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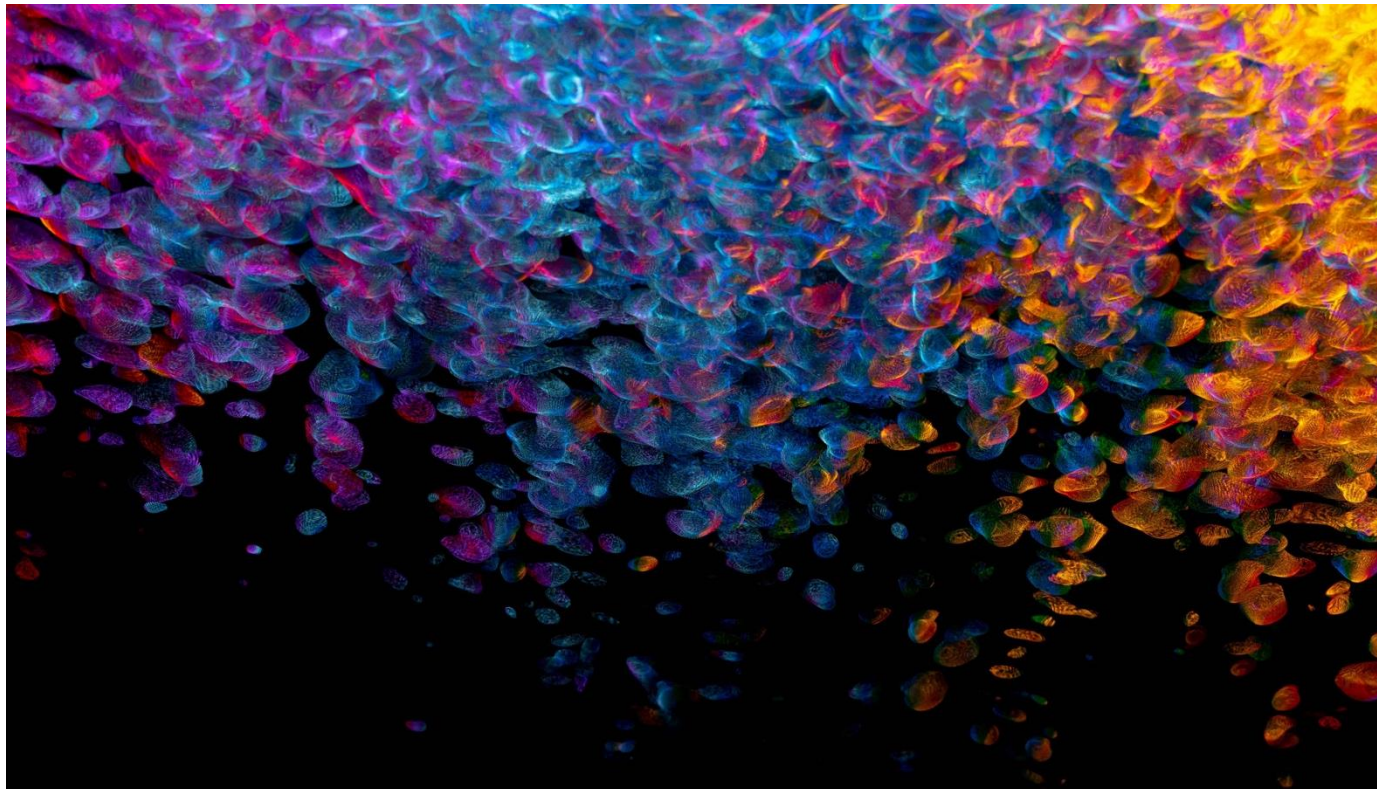
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Habits of Mind

Designing Courses for Student Success



edited by **Julia M Gossard & Chris Babits**

EMPOWER TEACHING OPEN ACCESS BOOK SERIES

Dedicated to Utah State University's Center for Instructional Design and Innovation (CIDI) and the Office of Empowering Teaching Excellence (ETE), especially Neal Legler, Elisa Taylor, Travis Thurston, and Shelley Arnold, for their exceptional dedication to teaching and learning during the Covid-19 pandemic.

Acknowledgements

As a land-grant institution, Utah State University campuses and centers reside and operate on the territories of the eight tribes of Utah, who have been living, working, and residing on this land from time immemorial. These tribes are the Confederated Tribes of the Goshute Indians, Navajo Nation, Ute Indian Tribe, Northwestern Band of Shoshone, Paiute Indian Tribe of Utah, San Juan Southern Paiute, Skull Valley Band of Goshute, and White Mesa Band of the Ute Mountain Ute. We acknowledge these lands carry the stories of these Nations and their struggles for survival and identity. We recognize Elders past and present as peoples who have cared for, and continue to care for, the land. In offering this land acknowledgment, we affirm Indigenous self-governance history, experiences, and resiliency of the Native people who are still here today.

We would like to thank each of the authors for their enthusiastic participation over the past 18 months. *Habits of Mind: Designing Courses for Student Success* is a showcase of some of USU's best educators committed to transformative and impactful learning.

Additionally, we thank Travis Thurston and Shelley Arnold for their assistance in the publication process and for bringing our idea to the ETE subcommittee. We also thank Heather Jensen for work on Pressbooks and with the editorial process. We appreciate your time and guidance.

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Introduction

Julia M. Gossard and Chris Babits

Although content knowledge remains at the heart of college teaching and learning, forward-thinking instructors recognize that we must also provide 21st-century college students with transferable skills (sometimes called portable intellectual abilities) to prepare them for their futures (Vazquez, 2020; Ritchhart, 2015; Venezia & Jaeger, 2013; Hazard, 2012). To “grow their capacity as efficacious thinkers to navigate and thrive in the face of unprecedented change” (Costa et al., 2023), students must learn and improve important study skills and academic dispositions throughout their educational careers. If we do not focus on skills-building in college courses, students will not be prepared for the challenges that await them after they leave institutions of higher education. If students are not prepared for these postsecondary education challenges, then it is fair to say that college faculty have failed them.

Utah State University (USU) instructors are particularly adept at providing study skills and academic competencies throughout the undergraduate curriculum. Before they even begin their formal coursework, USU students start learning about the study skills that will help them thrive, not only in college but in their careers. USU’s most transformative educators continue to cultivate these skills and dispositions throughout the undergraduate course of study. Though we may be biased, we believe that USU is an innovator in combining the rigorous teaching of content knowledge with an emphasis on study skills. Our belief that USU offers a strong model for education compelled us to edit this collection.

To underscore the pedagogical possibilities of remaking college courses, we have assembled the perspectives of USU faculty, instructors, and learning specialists from across the University in a single edited volume. In *Habits of Mind: Designing Courses for Student Success*, we bring together 32 transformative USU instructors who, in 22 chapters, highlight their experiences in developing the Habits of Mind framework in the courses they teach. Doing so, we hope, will demonstrate USU’s commitment to offering a strong educational experience for our students. In the 21st century, this commitment is more important than ever, especially at an institution like Utah State University.

USU is a land-grant university that carries the prestigious R1 (or “very high research activity”) classification from the Carnegie Commission on Higher Education. The R1 designation means that our faculty and graduate students must meet high standards of research productivity and innovation. But research, though crucial for knowledge production, is not the only thing that USU department chairs, deans, and administrators care about.

Unlike many R1 institutions of higher learning, which can shy away from teaching excellence as a core component of their mission, USU actively encourages exceptional college-level teaching. This is evidenced in USU’s three-part “Strategic Direction,” which lists teaching first. “We champion exceptional education, research and discovery, and community contribution,” the strategic document emphasizes. This three-pronged mission is what makes USU a premier land-grant institution, one dedicated to innovation in teaching and learning. As Steven Gavazzi (2019), author of *Land-Grant Universities for the Future*, explained at the USU Empowering Teaching Excellence Conference, land-grant universities provide a key service to their communities—to “support equitable access to all formats of learning.” With a large statewide campus system that is committed to strong in-person teaching, equitable online

learning, and a sincere dedication to nontraditional and first-generation students, USU embodies Gavazzi's ideal.

Many USU instructors have shown dedication to excellence in teaching through thoughtful course design, with an explicit goal of helping students succeed in college. Thinking deeply about how we structure our courses has become increasingly important. Over the past 30 years, higher education has become more accessible (Vieira et al., 2020). But colleges and universities have also experienced increasing DFWI rates, which refers to the number of Ds, Fs, withdrawals, and incompletes awarded in courses (Koch & Drake, 2019). These DFWI rates are especially high in introductory and gateway courses (Koch & Drake, 2019). One of the reasons for this is that not everyone arrives at institutions of higher learning with the same skillset. While some students come to campus with excellent self-regulated learning abilities, for example, others lack important knowledge of what skills and dispositions can help them thrive in the post-secondary education environment.

Even though we acknowledge that many of our colleagues have recognized the importance of purposefully teaching and honing study skills and academic dispositions in their courses, we do not want to paint USU as some kind of educational utopia. Some of our colleagues are unforgiving with students who seem unprepared for the rigors of a university education. Simply put, these faculty members and instructors do not think it is their job to teach skills in their courses. Instead, they believe that students should have entered USU with the academic dispositions needed to thrive on Day One. Fortunately, we think that the number of our colleagues who think this way is rapidly shrinking.

As universities continue to diversify their student bodies, transformative college educators must perceive that they share responsibility in teaching skills and academic dispositions—like managing impulsivity, metacognition, and persistence—to students. This is especially crucial for instructors at land-grant universities, as our students come from a wide range of socioeconomic backgrounds and have an impressive diversity of lived experiences. If we value diversity as much as our institutional statements say we do, it is essential to meet students on their own terms and to work on making them ready not only for the rigors of a university education but also for what they will confront after. With this in mind, we contend that fostering Habits of Mind can prepare our students for their challenges of being a 21st-century global citizen in a rapidly changing world.

Habits of Mind: An Introduction

Predominantly a pedagogical framework for primary and secondary educators, Arthur Costa and Bena Kallick's Habits of Mind is a list of "intelligent behaviors" that educators can foster in students—and in ourselves—for successful and meaningful learning (Costa & Kallick, 2008, loc. 133). Costa and Kallick propose a 16-point framework, which we list in the paragraph below and explain in greater detail near the end of this introduction, to assist students to "habituate effective problem solving" (Costa & Kallick, 2008, loc. 133).

Costa, Kallick, and Zmuda outline the following 16 Habits of Mind in their framework: 1) persisting; 2) managing impulsivity; 3) listening with understanding and empathy; 4) thinking flexibly; 5) metacognition (thinking about your thinking); 6) striving for accuracy; 7) questioning and posing problems; 8) applying past knowledge to new situations; 9) thinking and communicating with clarity and precision; 10) gathering data through all senses; 11) creating, imagining, and innovating; 12) responding with wonderment and awe; 13) taking responsible risks; 14) finding humor; 15) thinking interdependently; and 16) remaining open to continuous learning. These Habits of Mind form a strong educational approach for teaching students to have the study skills and academic dispositions to succeed in college.

First developed in 1982, Costa, Kallick, and Allison Zmuda have revised and updated Habits of Mind to meet the demands of learners in the 21st century. In 2017, for instance, Bena Kallick and Allison Zmuda published *Students at the Center: Personalized Learning With Habits of Mind* (with a foreword by Costa). In this book, Kallick and Zmuda seek to help educators develop “a transformative, student-driven model of personalized learning built on the set of dispositions known as the Habits of Mind” (Kallick & Zmuda, 2017, p. 12).

Despite going through multiple iterations over 40 years, the goal of Habits of Mind has remained the same—to teach students aspects of the framework so that they eventually internalize effective study skills and academic dispositions. The originators of the Habits of Mind framework stress the importance of this internalization process, emphasizing how students can use these habits “as an internal compass to guide their thoughts, decisions, and actions,” both in their educational careers and as 21st-century global citizens (Costa & Kallick, 2009, p. 3). Given the educational inequities that exist in Utah—and throughout the United States—it is crucial to focus on Habits of Mind within postsecondary educational contexts.

As we have developed this edited collection, we have grown increasingly cognizant of how the Habits of Mind that we discuss in the following pages *can* represent a kind of “hidden curriculum” (Jackson, 1968) in formal educational settings. This hidden curriculum includes “the norms and values that are implicitly, but effectively, taught in schools” (Apple, 2004, p. 78). These norms, behaviors, and expectations may be “unacknowledged and unexamined” but nevertheless “serve to maintain the status quo” (Gable, 2021, p. ix). Depending on one’s upbringing, students may—or may not—have been exposed to certain academic dispositions that set them up for success. We contend that it is the job of college-level instructors to make these parts of the hidden curriculum visible to our students. Otherwise, many students will continue to struggle academically.

The hidden curriculum perpetuates systems of inequity among college students. Understanding how, when, and why to attend an instructor’s office hours, for example, is part of the hidden curriculum of college. Though instructors expect students to reach out for help or to forge professional connections during office hours, explicit discussions around what office hours are and how to use them effectively are often unstated. These implied norms and values can present barriers to student success. Nontraditional and first-generation students, many of whom have few people to ask about the hidden curriculum, might view attending office hours as a sign of weakness. Students with greater levels of social and cultural capital, though, are more likely to view office hours as an opportunity to advance their academic performance and professional connections (Cataldi et al., 2018, p. 2).

In addition to the hidden curriculum of higher education, students can often overestimate their academic abilities when they first enter college. Many students believe that because they achieved academic success in high school, they will continue to be successful in college. This mindset can be especially true for students who took Advanced Placement (AP) and concurrent enrollment courses. These courses, which take place in high school settings, can earn students college credit. But they can also instill too much confidence in students that they already know what learning will be like in the college classroom.

As university-level instructors know well, thriving academically in high school does not necessarily equate to college success. To confront the challenges of learning in higher education, students must continue to develop and refine their study strategies. They are, after all, learning under new circumstances.

Both of us have seen this process play out for students in our large-enrollment introductory surveys. Our first-year students are often surprised that the same study strategies they employed in high school have a vastly different impact on their academic performance in

college. This is particularly true for students who come from school districts that have eliminated homework. Liberated from being in the same school walls for 8 hours each weekday, college students must work on important skills and academic dispositions that few of them had to master before pursuing postsecondary education. They must determine when they will complete readings, create in studios, write papers, conduct experiments in labs, and participate in extracurricular activities. The built-in schedule of secondary school is behind them. But they are not on their own. College instructors can be mentors and guides to help students acquire the study skills and academic dispositions necessary for success.

We are at an important moment in postsecondary education. In the wake of the Covid-19 pandemic, many college-level instructors recognize that we must rethink old ways of teaching. It is no longer enough to be a “sage on a stage,” hoping that our passion for content knowledge seeps into the skulls of our students (Freire, 1970). Instead, we must actively nurture our students’ study skills and academic dispositions. Elementary and secondary educators have long known that one aspect of their jobs is to develop students’ skills. This important task, however, can no longer be lost on instructors in the nation’s colleges.

Habits of Mind at USU

Over the past 2 decades, USU has become increasingly committed to not only discipline-specific content mastery but also skills acquisition. This commitment can be seen in three interrelated initiatives: the establishment of the Center for Instructional Design and Innovation (CIDI); support for the Office of Empowering Teaching Excellence (ETE); and most recently, the development of Habits of Mind courses.

CIDI is one of the most useful teaching resources that either of us have encountered. Many universities, including the institution from which we both earned our doctorates, have a center for teaching and learning. These centers provide instructors with basic training in pedagogy, the use of instructional technology, and equitable and inclusive teaching practices. These are needed services, particularly since many doctoral programs have little to no formal training for Ph.D. students to learn about effective teaching methods. But most of these centers pale in comparison to USU’s CIDI. This is not a simple, biased observation. Our colleagues at other institutions have often expressed jealousy when we tell them about the opportunities and support that CIDI has provided us.

ETE, which seeks “to elevate and promote a culture of teaching excellence that leads to deeper student learning,” is another resource that advances USU’s mission to achieve educational distinction. Through workshops, bootcamps, learning circles, and open-access pedagogical publications, ETE helps USU faculty develop student-centered and inclusive teaching practices. Both of us have participated in and led learning circles focused on a range of topics, including the history of college teaching (Zimmerman, 2020), culturally responsive pedagogy and the brain (Hammond, 2014), the use and development of essential questions (Wiggins & McTighe, 2005), effective online teaching practices (Darby & Lang, 2019), and helping students who may be distracted while learning (Lang, 2020). ETE also hosts a yearly conference for USU instructors to share successful teaching practices with one another. Participants emerge from these workshops and the annual conference ready to facilitate deeper, more meaningful learning for our students.

While CIDI and ETE focus specifically on instructor education, USU has also developed a series of courses focused on establishing Habits of Mind. This initiative has made a direct impact on students’ mastery of study skills and academic dispositions. As part of the Student Academic Success program, USU offers several one-credit courses that “address a variety of Habits of Mind necessary for success in university work” (USU Academic Support, n.d.).

Developed under the leadership of Associate Vice Provost Harrison Kleiner and Executive Director of Academic Belonging and Learning Excellence Heidi Kesler, USU's Habits of Mind courses teach students important academic and career dispositions.

Habits of Mind courses, which Melanie Chambers and Sharon Lyman discuss in more detail in Chapter 12 ("Habits of Mind Courses for College Success: Empowering Students to Plan and Read"), are taught by learning specialists and academic advisors. These courses foster a sense of belonging, equity, and community, all while assisting students in building transferable study skills. Kleiner and Kesler, through continual outreach to instructors and students alike, have managed to make a noticeable impact on student belonging and success in these courses. Kesler's experience in student retention and completion has been essential for instituting interventions that help students succeed at USU.

Most importantly for our teaching practice, Kleiner encouraged us to incorporate various Habits of Mind into our large, introductory surveys. We met with Kleiner about instituting Habits of Mind in courses with the highest enrollments in the College of Humanities and Social Sciences. As instructors for *HIST 1110: European History since 1500* and *HIST 1700: American History*, we teach courses that sometimes have 200-student caps. Interested in seeing our students succeed, we were immediately drawn to Kleiner's and Kesler's efforts to improve our students' study skills and academic dispositions. Without Kleiner's support and guidance, we may have never been introduced to the important work proposed by Costa, Kallick, and Zmuda. By introducing this framework to instructors across the university, Kleiner and Kesler have built a community of learning around transferable study skills and academic dispositions.

Habits of Mind in Higher Education

We firmly believe that Habits of Mind should be developed in every institution of formal learning, from preschool through graduate school. Habits of Mind initiatives have a particular place in the undergraduate classroom, though, especially at universities with sizable nontraditional and first-generation student populations. These initiatives can resemble—and build on—what we have established at USU. This includes a focus on programmatic-level implementation, such as Habits of Mind courses, as well as by encouraging instructors to incorporate Habits of Mind in their introductory and advanced courses.

What matters most, we think, is that college-level faculty recognize the importance of study skills and academic disposition development in postsecondary education. Indeed, as many of the authors in this collection note, it is irresponsible to assume that our students roll onto campus with the skills needed to thrive in college. That mindset only perpetuates social inequalities and the hidden curriculum of college. By building our students' study skills in a concerted and meaningful way, we can play an important role in ensuring their success, not only in college but beyond postsecondary education.

Like most educational frameworks, Habits of Mind is much more than a checklist of skills and academic dispositions that we want students to master. And like many approaches to educating whole persons, Habits of Mind can look complicated in action. Importantly, Costa states that Habits of Mind are rarely "performed in isolation; rather clusters of behaviors are drawn forth and used in various situations" (Costa & Kallick, 2008, loc. 538). We recognize that our students' clusters of behaviors, which each author in this collection addresses, can take endless forms. However, as educators, we should value the individuality of the students we teach, taking the time to comprehend their strengths and to shore up their academic shortcomings. This approach to building Habits of Mind will mean that we have a greater impact on our students' lives than if we approached education as the rote teaching of skills and/or content.

Costa, Kallick, and Zmuda (2023) have created a strong framework for developing Habits of Mind. But most of the available literature focuses on Habits of Mind in elementary and secondary educational settings. Since there has been less focus on fostering Habits of Mind after secondary schooling, in the following section we sketch how Habits of Mind can be adapted to and serve students in the college classroom. This emphasis on study skills and academic dispositions in the postsecondary context will go a long way in educating all our students. Keeping skills at the forefront of our teaching practices will also be important for fostering equity in learning.

Like Costa, we recognize that students pull from multiple Habits of Mind—in various circumstances and situations—as they build their study skills and tackle the challenges of higher education. Each of the authors in this edited collection highlight multiple Habits of Mind they foster in their respective courses. But before someone can understand the intersection—or to use Costa’s phrase, the clusters—of Habits of Mind, it is helpful to explore each of the 16 Habits that Costa, Kallick, and Zmuda (2023) have proposed.

Persisting in College

Persisting is one of the Habits of Mind most extensively covered in this edited collection. There is good reason for this. As Costa and Kallick state, “students often give up when they don’t immediately know the answer to a problem” (2008, loc. 587). Yet persisting is about “seeing a task through to completion” (Costa & Kallick, 2008, loc. 195). College students will not succeed unless they learn to persist through some difficult learning challenges. In college, persisting in learning looks several different ways. It can include overcoming learning setbacks during the first year or when making the leap from introductory to upper-division courses. It could also involve breaking an assignment into manageable steps and using self-talk to stick through a task. It might also involve seeking assistance from campus resources, such as the Disability Resource Center (DRC) and writing and tutor centers. Persisting ultimately “means persevering in a task through to completion” (Costa et al., 2023, p. 95).

Managing Impulsivity in College

The importance of managing impulsivity is an essential Habit of Mind at the college level. Costa and Kallick define this Habit of Mind as the ability to “remain calm, thoughtful, and deliberate” (2008, loc. 200). For college students, this could pertain to a range of issues. Academically, students might rush through their assignments, hoping that they earn a good score without putting in the appropriate amount of time and effort. They might not read directions carefully. Or they could respond hastily to a classmate in an in-person or online discussion. To manage their impulsivity, students must slow down, consider their options, and reframe the possibilities for succeeding in their courses. As Costa, Kallick, and Zmuda (2023) note, students might need to focus on their breathing to settle down. Or they may want to find other strategies to keep their emotions under control (p. 95).

Listening with Understanding and Empathy in College

Refining listening skills involves developing empathy, a skill needed more than ever during our politically charged times. Costa and Kallick (2008) define this Habit of Mind as seeking “to understand others” while “devot[ing] mental energy to another person” (loc. 200). Promoting active and engaged listeners starts with students practicing listening comprehension. In building the Habit of Mind of listening with understanding and empathy, instructors must help students “hold in abeyance their own values, judgements, opinions, and prejudices” while someone else is speaking or when encountering a written text with which they disagree (Costa &

Kallick, 2008, loc. 200). Attending college is not only about expanding one’s knowledge in a chosen field of study. It is also about interacting and cooperating with those who hold different opinions. To improve students’ listening abilities, instructors might implement pauses in discussions to be sure that students have processed what someone in class said. Students might also paraphrase what people have proposed. Or they can ask questions “to seek clarity and precision” of a view, solution, or idea (Costa, Kallick, & Zmuda, 2023, p. 96).

Thinking Flexibly in College

Thinking flexibly means to “look at a situation another way” (Costa & Kallick, 2008, loc. 200). Students must build the capacity to look at problems through multiple lenses. A student who thinks flexibly can “work within rules, criteria, and regulations” while still providing creative solutions to problems (Costa & Kallick, 2008, loc. 645). Thinking flexibly encourages students to recognize that there are multiple pathways to a desired result and that there are multiple perceptions of which way is “right.” Costa et al. (2023) propose the following questions to foster flexible thinking:

- In what other ways might I think about this topic? What is another perspective?
- How does stepping back and looking at the big picture open my eyes to new ideas?
- When and why should my thinking and my actions change?

Thinking About Thinking (Metacognition) in College

Costa, Kallick, and Zmuda (2023) define metacognition as “our ability to know what we know and don’t know” (p. 97). Instructors can help students become aware about their study skills and academic dispositions through reflective exercises, as discussed in several chapters of this edition. These exercises might help students think about the steps and processes they take when tackling an assessment. In addition, Costa, Kallick, and Zmuda (2023) stress how metacognition “facilitates making temporal and comparative judgements, assessing the readiness for more or different activities, and monitoring our interpretations, perceptions, decisions, and behaviors” (p. 93). Students may need to think about their own thinking. They might have to understand the kind of thinking that they must engage in to complete an assignment. Or students could reflect on the strategies they have used to finish a similar assignment in the past. What is important, according to Costa, Kallick, and Zmuda (2023), is for students “to become more aware of their own thinking and to monitor their plans of action” (p. 97).

Striving for Accuracy in College

Costa and Kallick define striving for accuracy as a “desire for exactness, fidelity, craftsmanship, and truth” (2008, loc. 208). Accuracy should not only mean a reiteration of facts and figures, though. Striving for accuracy in college can also entail demonstrating keen mastery over a theory or concept, illustrating careful craftsmanship in artistic work, or editing and revising a paper multiple times. Students who strive for accuracy concern themselves with creating excellent, well-defined products instead of getting a task done as soon as possible. As Costa, Kallick, and Zmuda (2023) note, “[p]eople who strive for accuracy work to attain the highest possible standards and pursue ongoing learning in order to bring a laser-like focus of energies to task accomplishment” (p. 98). Students who strive for accuracy check their work with a peer and finish work early enough so they can revisit what they did before turning in their assignment.

Questioning and Posing Problems in College

Knowing how to ask questions, develop hypotheses, and pose problems are key hallmarks of the higher level thinking championed in higher education. Costa and Kallick define this Habit of Mind as the development of “a questioning attitude” (2008, loc. 208). We ask college students to define knowledge for themselves, and this requires students to pose questions to new and old problems alike. Instructors should help students develop academic and professional skepticism. When possible, we should cognitively model the messy process of research. Instructors can help students dig deeper into the sources, data, and arguments presented to them. The key, according to Costa, Kallick, and Zmuda (2023), is for students to generate, analyze, and prioritize questions before deciding on actions to answer their questions (p. 99).

Applying Past Knowledge to New Situations in College

Adult learning theory suggests that “adults’ life experiences are a rich resource for learning” (Merriam & Bierema, 2012, p. 12). Instructors should regularly encourage college students to “access prior knowledge” (Costa & Kallick, 2008, loc. 208) and to apply past learning and experience from one assessment to another. Instructors, in other words, should encourage students to incorporate feedback, critique, and past experiences to current assessments and activities. Students can then reflect on prior learning, actively make connections, and extend their thinking by asking additional questions (Costa, Zallick, & Zmuda, 2023, p. 99).

Thinking and Communicating with Clarity and Precision in College

Costa and Kallick define this Habit of Mind as the ability to “be clear” and “avoid overgeneralizations, distortions, and deletions” (2008, loc. 208). Students should communicate their ideas using correct terminology, labels, and other competencies as required by the discipline. Their communication—whether written or oral—should be easily understood by their peers. By modeling effective prose, instructors can encourage their students to avoid vague language and overgeneralizations. Costa, Kallick, and Zmuda (2023) write that “[l]anguage and thinking are closely entwined: enriching the complexity and specificity of language simultaneously produces more effective thinking” (p. 100). To avoid overgeneralizations, deletions, and distortions, students can mentally rehearse their responses for in-class discussions, avoid emotional reactions to content, and seek feedback from others before submitting an assignment (Costa, Kallick, & Zmuda, 2023, p. 100).

Gathering Data through All Senses in College

Costa and Kallick (2008) encourage the gathering of data through all the sensory paths—sight, sound, taste, touch, and smell. Costa, Kallick, and Zmuda (2023) further note the following: “When you recall information from [an] experience, the brain reactivates or reconstructs the circuit in which it was stored. The more sensory modalities that were activated, the more triggers the brain has for reactivating the circuit” (p. 101). Instructors might think more expansively about the senses we can have our students draw from when completing an assignment. Students might use their senses when they are trying to remember something. Instructors could use role-plays and have students act out a historical event. Or students might visit a place of worship or a restaurant serving a cuisine they have never had. Doing so would challenge students to reflect on what they see, hear, taste, touch, and smell in these locations.

Creating, Imagining, Innovating in College

Developing students’ abilities for creativity is an essential Habit of Mind. Students should “seek originality” (Costa & Kallick, 2008, loc. 208). According to Costa, Kallick, and

Zmuda (2023), “Creative people take risks and push the boundaries of their perceived limits. They are intrinsically motivated, working on the task because of the aesthetic challenge rather than the material rewards” (p. 102). Students do not need to be artistic to create, imagine, and innovate. They could think by using analogies between seemingly disparate disciplines. Students might try a new app to create and imagine a solution to a problem. They could innovate (or create altogether) a technological solution to an issue plaguing society. Or groups of students might develop a business plan to bring their idea for a store, restaurant, or other capitalistic venture to life. In short, creating, imagining, and innovating, though important for the arts, can be incorporated throughout the college curriculum.

Responding with Wonderment and Awe in College

“When the world around us sparks our interest and ignites our sense of wonder,” writes Costa, Kallick, and Zmuda (2023), “we are inspired to learn, to explore, to imagine possibilities” (p. 103). Responding with wonderment and awe means that students enjoy the complexities of the world around them. It is particularly important for students to explore new ideas and places in college. Going to museums (or different places of worship, as suggested above) can foster the Habit of Mind of responding with wonderment and awe. Encouraging students to recognize and appreciate the beauty, intricacies, and complications of a concept or discipline are essential for the Habit of Mind, too. Instructors can model responding to wonderment and awe by demonstrating their own enthusiasm for their chosen discipline of study and make known when they have learned something new, especially about their area of specialization.

Taking Responsible Risks in College

Students often focus more on whether they submit a “correct” answer than putting time and effort into understanding the process of finding an answer. This black-and-white thinking demonstrates how uncomfortable many students are with uncertainty. “Risk-taking requires a leap into the unknown,” note Costa, Kallick, and Zmuda (2023), “requiring a tolerance for ambiguity” (p. 104). To develop student risk takers, instructors can model failure as part of the learning process. In addition, we can provide opportunities for students to gain experience with the liminal state of uncertainty. By scaffolding learning into smaller chunks and allowing students the opportunity to fail on low-stakes formative assessments, students learn to take responsible risks that can eventually result in high rewards. Costa, Kallick, and Zmuda (2023) observe that taking responsible risks can help students take on tasks that they otherwise might not.

Finding Humor in College

College should not only be a space for serious scholarly study. It should also be a place of joy, humor, and enjoyment. Costa and Kallick (2008) define this Habit of Mind as the ability to “laugh at yourself when you can” (loc. 217). This Habit of Mind could also be defined as “humanizing” the classroom (Rawle et al., n.d., para. 1). College-level instructors understand that they are often teaching their students academically and personally difficult topics for the first time. Yet humor is not only an effective way to humanize the learning experience for college students. It is also important for learning. “Humor has been found to liberate creativity and provoke higher-level thinking skills such as anticipation, finding novel relationships, visual imagery, and making analogies,” pen Costa, Kallick, and Zmuda (2023, p. 104).

Thinking Interdependently in College

“Thinking interdependently,” according to Costa, Kallick, and Zmuda (2023), “means knowing that we will benefit from participating in and contributing to ideas, inventions, and problem solving” (p. 105). Group projects are a common feature of some college-level learning. But instructors can think about constructing more meaningful group learning assessments for college students. Thinking interdependently is especially important at the postsecondary level. College students need to improve their listening and consensus-seeking skills if they want to be ready for their future careers. Costa, Kallick, and Zmuda (2023) highlight how interdependent people “envision the expanding capacities of the group and its members.” In addition, these three writers note that interdependent people “value and draw on the resources of others to enhance their own personal competencies” (p. 105). Instructors can help students learn to collaborate with their peers, whether by taking the lead over a project or through taking direction from someone else.

Remaining Open to Continuous Learning in College

College provides students the opportunity to learn about an impressive range of disciplines and topics. But to do so, students must be open to continuous learning. “Remaining open to continuous learning,” Costa, Kallick, and Zmuda (2023) write, “is an essential characteristic of self-directed, continual, lifelong learners” (p. 106). Instructors should model being open to continuous learning by admitting when they do not know something. More importantly, we can show students that even with so many years of formal education, we still want to know more about what we specialize in. This can encourage college students to have humility and pride when they admit what they do not know (Costa, Kallick, & Zmuda, 2023, p. 106). Doing so can keep them open to new ideas, setting them up for a lifetime of continuous learning after they leave college.

Conclusion

The utility of the Habits of Mind framework is that it is adaptable for a range of educational contexts. Although the Habits of Mind explored in this edited collection can be taught before a student enters college, these Habits remain important throughout one’s postsecondary education. In the following 22 chapters, USU instructors detail how they have developed teaching philosophies, syllabi, class content, and assessments around various points from Costa, Kallick, and Zmuda’s (2023) Habits of Mind framework. These chapters illustrate how to help students improve their study skills and academic dispositions. We believe that this edited collection will be particularly valuable for instructors and administrators at USU as well as at other large, public, land-grant universities.

Habits of Mind: Designing Courses for Student Success is divided into four thematic sections: Starting, Reflecting, Growing, and Mooring. These sections group chapters that engage with similar Habits of Mind, sometimes in disparate ways, to demonstrate the diversity of approaches to Habits of Mind in the college classroom. Section I: Starting explores how instructors, especially in gateway courses, begin to foster Habits of Mind. This section highlights multiple ways to infuse the college curriculum with Habits of Mind from the beginning of our students’ journeys in postsecondary education. Section II: Reflecting showcases the importance of reflection and metacognition in college learning, especially in lower and mid-division courses. This section spotlights some best practices for helping students think about their thinking. Section III: Growing highlights the wide variety of ways that college instructors have encouraged students to develop growth mindsets, persist in learning, and think flexibly in myriad disciplines. These chapters emphasize that learning is a continual process, especially as students

move onto mid- and upper-division courses. Section IV: Mooring explores how USU instructors challenge students to apply their skills to difficult situations and circumstances, including those outside of the traditional classroom. This section demonstrates how postsecondary learning environments can develop students' Habits of Mind in ways to improve the local community and prepare college students for the world beyond the academy.

In each of these sections, the commitment of USU instructors to student success is apparent. Our efforts to develop our students' Habits of Mind is a core feature of what we have started to accomplish at Utah State University. We hope that the approaches discussed in this edited collection will inspire other postsecondary educators to think about what Habits they can infuse in their courses and programs for academic success.