are often the ones that are hardest to see and talk about (p. 7).

We educators often do not see the reality with which students are actually struggling and assume that they know what's going on around them because that's all they know. They get up, check their phones, use their laptops, etc. Information is ubiquitous, just like water, but have they had anyone who has helped them question it? Or, do educators make the assumption that someone else has asked them those questions?

Furthermore, just because everything is "available" it does not mean that people— whether students or not— know how to find it or what it is. The advent of many technologies, but especially the internet, have allowed people to offload having to remember or even know about a thing or idea because the technology will remember it for us.

In addition to the social context that students find themselves in, there is also the practical aspect that librarians have a lot of experience with—helping people understand how to evaluate information. To put it succinctly, many people do not know how to evaluate information with the Stanford History Education Group describing the situation as "bleak" (Wineburg et al., 4). While publicly accessible evaluative tools such as the CRAAP Test (Currency, Relevance, Authority, Accuracy, Purpose) were attempts at helping students build a framework for evaluating information, they do not build into their evaluation the nuance necessary to deal with an ever-changing information environment. Checklists like CRAAP give people the impression that as long as you ascertain that a specific characteristic is present in an item you do not have to continue to question its validity or conclusions. The world of information is too complex to be dealt with in a simple checklist. Even the scientific method is frequently viewed as a checklist or a set of steps to follow in sequential order. Evaluating information needs to look more like a systems diagram as opposed to a linear set of instructions that can be followed to succeed.

The last social challenge that the information era presents is that information has become a commodity. Meta, the parent company of Facebook and Instagram, for example, makes $40.96 per person on average around the world by selling digital advertising space to companies that is tailored based on the information Meta collects about its users (Meta, 2021a). In other words, much of what we see happens because those who control information (i.e., have power) want it to get it in front of as many eyeballs as possible because that's how our society has set itself up—to make money (Meta, 2021b). The ramifications of this commoditization of information and our attention (Goldhaber, 1997) may be innocuous such as scrolling through cute animal pictures on social media because that's what you like. But such commodization also has the potential to harm one's mental health (McRae et al., 2017), encourage antisocial behaviors (Twenge, 2013), or reinforce systemic racism (Noble, 2018), and people are beginning to question the power commoditization has.

Education Challenges

On an educational level, the world that graduates are sent into today is not the world that older generations faced when they graduated. As we learn more about the world, we realize that we know less and less about it. It is a world in which there is greater understanding and, at the same time, more uncertainty. Reductionist thought has brought us to a point where computing power can be used in ways that could only have been dreamt about 50 years ago and humans can glimpse their own DNA; yet, more people feel uncertain about what tomorrow holds.

Our educational paradigm continues to shape and produce those who know more about less and less. Today's graduates are often so specialized in their knowledge that they can only communicate with just a handful of individuals and be understood. Burke and Orenstein (1995), in their book *The Axe Maker's Gift,* describe this situation as involving axe makers (those that create new things) and the gifts (technology) and problems (unforeseen consequences) they have given us. But even though there are great benefits and unforeseen consequences of these new technologies, they argue that society needs more people who no longer just make new axes, but use the ones we have to help solve the problems that earlier gifts have left for us (e.g., global warming). Changing the educational system for this world will take a dramatic shift in thinking not only from administrators and faculty but from students too.

Another educational challenge is that students need to be convinced that they have the time and can expend the energy to learn. It is trite to say that meaningful learning takes time and effort, but it is so true, especially in today's social and educational context. Everyone is being pulled in so many directions by everything around us, and so many of these "pulls" are an immediate "need" as opposed to a very long-term need and goal to learn. Surely most of us have heard questions from students like "How can I take 30 minutes to read this book or article, with all my devices off?" The immediate is flooding our vision, in other words, so it is even harder to see or find use in longer term ideas and aspirations.

To go back to the aphorism at the beginning of this article, we do not stop to question what water is at all and have internalized reality as that which is seen in front of us or that we have any agency in crafting the future. Doing so requires work, which means that time and energy will have to be expended into changing the system when the change may end up being only baby steps, if any steps at all. For many, this is a bridge too far.

Lastly, though much of what we have articulated up to this point is being done by librarians, it is not the librarian's job alone. One frequently assumes that students will learn these skills elsewhere, but without someone taking responsibility for teaching these skills, nothing gets done and the problem perpetuates itself. That may feel like a dire assessment of our society and higher education, but there is opportunity for hope. One way to do this is through an intentional investment in a new type of class, one that focuses on thinking, questioning, and discussing rather than discrete facts that need to be remembered. Ideally it would be team-taught so two perspectives would be presented to the students. We developed and taught such a class, Honors 158: Question Everything: Navigating the Information Age, a 3-credit class within the University Honors Program at the University of Wisconsin-Eau Claire (UW-Eau Claire) where the authors both worked. At UW-Eau Claire, the Honors Program is set up to be a testing ground for new types of classes for the university to experiment with before moving them into the general curriculum. In the time that we team-taught the class the number of students we had ranged between 20–25.

This class was taught by librarians whose background in information literacy is valuable, but it needn't be. As evident in the literature, there are those that believe critical thinking skills should be taught in discipline-specific classes and others that believe that teaching these skills are generic enough that they need not be taught within a discipline (Abrami et al, 2015). The authors fall in the generalist camp and believe that classes such as these should be made available to as many students as possible so students from all majors see it and understand that it is built for them. This can be done through an interdisciplinary program like UW-Eau Claire's Honors but more ideally through a university's general or liberal education program. The latter half of this article is our most recent attempt at addressing these issues as a framework or model that could be adopted or adapted in colleges and universities in order to help prepare students for a future filled with uncertainty and change.

Concepts & Methods

Before diving deep into this class's specific assignments, it is essential to look at the general concepts and methods that drive the course, the first of which is Socratic questioning. Paul and Elder (2016) define Socratic questioning as

> Disciplined questioning that can be used to pursue thought in many directions and for many purposes, including: to explore complex ideas, to get to the truth of things, to open up issues and problems, to uncover assumptions, to analyze concepts, to distinguish what we know from what we don't know, and to follow out logical implications of thought. The key to distinguishing Socratic questioning from questioning per se is that Socratic questioning is *systematic*, *disciplined*, and *deep*, and usually focuses on foundational concepts, principles, theories, issues, or problems. (p. 4)

Socratic questioning is active in that it necessitates student participation in the class through discussion. Students are active collaborators in the discussion through asking questions themselves—either of their peers, their professor, or of the content that is being studied. Moving away from the "sage on the stage" way of conducting class helps direct students to take ownership of their own learning. Palmer (1998) says that "Good teachers join self and subject and students in the fabric of life" (p. 11). In other words, good teachers join the search for truth and do not project themselves as omniscient. Teaching a class like this is more philosophical in nature. Having students question class content, their professors, or their peers—all of which show an embrace of uncertainty—helps make the course content relevant and applicable to their lives. Further, that ownership allows them to process what it all means in a safe space where ideas bounce off each other as the class searches for the "truth" of the issue at hand. When students start looking to themselves as a source of learning and see the instructor as more of a guide/mentor they create an educational disposition that has the potential to carry over into other areas of their lives. Instead of being told what and how to think they can begin seeing their role as one of great agency whether in school, with friends, or within what they consume on a daily basis. It moves away from instructor-centered education toward learner-centered education.

Instead of focusing on lower order thinking skills and content that is frequently memorized for a test, students are asked to *reflect* on what they learned from each day's content and what questions they raise. Brockbank and McGill (1998) argue that because learning is individualistic *and* social, using reflective dialogue in the classroom can enhance learning. By moving reflection from a wholly internal process to the larger classroom the learner's "assumptions about knowledge, herself, and the world are challenged through the process of connection-with-others, in the

realms of her mind, her feelings and her experiencing of the world" (p. 153). Engaging them in this way encourages further questioning—whether specific to an idea or concept that they do not understand, to help uncover for the whole class a better understanding of the material, or to re-evaluate their own beliefs.

Lastly, the course is team-taught by two professors. Davis (1995) defines team-teaching as "arrangements that involve two or more faculty in some level of collaboration in the planning and delivery of a course" (p. 8). Team-taught courses can vary in depth and complexity and Davis (1995) describes the level of collaboration as a spectrum with faculty who plan a common course but teach parts of the course independently on one end and faculty who plan and teach the course together at the other end. This class uses the latter strategy which provides numerous advantages for discussion-based classes. It makes it easier to manage the class, shows students that disagreement can be productive and healthy (e.g., professors can intentionally play devil's advocate to give voice to the other side of the argument), and also makes it easier for one professor to honestly tell the class that they do not have an answer to a question. Because we had differing academic backgrounds prior to becoming librarians it also allowed for our individual expertise and knowledge to play off one another and fruitfully advance discussion. Two instructors that are open, honest, humble, and reflective from two different perspectives (disciplines, background, experiences, etc.) offer a very rich opportunity to learn and grow together.

Goals

With a grounding in the concepts and methods that guide daily classes it may be helpful to take a step back to see the big picture of the class's goals. Doing so will reinforce how the class aims to build critical thinking skills and a value of liberal education in students. Following each course goal is the *ACRL Framework* (2015) that applies, with a brief description of how it is covered in the course.

Course Goal 1: Build strategies for critically evaluating information from a variety of sources and media.

ACRL Framework: Authority is Constructed and Contextual

- Helping people evaluate information in different contexts is an essential component to building skills necessary for lifelong learning. Socratic questioning and discussion of competing arguments undergirds this objective.

Course Goal 2: Build an awareness of the factors that influence and hinder your own information exposure and consumption.

ACRL Framework: Information Has Value

- In contemporary society people often forget or are unaware of how much of what is seen and heard is shaped by forces that happen because of information's value as a commodity or as an agent of influence. Looking at how information has become an economic tool in social media, for example, helps situate this objective in students' lives.

Course Goal 3: Gain an understanding of the evolution of information, including how it is generated, disseminated and filtered.

ACRL Framework: Information Creation as a Process

- Methods of communication have changed over time and looking at McLuhan's theories of media helps students differentiate and understand this in a historical context. Discussing social media and contemporary society situates it for today's students.

Course Goal 4: Come away with research skills preparing you to become informed, responsible, and engaged students, citizens, and professionals.

ACRL Framework: Research as Inquiry

- In order to be an informed citizen, the skill of questioning needs to be built into a habit. This is achieved through regular questioning in class discussions and on assignments. In doing so students learn that what they know about the world is not fixed in time, but grows through inquiry.

ACRL Framework: Scholarship as Conversation

- The previous frame situates inquiry at the heart of research, but it is also important to understand that research does not happen in a vacuum. By bringing a variety of sources to the table when reading and discussing a topic, students can see the interconnectedness of the world and the uncertainty that multiple viewpoints can cause. Further, because the class is housed in the Honors program, it is without a departmental "home" which allows for a cross-pollination of disciplinary perspectives.

ACRL Framework: Searching as Strategic Exploration

- As with the idea of inquiry and scholarly conversation, discussing the concept of strategic exploration is an essential component to student learning. The concept of lateral reading—using multiple tabs (i.e., sources) on your browser—is introduced and discussed to demonstrate this. One class session is set aside to teach library-related search skills that are not database dependent as well.

Pedagogy

With an understanding of the concepts, methods, and goals, we can now describe the course structure which is broken into four parts: readings, reflection, class discussion, and assignments. Readings are defined broadly and each day students have something to read, watch, listen to, interact with online, or some combination thereof. The class has a philosophical foundation upon which the entire course is designed—Marshall McLuhan's *Understanding Media* (McLuhan, 2003)—and the questions that it asks help provide guidance for the course theme of questioning everything. Generally, the class has two to three readings each day. Some of these readings intentionally have arguments that conflict with each other which forces students to confront a world of uncertainty in class discussion or on their reflections.

As described here, students are asked to reflect on what they read each day for a small number of points contributing to their grade. Upon completing their readings they produce a typewritten reflection on one or more of the readings, not summarizing, but giving an honest assessment of their thoughts, questions, and feelings toward the readings. Questions they ask and/or answer in this reflection may be how it connects to their lives, whether they agree or disagree with it and why, what they have learned elsewhere that is tied to the day's readings, etc. Though there is no specified length, generally students write 1-2 pages of double-spaced text in an informal manner which can include the use of first person and slang. Students turn in the reflections at the end of class and each student's reflection is graded by the professor. When grading student reflections professors ask further Socratic questions, comment on their reflections, answer questions that might come up, and take notes that help guide the next class period's discussion. Generally, the reflection is a pass/fail whereby students get full points or no points because the reflection should be personal in nature. The only way to fail is not attempting it at all.

In the traditional classroom, a professor gets up in front of the class and lectures at them, using tools like PowerPoint to guide students' understanding of the material. But, because this class is discussion-based, (Howard, n.d.) the professor moves from the front of the classroom to being part of the class by sitting with the students and acting as a facilitator of discussion through Socratic questioning. In order to prepare for each class period, the professor uses student reflections which were collected at the end of the previous class period to identify common themes or questions which need to be addressed. The professor can use these questions to start the discussion, but may also quote a particularly insightful reflection as a way to prime the class for discussion of a concept they want to reinforce or as an answer to a question that others in the class had.

Students are required to participate in class discussion as part of their grade. Participating in the traditional sense is done by speaking up in class, through asking or responding to questions, or providing commentary and thoughts that help collectively process the day's readings. In order to make access to points for participation equitable, those who do not feel comfortable or choose not to talk in class may still "participate" by taking handwritten notes on their daily reflection sheet, answering or asking questions just like those who speak up in class. A different way to characterize participation is that it requires student *engagement* (Lang, 2021) in the class reflections and discussion.

While the daily reflections and class discussions are the least traditional way to grade student attainment of the course goals, the class does have traditional assignments. All assignments are reflective in nature and are guided so students incorporate material from the readings into the expected product. For example, one of the first assignments asks students to analyze a historical news event through various media. In this case, they look at the events of the September 11 attack by listening to an archived radio broadcast, watching an evening news telecast, and reading newspaper and news magazine articles. Because this happens at the beginning of the semester and the main focus of the class's readings up to that point have been learning about Marshall McLuhan's theories of media and their effects on us, they must incorporate their interpretation of his theories with how different media can color how people interpret the event (e.g., hot vs. cold media).

In essence, the assignments are longform versions of the daily reflections that have boundaries to help guide student understanding. Other assignments that each student completes individually include

- learning how and why to read and properly format citations
- determining their own information landscape to see how it may shape their reality
- investigating how much information is freely available online about individuals by researching their professors (who have given them their consent to do this)[1]
- identifying a new reading that they think should be added into a future iteration of the class.

[1] The authors recognize that not all educators may be comfortable doing this type of assignment and would only encourage those that feel comfortable in doing so making this part of their curriculum.

The final, which is presented to students on the first day of class, asks students to continuously reflect on class goals as the semester progresses so by the day of the final examination it is complete.

Outcomes

Course goals alone do not fully encompass the breadth and depth of what the course sets out to accomplish. One of the most important takeaways from the class is to model questioning as a behavior that helps guide everyone to a better understanding of the world. This includes questioning one's own beliefs and what one thinks they know so the truth can be determined. In order to achieve this, the course uses the introductions and first nine chapters of Gordon's (2003) critical edition of Marshall McLuhan's seminal work, *Understanding Media*. Although McLuhan's text is dated and often confusing it is used purposefully. Specifically, it

- asks questions (or probes) that McLuhan doesn't give the answers to, most of which lead to further questions and a foundation for continual questioning throughout the class and students' lives.
- challenges students to think critically about the concept of media and apply it in various contexts.
- is difficult to understand and pushes students out of their comfort zone of what they think they know about the world.
- gives students a framework for thinking and inquiry (questioning) in which the labels of good or bad are no longer the main thought when evaluating a new thing or idea.
- helps students begin to see connections across history, disciplines, and into their own lives.
- frames truth-seeking as one that requires an open mind because our understanding of the world is not fixed, but ever-expanding into the unknown.

Although *Understanding Media* may not be the *only* text that can accomplish this, we believe that its structure and content are well-situated to help address the course goals and learn concepts that can be used in different contexts. The class incorporates a variety of other readings and resources into the curriculum to help students engage in the application of searching for truth. As described previously some of that includes content that contradicts other readings. For example, after reading McLuhan students read critiques of *Understanding Media* (e.g., Theodore Roszak's [1968] "Summa Popologica" of Marshall McLuhan, W. Terrence Gordon's [2003] "Critical Reception of *Understanding Media*") to give air to the frustrations they may have felt and to recognize that those critiques or questions are worth consideration as one searches for the truth. Later in the semester they read articles (e.g., Nicholas Carr's [2008] "Is Google Making Us Stupid?"; Carl Zimmer's [2009] "How Google is Making us Smarter"; Jean Twenge's [2017] "Has the Smartphone Destroyed a Generation?"; Lydia Denworth's [2019] "The Kids are All Right") that ask important questions about the internet and whether or how these new technologies are affecting us individually and as a society. Building on the foundation of McLuhan's theories of media helps make class discussions around contemporary topics affecting the lives of the students more substantive and thoughtful because they have been practicing thoughtful questioning since the start of the semester.

Interdisciplinary thinking, though not as explicit as the stated goals, is also an important concept that students learn in this class. As described previously, much of education has become incredibly fragmented and reductionist. Epstein (2019) describes this as a world of "hedgehogs" and "foxes." He says, "The highly specialized hedgehogs knew 'one big thing,' while the integrator foxes knew 'many little things'" (p. 22). This plays out in the classroom in a variety of ways. Right off the bat, McLuhan integrates content from a variety of disciplines into his work to help explain his theory of media. From Shakespeare to baseball, psychology to history, he illustrates that an interdisciplinary mind can help make sense of a rapidly changing world. Even after the foundational text, additional readings from a variety of disciplines are explored to help make sense of the contemporary information landscape. Readings range from philosophy to computer science, biology to library science.

Interdisciplinarity is important because as Palmer states in *The Courage to Teach* (1998), "Good teachers possess a capacity for connectedness. They are able to weave a complex web of connections among themselves, their subjects, and their students so students can learn to weave a world for themselves" (p. 11). Just as intersectionality has taught many that boiling people down to one thing is not helpful, it is also valuable to learn that one discipline's understanding of the world may not be the only way to look at an issue. This class encourages students to think about the ways in which thoughts and ideas intersect with each other because it is situated outside of a discipline with students from across all colleges and majors. It creates a bigger picture of the world that they can carry forward no matter where they go or what they do.

Another unstated outcome of the class is teaching students about and demonstrating intellectual humility. Though there are many definitions of intellectual humility, the general idea behind this concept is that an

intellectually humble person acknowledges the limits of their own knowledge (Whitcomb et al., 2017) and/or admits that what they hold to be true may be incorrect. Further, intellectually humble people, as a result of not being concerned about this lack of knowledge or correct interpretation of it, are less likely to be concerned with their position or status (Roberts & Wood, 2007) as a result of these limitations. In effect, they are ok with being wrong.

It is no surprise for anyone who has taught before that students rarely admit that they do not know the answer. During such a formative time in one's life, showing that limitation is not "cool." It is especially fraught with problems for students that are going to be graded by their professors. Why risk admitting you do not know something to your professor since it may color their perception of you as a student? As professors, it is essential to show students that it is ok to admit that you have been or are wrong because one often learns more from one's mistakes than always being correct.

Because the class is taught outside of a discipline and the class has readings from many different perspectives there is no way for the professor to know everything about all subjects discussed. Additionally, because society places professors on a pedestal of omniscience in their respective fields, having them admit that they do not have all of the answers, helps students understand that they do not have to have them either. In class that means that professors have to lead by example. A week does not go by in which a student asks a question in class or on a daily reflection for which we do not have an immediate answer. Being willing to publicly demonstrate to students that you do not have all of the answers gives students the opportunity to see that asking questions is essential to growth and development and gives them cover so they too can ask questions that normally they might think are "dumb" or "silly". Just as it gives cover for asking questions, demonstrating intellectual humility allows for others to see that what they assume is common knowledge may not be so common. Breaking down this assumption leads to better empathy and understanding of others whose background and experience may be different.

Conclusion

In summary, we live in a society and world where admitting you do not know something, that you are wrong, or changing your mind based on new information or experiences is a character flaw. We believe this needs to change so our future generations can reflect on and adapt to the world as it changes around them.

As educators we struggle with this idea independently and silently, forgetting that it has taken years to get to where we are while also trying to condense our learning into a 50-minute lecture or a 10-page article. To reference the beginning of this article, we assume that these ideas and lessons are or have been taught elsewhere, or that our students come to us with the requisite knowledge of these concepts so when we teach them, they will instantly get it. We know that it is much more difficult than that. Thoughtful reflection requires what Barnett (2018) calls "liquid learning" and constructivists describe as bringing the whole self to the educational table.

Additionally, real learning requires people to put in work. Unless you are one of the lucky ones who learn through hearing, reading, or seeing something once, individuals have to put in time and effort to make learning happen. This class sets itself apart from other classes in that it gives students from all disciplines and backgrounds regular opportunities—informally via daily class discussions and formally via assignments—to work on questioning things to help enhance their education rather than just assume that the skill and habit of the mind is taught elsewhere on campus or learned outside of the classroom.

In the process of teaching this course, revising the syllabus, and reflecting on class sessions or the semester as a whole, we have gained tremendous insight into our own learning and that of the students. One of the main things that has become clear to us is that it's not about us filling their vessel with knowledge; it's their responsibility and choice to do that. All of our vessels are large enough for the incorporation of new knowledge and experiences into our lives. Students have control over their own thinking and education. They will have to, whether they like it or not, keep doing this after they graduate. They will have to empty out ideas from their head that they think they "know" because the world is changing.

We also brought students along for the ride so they could see our own struggles. Being with them as facilitators, guides, and partners in their learning helped build trust and created a safe space to explore thoughts and ideas. It changed the classroom experience from one based on lecturing toward an inclusive and growth-minded educational experience.

In the end, while what we present describes the philosophy and result of a class built off of exploring ideas through dialogue and embracing uncertainty it is not *the* silver bullet to larger educational or societal challenges. It is a start, though, and more should be done in this realm to build on these concepts because these practices helped us grow and created a better class for students which is the ultimate goal for educators.

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