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Chapter 4- With Sustainability in Mind: Twelve Habits of Mind for a Successful Learning Experience in the Second-Language Classroom and Beyond

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Chapter 4 With Sustainability in Mind: Twelve Habits of Mind for a Successful Learning Experience in the Second-Language Classroom and Beyond

Doris McGonagill

When Art Costa and Bena Kallick first developed their Habits of Mind framework, they conceived of their approach as a contribution to sustainable and ethical learning. The dedication opening in all four volumes of *Habits of Mind: A Developmental Series* is explicit about this trajectory: "Native peoples teach that the ultimate norm for morality is the impact our choices have on persons living seven generations from now. If the results appear good for them, then our choices are moral ones; if not, they are immoral. We therefore dedicate Habits of Mind: A Developmental Series to our children, our grandchildren, and their children's children" (Costa & Kallick, 2000, p. iii). The same dedication prefaces *Learning and Leading with Habits of Mind: 16 Essential Characteristics for Success* (Costa & Kallick, 2008, p. v). The following chapter takes its cue from this inherent connection between sustainability and specific life-related problem-solving skills and strategies. I demonstrate how sustainability-related lessons, assignments, and course practices help students develop 12 Habits of Mind that will prepare them for success.

Drawing on environmental education pedagogy and literacies pedagogy in conjunction with the Habits of Mind framework, I show pathways for engaging upper-division language and culture students in meaningful learning experiences centered around theme-based, culture-driven environmental discourses, practices, and activities. Although the specific activities, practices, and contexts originated in the German-language arena (intermediate and advanced language and culture courses), they translate well into different educational contexts and different levels of linguistic proficiency. This approach is geared at immersed, holistic, process-oriented, and project-based learning that supports students in acquiring academic and social competencies characteristic of the "citizen scholars" USU envisions.

But the learning formats I discuss are also designed to benefit students far beyond their college careers. Specific Habits of Mind this contribution engages with include questioning and posing problems; thinking flexibly and interdependently; and creating, imagining, and innovating. Other important Habits of Mind that this chapter touches on include thinking about thinking (metacognition); listening with understanding and empathy; persisting; and remaining open to continuous learning. Habits of Mind this chapter briefly mentions are thinking and communicating with clarity and precision; striving for accuracy; applying past knowledge to new situations; and gathering data through all senses.

The following segments discuss first the relationship of sustainability learning and the Habits of Mind framework and, second, the specific possibilities the second-language classroom affords for implementing Habits of Mind learning. In the main segment of this chapter, I address five examples that demonstrate how different practices and activities incorporate sustainability and Habits of Mind in the second-language classroom. The specific examples are taken from three upper-division German language courses I have offered at Utah State: *Contemporary German-Speaking Cultures (GERM 3300), German Narratives (Revisited) (GERM 4610)*, and *Individual Readings: Nature—Landscape—Environment (GERM 4900*; to be offered in 2025 under the new label *GERM 3940*).

In the context of USU's Planetary Thinking Workshop for faculty, I have had the opportunity to redesign the curriculum for the first two courses to more actively and creatively

incorporate issues of sustainability. Planetary Thinking Workshops, led and designed by USU faculty, promote critical problem solving and application in student education through the UN Sustainable Development Goals (USU, n.d.).

I would like to acknowledge the important impulses my course and curriculum design have received from this cross-disciplinary learning community focused on sustainability. I would also like to acknowledge the opportunity to discuss pathways toward a sustainable university in the context of a 2022 ETE Learning Circle about *The Sustainable Development Goals in Higher Education: A Transformative Agenda?* (Steele & Rickards, 2021). Learning circles, facilitated through Utah State's Office of Empowering Teaching Excellence (ETE), are collaborative, selfdirected groups dedicated to exploring teaching-related topics through discussion of a recent publication from the field of teaching and learning (Empowering Teaching Excellence, n.d.). This learning circle was part of ETE's Sustainable Teaching Track and led by USU Sustainability Program Manager, Alexi Lamm.

Why Sustainability?

There are three key concepts I consider central to both learning about sustainability and developing positive Habits of Mind: the concept of care, the concept of interdependence, and the concept of collaboration. These concepts are both foundational and directional. They ethically and educationally underpin and form the bases of both forms of learning, and they also inform the learning's trajectories, goals, and objectives.

In the fourth book of *Habits of Mind: A Developmental Series*, Costa and Kallick are most explicit about this connection. Outlining the learning communities they envision (sensitive, caring, and thoughtful), the authors stress the "larger, more global agenda" of their work: "That agenda is to make the world a better place through the Habits of Mind" (Costa & Kallick, 2000, p. 75). Tracing the development from learning on the individual level to learning on the collective and community levels, the authors list environmental challenges ("dilemmas") as an example of several intersecting problems—moral, social, scientific, and economic.² To Costa and Kallick, the epistemological and ethical challenges posed by our interaction with the environment serve as a context to showcase the importance of good Habits of Mind. Any pathway toward a possible solution to such interrelated problems necessarily requires

a continuous learning community where all people are searching for ways to live more harmoniously by thinking interdependently; listening to each other with understanding and empathy; remaining open to continuous learning; persisting; managing impulsivity; and...developing a greater collective consciousness about the effects we have on each other and on the Earth's finite resources so that we can live more respectfully and graciously and in balance with our delicate environment. (Costa & Kallick, 2000, p. 75–76)

Continuous, empathetic, persistent, and interdependent learning transforms and empowers us to shape our future. Sustainable learning and learning about sustainability go hand in hand. "The Habits of Mind are tools we all can use to invent our desired version of the future" (p. 76).³

² In 2012, Levin et al. would term such interrelated constellations "Wicked Problems." Today, they are sometimes even referred to as "Super Wicked Problems."

³ The Association for Supervision and Curriculum Development (ASCD), which has published much of Costa and Kallick's work, echoes this trajectory by short prefaces like "ASCD cares about Planet Earth," and by printing on environmentally friendly paper (Costa & Kallick, 2009).

Costa and Kallick's framework has a global agenda. But the last quote and the dedication of five of their books to future generations indicates that their spatial framework is complemented by a temporal dimension as well. Good Habits of Mind compel us to think forward in time and base today's choices also on our responsibilities to the future. Sustainable learning and sustainability learning both unfold on synchronic and diachronic axes. Habits of Mind like persistence, continuous learning, applying past knowledge to new situations, or imagining and innovating point toward the future and involve long-term learning.

Similarly, the communities the *Habits of Mind* authors envision require that we collectively transcend our ethnocentrisms and our myopic focus on the present in favor of shared long-term goals (Costa & Kallick, 2000, p. 75). In different and diverse contexts ranging from building learning organizations and knowledge-sharing cultures to reflective, growth-oriented classroom environments, a mindful language of learning, and successful curriculum design, the authors stress the importance of reflective, responsive, adaptive, communicative, and empathetic approaches. The same qualities are required in environmental discourse, problem solving, and action. The Habits of Mind trajectory and vision coincide with environmental and sustainability practice and goals, and the horizon of future generations addressed in the dedications echoes the question attributed to Jonas Salk and frequently quoted in contemporary environmental studies contexts: "Are we being good ancestors?" (Salk, 1992).

Lastly, Habits of Mind like remaining open to continuous learning, responding with wonderment and awe; and gathering data through all senses emphasize humility, alertness to the world's phenomena, and attention to natural pathways. Together with empathy, creativity, flexibility, and innovation cultivated through complementing Habits of Mind, these qualities are also prerequisites to a mindset that is attuned to environmental threats and challenges. Learning to be more open, attentive, and sensually alert to the world around us and engaging with this world in a reflective, thoughtful, and empathetic manner is likely to strengthen a respectful relationship with our environment; foster attention to the just, equitable management and distribution of Earth's resources; and focus on collectively working toward preserving and stabilizing ecological systems and global communities.

Why the Second-Language Classroom?

Successfully learning a foreign language requires a series of Habits of Mind, most prominently thinking flexibly; thinking about thinking; listening with understanding and empathy; persisting; striving for accuracy; communicating with clarity and precision; and applying past knowledge to new situations. Thinking flexibly is relevant because changing linguistic contexts necessitate changes in perspective and looking at things in a new way. Thinking about thinking is involved as language learners develop an awareness of how their thinking habits are related to the language they speak and how each language influences our perception, thinking, and mental life in a specific way. Much of the work by American linguist Benjamin Lee Whorf was dedicated to this relationship, which is encapsulated in Whorf's famous statement that "language shapes the way we think, and determines what we can think about."⁴ Similarly, German philosopher Ludwig Wittgenstein wrote, "The limits of my language mean the limits of my world."⁵ Some sustainability-related examples from the German-language

⁴ From "The Relation of Habitual Thought and Behavior to Language," reprinted in *Language*, *Thought, and Reality* (Whorf, 1939/2012). Similarly, German philosopher Ludwig Wittgenstein wrote, "The limits of my language mean the limits of my world" (in *Tractatus Logico Philosophicus* of 1921).

⁵ Tractatus Logico Philosophicus (1921).

context that allow traditional English speakers to transcend the limits of their first language and concomitant worldview to open up new perspectives and conceptualizations include terms like *enkeltauglich* ("sustainable for the generation of our grandchildren"), *Flugscham* ("the guilt or shame about the environmental impact of flying"), or *Lassenskraft* ("the strength to do without")—instead of *Verzicht* ("renouncement or abstinence").

Language learning always implies devoting mental energy to another culture and other speakers' thoughts and ideas and making an effort to perceive other points of view and emotions. Persisting is necessary because only perseverance and sustained focus on our linguistic and/or communicative goals yield results in the second-language classroom. Striving for accuracy and accurate communication in both written and oral form, checking one's work repeatedly, and finding ways to constantly improve while setting high standards are core features of any language-learning process. They apply to all language components, the productive skills (speaking and writing) and receptive skills (listening and reading); structural, functional, and conventional aspects (grammar, lexis, and orthography); as well as the domains of phonology, morphology, syntax, semantics, and pragmatics. Applying past knowledge to new situations likewise accurately describes the transfer operations constantly required from language learners who engage with new words, concepts, phrases, figures of speech, sentences, structures, contexts, and discourses. Furthermore, all language learning requires a pro-sharing culture, as detailed by Costa and Kallick (2000, Figure 1.1, p. 3), and a feedback and learning spiral similar to the model the authors provide (2000, Figure 1.2, p. 6). This spiral involves clear goals and purposes, action, assessment, reflection, and further study that revisits and deepens the new knowledge and, where necessary, modifies (linguistic) actions based on the deepened understanding.

All these formats of learning, application, and intensified production of accuracy and/or meaning; the necessary perspectival changes and the communicative engagement; the required flexibility in thought and expression; and all the repetitions and variations necessary to develop greater linguistic proficiency and familiarity with diverse cultural contexts make the second-language classroom a privileged site for Habits-of-Mind learning.

Sustainability in the Second-Language Classroom

The next paragraphs share some ideas and impulses for integrating sustainability and Habits-of-Mind learning into the second language (L2) classroom. I discuss five examples that illustrate practices and activities that stem from upper-division German language and culture courses, but many formats, concepts, approaches, and instructional strategies are transferable across disciplines and languages. The five examples employ different methodologies, are designed to strengthen different aspects of learning, and are connected to different learning outcomes. (Ranging from lower- to higher-level cognitive learning outcomes, these formats lead students from "remember" and "understand" to "apply," "analyze," and "create"). What ties them together is their hybrid approach to learning that amalgamates content, materials, and goals from the environmental humanities with Habits of Mind and immersed cultural learning in the target language. The overall goal of these activities and practices is to engage students in meaningful learning experiences that center language learning around theme-based, culture-driven environmental discourses and to create frameworks that involve diverse environmental perspectives, practices, and products.

I. Creating Word Clouds and Concept Maps

Creating word clouds invites students to pay attention, actively participate, and engage not only with the instructor but with one another. Visualizing students' ideas and associations in

the form of word clouds allows for more interactive, inclusive, and equitable learning and supports student success by complementing the spoken word (and acoustic reception) with a tangible illustration (visual production). This is particularly relevant in the L2 classroom because recalling, reproducing, and visualizing vocabulary, concepts, and expressions solidifies students' long-term memory and helps deepen retention of a given term's gestalt (spelling) as well as content (meaning and context). But the creation of word clouds does not only help students hone their linguistic skills; on a metacognitive level, it invites, in a playful way, thinking about our thinking. Allowing students to compare their ideas with those of others supports them in self-assessing their knowledge and/or proficiency and identifying areas for improvement.

Costa and Kallick's "know your knowing!" thus comes into play in a low-stakes, nonintimidating environment that paves the way for other forms of student application, engagement, and interaction. Conforming with the Habits of Mind sequence of teaching, learning, and optimizing over time, creating word clouds in the classroom can be used to visualize progress and improvement when such exercises are used at the beginning of a unit (in our case, the opening unit of a class dedicated to nature—landscape—and environment) and as a repetition assignment near the conclusion of a unit. Most importantly, word cloud generation allows learning communities to collectively create a "product," work together, and develop a sense of agency and ownership.

A slightly different set of Habits of Mind comes into play when students are asked to create mind or concept maps. The term "mind maps" generally refers to visualizations that focus on one central idea, while the term "concept maps" denotes graphic arrangements of more complex, interrelated ideas or concepts. Both mapping exercises can be used to reflect real-life interdependencies and foster creative, innovative, and interdependent thinking. I like to assign mapping exercises to smaller groups of students because that allows for more intense interaction and exchange.

In the L2 classroom, mind and concept maps, like word clouds, are great tools for scaffolding lexical development and vocabulary retention. They facilitate collective brainstorming and listening, speaking, and writing practice. By exchanging the maps produced in the individual groups, this exercise can be extended to also include reading practice, interpretation, and verbalized explanation. Such sequencing encourages students to engage with even more ways of thinking and different perspectives and forms of conceptualization. It also models a culture of sharing and collective learning as well as pathways for creating, imagining, and innovating.

With respect to content learning, generating mind and concept maps can provide holistic visualizations of a topic and alert learners to complex interrelationships as well as alternative or complementary forms of conceptualization and contextualization. The production of mind and concept maps—like the creation of word clouds—is a useful tool for applying existing knowledge to new situations, strengthening interdependent thinking, and demonstrating the benefits of working collaboratively. Creating a product that documents collaborative thought processes stimulates students' creative, imaginative, and innovative potential. Exchanging, discussing, and interpreting maps produced by others creates additional opportunities for flexible and interdependent thinking by engaging with other perspectives and considering alternative options. It also adds additional incentives for striving for clarity, accuracy, and precision.

Examples of mind and concept maps students produce in my upper-division Germanlanguage content/culture courses include visualizations of our consumer behavior or the environmental, social, and economic impact associated with different modes of transport (bikes, passenger cars, motorized two-wheelers, buses, trains, aircraft). Reliably, students debate the pros and cons of purchasing bottled water or using plastic bags, the dangers of emitting greenhouse gases, and the hazards of noise or light pollution. But they also reflect on the effects our mindsets, choices, and actions have on others, the global consequences of our individual actions, and the necessity to question existing attitudes, secure trustworthy data, and develop effective problem-solving strategies. Students discuss how scenarios might differ in different regions of the world (e.g., densely populated, highly developed Western nations as opposed to developing nations) and consider different points of view, alternative options, and new approaches.

In all these ways, students practice Habits of Mind, including thinking about thinking; questioning and posing problems; thinking flexibly; and creating, imagining, and innovating. One of the student suggestions for sustainable changes to our local context in Cache Valley that came up in the context of such a brainstorming exercise involved creating a USU-operated shuttle service between Logan and the Beaver Mountain Ski Resort. This idea, aimed at reducing traffic and emissions during the challenging bad air days, is now being developed into a student grant proposal to USU's Christensen Office of Social Action and Sustainability (COSAS). COSAS offers students opportunities for sustainable innovation, outreach to the local community, and to become lifelong engaged citizens (Christensen Office of Social Action and Sustainability, n.d.).

Figure 4.1

Three different types of word clouds created by USU students enrolled in *GERM 4610* (tool: <u>https://wordart.com</u>).



II. Measuring and Analyzing Our Ecological Footprint

The second activity revolves around measuring one's carbon footprint. Despite this tool's problematic backstory—one of the first measuring tools was developed by the British petrol giant BP and designed to deflect corporate responsibility away from the company onto individual consumers—asking students to measure their footprint can be a great learning tool, especially in the preparation of sustainability-related classroom discussions or project development. Challenging students to calculate their footprint encourages them to develop an awareness of our demand on nature in relation to Earth's natural supply (biocapacity) and to critically (re)examine our own habits and consumer behavior: How and what do we eat? How do we live? How do we travel? How and what do we consume? How much waste do we generate? There are many sites that invite carbon footprint calculation. For the German-speaking context, I find the following ones helpful: https://www.fussabdruck.de; https://www.wwf.de/themen-

projekte/klima-energie/wwf-klimarechner; https://www.mein-fussabdruck.at; or https://www.nachhaltigleben.ch.

The test results show how many earths we would need to support our current lifestyle in relation to how fast we consume limited resources and generate waste. The parameters for our demand (diet, living, mobility, consumption; generation of waste, etc.) connect to students' real lives and our shared reality, inviting them to raise questions, diagnose existing problems, and identify possible pathways toward solutions. An exercise involving carbon footprint calculation can also help students strive for accuracy and think and communicate with clarity and precision (among other things). A follow-up reflection asking students how they might reduce their ecological footprint or an assignment requiring them to develop a community project that may address, on a local scale, a specific problem can foster Habits of Mind like applying past knowledge to new situations; independent thinking; and working creatively, imaginatively, and innovatively.

Figure 4.2

Opening Page of a German Carbon Footprint Test



III. Role Play: Helping a Sick Planet

If planet Earth were a patient and you were the attending physician, what regimen of care and/or medication would you prescribe? So, or similar, is the question that I ask my students with the invitation to develop a dialogue or role play. In addition to useful linguistic practice, this exercise helps students develop several key Habits of Mind: It requires that students transfer knowledge to a new situation; engage in a creative, imaginative, and innovative way; think flexibly and interdependently; and that they listen with understanding and empathy. (Along the way, they might even find a little humor!) This format provides an engaging and studentcentered way of opening units that analyze different environmental narratives and their functions (warning, urging, appeasing). Discussing the metaphor of the "sick" planet or the image of the misanthropic, abandoned planet Earth prepares the analysis of more complex narratological forms and patterns (melancholy, dystopian, utopian, technological, or transformative) and leads to a deeper understanding of narratives as central to different cultures' (and individuals') selfinterpretation and construction of meaning.

Figure 4.3

Two examples for the depiction of planet Earth as a patient (left: source unknown; courtesy of *Gabriele Dürbeck; right:*

TYPISCHES BURN-OUT ZUM VERSLEICH: STEIST DIE KORPERTEMPERATUR UM NUR 2 °C AN, SPRICHT MAN VON FIEBER, WENN AUSGELÖST DURCH MENSCHBEFALL ... PERATUR 40 °C **DBERSTEIST, FÄLLT EIN** AN NACH DEM ANDERE US, UND RSENDWANN NLABERT DAS DESAMTE SYSTEM MENSCH.

https://de.toonpool.com/cartoons/Erde%20vor%20Burn%20out 280091).

IV. Experiencing and Creating a Nature Mindfulness Path Engaging students in a mindfulness exercise can be a particularly impactful learning experience, as it invites students not only to learn cognitively but to transcend traditional academic learning formats and learn emotionally as well. In my courses, I have used nature mindfulness paths in different ways-I have experienced them with my students, and I have encouraged my students to design their own mindfulness paths.

One of the excellent tools I have found for the German-speaking context is by Schutzgemeinschaft Deutscher Wald (n.d.). Under the heading "Experience the forest with all senses," this site provides visual and acoustic materials to facilitate forest mindfulness experiences. For each of the categories "breathing," "walking," "feeling," "smelling," "hearing," and "seeing," this site offers audio introductions, spoken by a male or a female voice, that provide information and contextualization as well as short meditations that guide the listener through an awareness exercise (Schutzgemeinschaft Deutscher Wald, n.d.). All materials, including the audio segments, are in the target language. In addition to this experiential material, Schutzgemeinschaft Deutscher Wald offers a lot of information materials, including printable cards that provide the above-mentioned headings and can structure student-designed mindfulness paths (Figure 4.4).

Experiencing and/or creating a nature mindfulness path enhances students' awareness, attentiveness, and listening skills. It facilitates explicit Habits-of-Mind learning because it encourages students to gather data through all senses; respond to their environment with wonderment and awe; and listen effectively, with understanding and empathy.

Figure 4.4

Forest Mindfulness Path

WAR

Atmen	Geh	en	Fühlen		Riechen		Hören		Sehen
Übungen mit weiblicher Stimme gesprochen									
► 0:00/2:56 ·····	•	▶ 0:00 / 4:34 —		► 0:00 / 8:3	• • •	▶ 0.00	0/6.29 4	0 1	
Intro (weibliche Stimme)	S	tation Atmen (wei	bliche Stimme)	Station Gene	n (weibliche Stimme)	Station	Fühlen (weibliche Stim	nme)	
► 0:00/6:34	•	► 0.00/8:34 —		► 0:00 / 6:0	• • •	► 0:00	1/0.58 4	01	
Station Riechen (weibliche	Stimme) St	tation Hören (weit	liche Stimme)	Station Sehe	n (weibliche Stimme)	Outro (w	veibliche Stimme)		

Note. Audio materials by *Schutzgemeinschaft Deutscher Wald*, www.sdw/de/fuer-den-wald/aktivitaeten-im-wald/achtsamkeitspfad.

V. Curating an Art Exhibition of Student-Created Upcycled Art The last idea I share here is creating with your students an art exhibition that consists of artworks produced from upcycled materials. This project, which I like to plan toward the end of our learning journey, consists of several steps. First, in the context of the course, students learn, through many different formats, about sustainability and the importance of good environmental habits. Second, they create these artworks, individually or in groups. And third, I provide a forum for exhibiting these artworks in the classroom context.

Engaging in an extended, multi-step learning project—scaffolded and interspersed by frequent instructor feedback—teaches students to remain on task, focused, and to persevere in seeing a task through to completion. There are many online materials for upcycling art projects. For my courses, I have found valuable tips and ideas at the website of *Geolino*, the German National Geographic for young people: <u>https://www.geo.de/geolino/basteln/15038-upcycling-mit-kindern-basteln</u>. In the classroom, we discuss some of the ideas showcased on this site. In my experience, students do not imitate those exact ideas but use them as springboards that unlock their own creativity. Creating artworks from recycled materials helps students question the concept of waste, experience community in the exhibition, be creative in helping the environment, reflect on possible improvements to practices in their own contexts, communities, and at USU at large, and act more mindfully on campus and beyond. Specific Habits of Mind practiced by creating an art exhibition of student-created upcycled art include encouraging students to think flexibly; questioning and posing problems; and stimulating creativity, imagination, and innovation.

Conclusion

Practical, process-oriented, innovative, and creative learning formats that involve students in "green" discourse, projects, and activities lend themselves particularly well to also facilitate equitable, supportive, holistic, and sustainable Habits-of-Mind learning. Engaging L2 students in sustainability-related activities, exercises, and projects opens specific pathways to transformative, holistic, and lifelong learning. Sustainability as a lens can help instructors create

theme-based and project-oriented immersion experiences that implicitly and explicitly engage students in Habits-of-Mind learning.

Developing word clouds and mind or concept maps prompts students to think about thinking and strengthens metacognitive skills. Facilitating opportunities for students to engage with many different viewpoints and conceptualizations fosters flexible thinking and the ability to see things from alternative viewpoints. Enriching students' perspectives further supports them in developing more diverse and encompassing problem-solving strategies. Exercises focused on calculating our carbon footprint help students strive for accuracy, raise questions, examine problems, and think and communicate with clarity and precision. Follow-up reflections and projects geared at actively developing alternative behavior patterns and shaping new, more sustainable habits requires the application of past knowledge to new situations; independent thinking; and working creatively, imaginatively, and innovatively. Role plays developing around the concept of a sick planet strengthen students' ability to apply knowledge to new situations, think flexibly and interdependently, engage with their (social and natural) environment in creative, imaginative, and innovative ways, and develop understanding and empathetic listening skills. Experiencing and/or creating a forest mindfulness path encourages students to gather data through all senses; respond to their environment with wonderment and awe; and listen effectively, with understanding and empathy. Finally, curating an art exhibition of studentcreated upcycled art encourages students to think flexibly and stimulates creativity, imagination, and innovation. The multi-step process consisting of learning about recycling, coming up with a concept for the artwork, gathering the materials, producing the exhibit, and, as a group, putting together an exhibition strengthens Habits of Mind like persistence and collaboration.

The L2 classroom provides an ideal context for interactive, communicative, and projectbased learning formats and outreach initiatives. By integrating student-centered sustainability learning into the L2 classroom, teachers ensure that students' learning journeys are connected to real-life challenges. Creating diversified, immersive learning contexts in which students interact with environmental challenges and debates can facilitate opportunities for students to come up with their own suggestions for solutions. This allows students to explore many different pathways to success.

Issues of sustainability and planetary boundaries affect us all and demand our collective attention, inquiry, creativity, and innovation—across disciplines and national or linguistic divides. One of the most important tasks of the university, and higher education in general, is to assume a leadership role with respect to issues of sustainability learning. If we take seriously the dedication at the beginning of Costa and Kallick's *Habits of Mind: A Developmental Series* "that the ultimate norm for morality is the impact our choices have on persons living seven generations from now," instructors need to create forums for communication and sustainable practice to help students create a positive and sustainable future. There are many vibrant learning formats, frameworks, and contexts in and through which instructors can help students develop greater environmental awareness and strong ethics of care, attention to the implications of our attitudes and actions for others, and an understanding of the necessity to constantly evaluate and improve. In all of them, sustainability learning and sustainable Habits-of-Mind learning go hand in hand. And through such holistic, immersed learning, instructors support students in becoming informed, engaged, and effective citizens, not only of our university but our region and the world.

References

- Costa, A. L., & Kallick, B. (Eds.). (2000). *Integrating & sustaining Habits of Mind. A developmental series, book 4*. Association for Supervision and Curriculum Development.
- Costa, A. L., & Kallick, B. (2008). *Learning and leading with Habits of Mind: 16 essential characteristics for success.* Association for Supervision and Curriculum Development.
- Costa, A. L., & Kallick, B. (2009). *Habits of Mind across the curriculum: Practice and creative strategies for teachers*. Association for Supervision and Curriculum Development.

Christensen Office of Social Action and Sustainability: Center for Community Engagement. (n.d.). *Christensen Office of Social Action and Sustainability*. Utah State University. Retrieved April 28, 2023, from https://www.usu.edu/social-action-sustainability/

- Empowering Teaching Excellence. (n.d.). *Learning circles*. Utah State University. Retrieved April 28, 2023, from https://www.usu.edu/empowerteaching/events/learning-circles/
- Levin, K., Cashore, B., Bernstein, S., & Auld, G. (2012). Overcoming the tragedy of super wicked problems: Constraining our future selves to ameliorate global climate change. *Policy Sciences*, 45(2), 123–152. http://www.jstor.org/stable/41486859
- Salk, J. (1992). Are we being good ancestors? World Affairs: The Journal of International Issues, 1(2), 16–18.
- Schutzgemeinschaft Deutscher Wald. (n.d.). *Achtsamkeitspfad: Den wald mit allen sinnen erleben*. Retrieved April 28, 2023, from <u>https://www</u>.sdw.de/fuer-den-wald/aktivitaeten-im-wald/achtsamkeitspfad/
- Steele, W., & Rickards, L. (2021). Sustainable development goals in higher education: A transformative agenda? Palgrave Macmillan.
- Utah State University. (n.d.). *Planetary Thinking in the Curriculum*. Retrieved April 28, 2023, from https://www.usu.edu/sustainability/planetary-thinking/.
- Whorf, B. L. (2012). The relation of habitual thought and behavior to language. In J. B. Carroll & P. Lee (Eds.), *Language, thought and reality: Selected writings of Benjamin Lee Whorf* (pp. 134–159). The MIT Press. (Original work published 1939)