Literacies for Lifelong Learning

A Quality Enhancement Plan Proposal

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Executive Summary

This proposal describes a Quality Enhancement Plan (QEP) that focuses on students achieving multiple literacies to further strengthen their ability to engage in lifelong learning after graduating from the University of Houston-Clear Lake (UHCL). These literacies include critical thinking, informational literacy, and equity literacy. Critical thinking analyses and evaluates thinking. Informational literacy emphasizes finding, identifying, evaluating, organizing, and using information. Equity literacy includes recognizing, responding, and redressing biases and inequities as well as cultivating and sustaining anti-oppressive institutional cultures. In addition, this QEP allows programs to incorporate into this model area literacies that are necessary for their discipline. These literacies are combined into an overall metaliteracy model appropriate for UHCL. The metaliteracy model including its components provide actions and roles for students. This QEP proposal has many advantages including: (1) builds from the successful first UHCL QEP on critical thinking, (2) having broad application across the disciplines of UHCL's four colleges, and (3) connecting with UHCL's identity and strategic plan.

Topic and Rationale

Possessing the ability and desire to engage in lifelong learning is key for graduating students (e.g., Brooks & Everett, 2008). At the University of Houston-Clear Lake (UHCL), we not only want our students to learn and develop while taking classes, but we want students to continue to learn and develop after graduation. As the famous saying states: "Give a person a fish, and they will eat for a day. Teach a person to fish, and they will eat for a lifetime." We need to make sure our students know "how to fish". To engage in lifelong learning, students need to have foundational literacies.

"The basic foundational skills in learning to be literate are the skills one needs to read situations; to plan, organise, revise; to build and negotiate meaning; to use and adapt conventions; and to figure out what new discourses expect and how to enter them....Literate action opens the door to metacognitive and social awareness. (Cambridge Assessment, 2013, p. 9)." This definition and others describe literacy as a series of actions (Cambridge Assessment, 2013). Other theorists have included the verbs determine, access, evaluate, and incorporate (Mackey & Jacobson, 2011). Through these roles and actions, students learn about the process of learning and how they, as students, relate to the world around them. These two qualities predict engagement in lifelong learning (Brooks & Everett, 2008).

One way to view the level of literacy a person can employ is with Bloom's taxonomy. Bloom's taxonomy (Bloom et al., 1956) and the 2001 revision (Anderson et al., 2001) describe the actions a person can make with the concept. These actions from the easiest to hardest are (1) remembering, (2) understanding, (3) applying, (4) analyzing, (5) evaluating, and (6) creating. At the earliest stage of remembering a person is not able to manipulate the concept; they are only able to recall it. They are not able to put it in context or apply it. Remembering is needed for the higher levels of thinking, but by itself, it is not enough. We want our students to be able to reach many of the higher-order thinking levels. We want them to be able to apply their knowledge, to analyze and evaluate situations, and to create something new. We want our students to be literate enough that they can engage in these higher orders of thinking both at UHCL and after they graduate.

Given the complexity of the world today, numerous areas of knowledge have adopted the term literacy for their disciplines. These literacies include financial literacy, scientific literacy, visual literacy, and many others. One infographic lists 20 types of literacy (Polk, 2012) and that does not include all of them. This Quality Enhancement Plan (QEP) selects three of the most relevant literacies for UHCL students. Incorporating these literacies together into an overarching framework is useful to show how the literacies interrelate and how this model fits with UHCL's prior QEP focusing on critical thinking.

Metaliteracy is "an overaching, self-referential, and comprehensive framework" (Mackey & Jacobson, 2011, p. 70) that "provides a unifying and overarching construct for related literacy types" (Jacobson et al., 2013, p. 85). The term metaliteracy has its roots library sciences and was originally seen as an extension and reframing of informational literacy (Jacobson et al., 2013). Metaliteracy focuses on different roles, each with its own set of actions (see Figure 1) including communicator, translator, author, teacher, collaborator, producer, publisher, researcher, and participant. We want students to develop all their ability in all these roles. Qualities of metaliterate individuals include functioning well in uncertain information environments, taking the role of an information producer, being flexible and conscientious, and practicing metacognition (Fulkerson et al., 2017).

Metaliteracy has cognitive, affective, behavioral, and metacognitive consequences for students (Fulkerson et al., 2017). For example, a metaliterate student would know how to engage in lifelong learning (cognitive), enjoy learning and want to engage in lifelong learning (affective), engage in lifelong learning (behavioral), and know if they are learning (metacognitive). In other words, this QEP is aimed at changing students' thoughts, feelings, behaviors, and ability to think about their own learning.

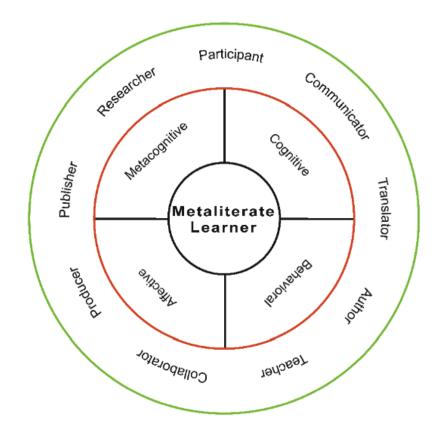
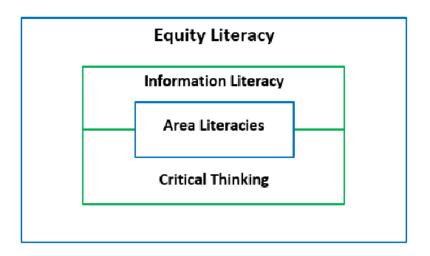


Figure 1: Metaliterate Learner Model (Lipera, 2013). Copied from http://metaliteracy.cdlprojects.com/what.htm

A UHCL Model of Metaliteracy

This proposal suggests a QEP of multiple literacies for UHCL. These literacies are combined into a metaliteracy model (see Figure 2). It consists of four main areas representing

the foundational literacies we want our students to employ at a high level: critical thinking, information literacy, area literacies, and equity literacy. Each of these literacies is crucial for students to have to engage in productive lifelong learning.



A UHCL Model of Metaliteracy

Figure 2: A UHCL metaliteracy model

The foundation of this metaliteracy model is critical thinking, which was the focus of the first UHCL QEP, which was titled Applied Critical Thinking for Lifelong Learning and Adaptability (UHCL, 2012). Although generally not classified as a literacy, critical thinking is a foundation for literacy (Mackey & Jacobson, 2011) and it is impossible to act in a highly literate way without critical thinking. Consequently, I am considering it a literacy similar to other literacies. Critical thinking applies intellectual standards such as clarity, precision, and relevance to elements of thought such as concepts, assumptions, and consequences (Paul & Elder, 2019). Using this metaliteracy model we can bridge the work we have already done on our past QEP with our current QEP. We can keep the same critical thinking model used in the past from the Foundations of Critical Thinking (Paul & Elder, 2019) and continue the work in the first-year

seminar and additional classes with these critical thinking practices. We can even model the program similar to this first QEP.

Information literacy is the next element in the metaliteracy model. The Association of College and Research Libraries (ACRL) recently refined its definition of information literacy. "Information literacy is the set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning" (ACRL, 2016, p. 8). Their model is composed of six main frames quoted below:

- Authority is constructed and contextual
- Information creation as a process
- Information has value
- *Research as inquiry*
- Scholarship as conversation
- Searching as strategic exploration (ACRL, 2016, p. 8)

Information literacy, more than any other literacy, is a foundation for metaliteracy (Jacobson et al., 2013; Mackey & Jacobson, 2011) which is why it has a prominent place in this model. Information literacy, like other literacies, states actions and roles describing literate individuals. Information literacy also has ties to numerous other literacies such as media literacy, digital literacy, visual literacy, cyberliteracy, and data literacy (Mackey & Jacobson, 2011; Gummer & Mandinach, 2015). These connections between information literacy and other literacies are not surprising given how important information is this Information Age.

Different fields have developed and theorized their own types of literacies from scientific literacy to financial literacy to cultural literacy. There is even an agricultural literacy. The area

literacies most important to a student will depend on their discipline. All these area literacies need both information literacy as well as critical thinking as a foundation. Similarly, critical thinking and information literacy need these area literacies to bridge the gap of what students need to know about their disciplines (e.g., Prado & Marzal, 2013).

Beyond critical thinking and informational literacy, which are key for other literacies, there is one additional literacy that all UHCL students need, equity literacy. Critical thinking and other literacies may tangentially relate to diversity, inclusion, and equity; however, even if a student is highly literate in these areas, it does not necessarily mean the student is practiced at applying, analyzing, and evaluating a situation through a diversity lens. Equity literacy (Gorski, 2016) is a needed component to produce exemplar students who will be able to work in and improve their communities of today and tomorrow. Four core abilities of individuals who are equitably literate (Gorski & Swalwell, 2015 but see also Gorski, 2020) include:

- Recognize even subtle forms of bias, discrimination, and equity
- Respond to bias, discrimination, and inequity in a thoughtful and equitable manner
- *Redress bias, discrimination, and inequity, not only by responding to interpersonal bias, but also by studying the ways in which bigger social change happens.*
- Cultivate and sustain bias-free and discrimination-free communities, which requires an understanding that doing so is a basic responsibility for everyone in a civil society. (p. 35).

As with other literacies, equity literacy provides actions that a person takes to demonstrate their literacy. These actions are what we want our UHCL students to do while at UHCL and once they graduate. In the metaliteracy model, equity literacy surrounds the other literacies representing the idea that all critical thinking and literacy should be done through an equity literacy lens.

One advantage of using this UHCL Metaliteracy Model as the QEP is that this model is relevant to all four colleges. Students from each college needs critical thinking, information literacy, equity literacy, and their area literacies. Even co-curricular activities can assist students to be literate in these areas. Every program can find a way to connect to each of the four parts of the model.

Data to Support the Topic

This QEP is designed to assist undergraduate students as they graduate to embrace and take steps to achieve lifelong learning. Therefore, data to support metaliteracy as a QEP are taken from graduating seniors.

Graduating seniors were asked in Spring 2019 "If you currently have, or will be starting a new job, to what extent is it related to your major or area of study at UHCL?" A majority said either Somewhat Related (28%) or Not Related (25%). Less than half said Directly Related (47%). The high percentages indicate many students are not employed directly in their area. Therefore, UHCL students must be literate in a wide variety of areas so that they can enter and advance through the workforce in areas that may not directly match their discipline.

From the National Survey of Student Engagement (NSSE) 2020 indicators, UHCL students participate in fewer high impact practices (34% exposed to two or more) than the average from their Carnegie Class (55%). High impact practices would be an excellent source of assignments that engage in these literacies.

The NSSE 2020 data show UHCL is similar to students in a variety of engagement indicators including Higher Order Learning (UHCL – 40.7; Carnegie Class- 40.5), Reflective &

Integrative Learning (UHCL – 37.1; Carnegie Class – 38.2), and Supportive Environment (UHCL – 36.6; Carnegie Class – 35.6). UHCL is also higher than comparable institutions in Collaborative Learning (UHCL – 31.1; Carnegie Class – 29.8) and Discussions with Diverse Others (UHCL – 41.6; Carnegie Class – 39.3), and Quality of Interactions (UHCL – 46.9; Carnegie Classification – 43.1), but lower on the category of Student-Faculty Interaction (UHCL – 19.6; Carnegie Class – 23.9). With the QEP we can either build on our strengths already noted in the NSSE report or use the QEP to improve on our weaknesses.

One additional note is the lack of data in one area. We have no clear information on lifelong learning. We do not know if our students are "going through the motions" to get their degree or are we "fanning their fire" for learning. This QEP allows us the opportunity to determine how engaged our students are in lifelong learning and if we are increasing their passion for learning.

Connection to UHCL Mission and Goals

This QEP provides many connections to the University Mission, Vision, Values, and Strategic Plan. The table below illustrates these connections.

UHCL Document	Quote	Connection to QEP
UHCL Mission	"thrive in a competitive workplace environment"	The QEP helps provide students with the ability to adapt to changes in the workplace
	"meaningful contributions to their community"	Able to engage in higher order thinking about the challenges facing their communities
	"fosters critical thinking and lifelong learning"	Critical thinking is a key element in the QEP. Lifelong learning is a main goal of the model.
UHCL Vision	"transformative education"	Producing highly literate students changes lives of students
	"UHCL launches your future"	By being highly literate, students can engage in the jobs of today and tomorrow

Table 1. Connection of Metaliteracy Model to UHCL Mission and Goals

UHCL Value – Learner-focused	"foster creativity and critical thinking"; "committed to their growth, development, and transformation"	The QEP includes both critical thinking and creativity. The QEP is designed to help grow and transform students not only at UHCL but also later in life.
UHCL Value – Transformation	"empowers individuals to learn, grow, and develop"	Engaging and developing the literacies provides the tools and mindset necessary for lifelong learning
UHCL Value – Diversity and Inclusion	"embraces inclusion and cultivates diversity at all levels of the institution"	Equity literacy is a key element of this QEP for all graduating seniors.
UHCL Value – Resilience	"perseverance, passion, commitment, resolve, grit"	These are potential outcomes of being metaliterate.
Strategic Plan – Educational Achievement		Promotes creation of products demonstrating educational achievement. Provides academic support so students can engage in lifelong learning
Strategic Plan – Inclusive Culture		This QEP will help create a mechanism for "institutional programming focusing on diversity, equity, and inclusion"
Strategic Plan – Innovation through Collaboration		Collaboration is a key element of metaliteracy (Mackey & Jacobson, 2011). Students are not able to work in interdisciplinary environments if they are not literate. Innovation is an element of creation, the highest level in Bloom's taxonomy.
Strategic Plan – University Identity		Encourages focus on lifelong learning and preparing students for their and their community's future

Programs Goals

This QEP on Literacies for Lifelong Learning has the following five program goals:

- Students will demonstrate proficiency in critical thinking, informational literacy, and equity literacy.
- Students will create products to show potential employers their ability in these areas.
- Students will have the appreciation, self-efficacy, and behavioral intent to engage in lifelong learning after graduating.

- Faculty and staff will further develop their ability to teach critical thinking, informational literacy, equity literacy, and area literacies relevant to their discipline.
- Academic and co-curricular programs will identify key literacies needed for their disciplines and refine their curriculum to provide majors, minors, and non-majors with practice and development of these literacies.

Student Learning Outcomes

More specifically, this QEP proposes the following student learning outcomes:

- Students will comprehend the basic components of critical thinking, informational literacy, and equity literacy.
- Students will apply the principles of critical thinking, information literacy, and equity literacy in academic and co-curricular products.
- Students will have high self-efficacy in engaging in lifelong learning after graduating.
- Students will have the intention to engage in lifelong learning after graduating.

Target Student Population

Although open to other levels of students, the focus of this QEP would be on juniors and seniors. Most UHCL students still transfer in, oftentimes as juniors and we want to make sure all undergraduates graduating are exposed to the program. Freshmen and sophomores can continue to concentrate on developing critical thinking from the first QEP. Graduate students, by their nature, are already beginning to engage in lifelong learning.

Potential Activities

A wide variety of activities could accompany this QEP. Here are some examples:

• Recognition of literacy through badges – UHCL could create a badge system where students could earn badges by accomplishing specific tasks including learning about a specific literacy

and creating products highlighting the literacy. Earning a badge would require a major product (e.g., a summative course artifact). Badges could be developed for critical thinking, information literacy, equity literacy, and lifelong learning. Programs, departments, and colleges could also create badges, through a centralized system for other literacies (e.g., scientific literacy). Co-curricular programs could also be involved in developing and awarding badge creation.

- Student E-portfolios Students could develop e-portfolios highlighting the products they
 create through earning badges. These portfolios would be a reference for students as to the
 work they have done throughout their academic career. This portfolio could be useful in
 describing and providing examples of their qualifications to potential employers. These
 portfolios could also be used by programs for university assessment practices. Additional
 workshops would be provided for students on how to create a quality portfolio.
- Awards and recognition for students showcasing their literacy development through their portfolios.
- Awards for faculty/staff/programs for their development of activities that promote one of these types of literacy, or metaliteracy in general.
- Development of a parallel badge system for faculty and staff demonstrating the work they have done to develop themselves and revise their courses in one of the literacies.
- Courses that have specific assignments related to these literacies could be recognized in the course schedule.
- Database of instructional activities for developing student literacies.

Faculty and Staff Development

Below lists some of the faculty and staff development that could occur:

- Workshops on course and/or co-curricular development concentrating on critical thinking, informational literacy, and equity literacy. These workshops may follow a similar model to the first QEP on critical thinking in which a cohort of faculty participated for one or two years. Initially, external experts could be brought on campus, but as faculty gain expertise, more internal presentations could be made.
- Funds for individual travel to conferences on the pedagogy of these literacies.
- Funds for individuals to participate in scholarship of teaching and learning (SoTL) research on developing these literacies in college students.
- Individuals and/or programs (degree and co-curricular) could receive internal grant funding to develop their own instructors in a literacy area with the ultimate goal of revising their courses. Activities could include bringing in national experts, engaging in internal consultations, providing conference travel, or other materials.

Student Awareness Campaign

A student awareness campaign can include information presented during orientation (both new and transfer students) and information at freshman seminars. In addition, information can be transmitted through a QEP website, Marketing & Communications videos, individual faculty classes, student clubs, UHCL Signal, and major student events (e.g., a QEP chili cook-off group). Furthermore, the UHCL Public Relations class through the Communication program could create additional elements in the student awareness campaign.

Possible Assessment

Although assessment would depend on the final program, some starting suggestions are listed below:

Program Goals

Potential program goals for five years after implementation could include:

- 80% of graduating seniors will have completed at least one of the three badges in critical thinking, information literacy, and equity literacy. 60% will have completed at least two badges, and 40% will have completed all three badges.
- 60% of graduating seniors will have completed an e-portfolio. Of completed portfolios, at least 80% will be rated at least a "3" on quality on a 4-point scale.
- 80% of faculty will have received additional training on how to teach at least one literacy (critical thinking, informational literacy, equity literacy, specific area literacy); 50% will have received training in at least two literacies.
- 40% of junior/senior courses offered every year will have a major assignment that can be used for a literacy badge (meaning that faculty have received QEP training in this area). If this goal is met then students should be exposed to, on average, 6 of these assignments during 45 junior/senior hours of coursework.

Student Learning Outcomes

For the student learning outcomes listed above, students could be assessed through two methods. One is the products that they created for their badges and/or e-portfolios. These could be assessed through a university-wide 4-point scale with the goal of 80% of the submitted work score a "3" or higher. Students could also be assessed through a graduating senior exam on comprehension of critical thinking, information literacy, and equity literacy with the goal of 80% of students receiving at least a score of 70% on the exam.

Student Success Outcomes

Student success outcomes would be represented in higher NSSE scores from graduating seniors on the following: high impact practices, higher order learning, reflective and integrative

learning, collaborative learning, discussions with diverse others, quality of interactions, supportive environment. We would also be able to formulate whether students believe they are ready for their employment, future schooling, life in general, as well as their engagement with lifelong learning.

References

- Anderson, L. W., Krathwohl, D. R., & Bloom, B. S. (2001). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. New York: Longman.
- Association of College and Research Libraries (2016). *Framework for information literacy for higher education*. American Library Association.

http://www.ala.org/acrl/files/issues/infolit/framework.pdf

- Bloom, B. S., Krathwohl, D. R., Masia, B. B. (1956). Taxonomy of educational objectives: The classification of educational goals. New York: McKay.
- Brooks, R., & Everett, G. (2008). The impact of higher education on lifelong learning. *International Journal of Lifelong Education*, 27(3), 239-254.
- Cambridge Assessment (2013). What is literacy? An investigation into definitions of English as a subject and the relationship between English, literacy and 'being literate'. <u>https://www.cambridgeassessment.org.uk/Images/130433-what-is-literacy-an-investigation-into-definitions-of-english-as-a-subject-and-the-relationship-between-english-literacy-and-being-literate-.pdf</u>
- Fulkerson, D. M., Ariew, S. A., & Jacobson, T. E. (2017). Revisiting metacognition and metaliteracy in the ACRL framework. *Communications in Information Literacy*, 11(1), 21-41. <u>https://doi.org/10.15760/comminfolit.2017.11.1.45</u>

- Gorski, P. C., & Swalwell, K. (2015). Equity literacy for all. *Educational Leadership*, 72(6), 34–40.
- Gorski, P. (2016). Rethinking the role of "culture" in educational equity: From cultural competence to equity literacy. *Multicultural Perspectives*, *18*(4), 221-226.
- Gorski, P. (2020). *Equity literacy for educators: Definition and abilities*. Equity Literacy Institute. <u>https://08a3a74a-dec5-426e-8385-</u>

bdc09490d921.filesusr.com/ugd/38199c_d5fce9c583f345ffad8dc108173fbd1f.pdf

- Gummer, E., & Mandinach, E. (2015). Building a conceptual framework for data literacy. *Teachers College Record*, *117*(040305), 1-22.
- Jacobson, T. E., & Mackey, T. P. (2013). Proposing a metaliteracy model to redefine information literacy. *Communications in Information Literacy*, 7(2), 84-91.
- Mackey, T. P., & Jacobson, T. E. (2011). Reframing information literacy as a metaliteracy. *College & Research Libraries*, 72(1), 62-78.
- Lipera, R. (2013). Metaliteracy model. https://metaliteracy.cdlprojects.com/what.htm
- Paul, R., & Elder, L. (2019). *The miniature guide to critical thinking: Concepts and tools*. (8th Ed.). Rowman & Littlefield.
- Polk, L. (2012). 20 common types of literacy [Infographic]. <u>https://venngage.net/p/10682/20-</u> common-types-of-literacy
- Prado, J. C., & Marzal, M. Á. (2013). Incorporating data literacy into information literacy programs: Core competencies and contents. *Libri*, 63(2), 123-134.
- University of Houston-Clear Lake (2012). University of Houston-Clear Lake Quality Enhancement Plan (QEP): Applied critical thinking (ACT) for lifelong learning and

adaptability. https://www.uhcl.edu/about/administrative-offices/institutional-

 $\underline{effectiveness/documents/quality-enhancement-plan.pdf}$