Didactic Principles of BEwell: Integrating Artificial Intelligence with Human-Centered Learning

Author: Jana Koci, Ph.D.

Affiliated: Uniwellsity s.r.o. & Univerzita Karlova

The BEwell course, guided by our AI companion WellBot, offers a fundamentally new approach to education—one that is maximally tailored to the needs of each student. Thanks to artificial intelligence, we are able to track students' real-time reactions, feedback, and engagement throughout the course. As a result, learning is no longer an averaged experience but a personal journey—like not serving everyone seven dumplings, but exactly the number each person actually needs.

This course is custom-made, efficient, and deeply rooted in student motivation. Each lesson begins with a clear preview of what students can expect and is enriched with real-life stories. Jana Kočí draws upon more than 20 years of experience in education and 15 years of working directly with students and schoolchildren. The course is also firmly grounded in evidence—every step and every idea is supported by research.

As an evidence-informed program, BEwell is built on scientific findings, not myths. Contemporary research shows that the idea of fixed learning styles is outdated—the most effective learning occurs when we engage all sensory channels and work in an integrated, holistic way.

That's why our course purposefully combines visual, auditory, and kinesthetic stimuli. We use illustrative materials, audio recordings, and practical exercises designed to quite literally get students out of their chairs. This multisensory approach significantly increases both the effectiveness of learning and long-term retention.

We employ the principle of dual coding—a proven technique for efficient learning. Key information is delivered through multiple channels at once—for example, when explaining the definition of well-being, we reinforce it visually with a graphic diagram. This combination of verbal and visual representation helps students better understand and retain the material.

We also build on the principle of visible learning—learning should be observable. In our course, the learning process is tangible and understandable not only for the instructor but, more importantly, for the student. Every step a student takes is clearly structured, reflected upon, and linked to a specific goal.

For instance, when working on the topic of character strengths, students not only hear the definition and examples, but also record their own strengths in a clear visual format that gradually fills up. Learning thus becomes visible, graspable, and intrinsically motivating.

The course intentionally develops key competencies, especially self-reflection, which forms the foundation of sustainable well-being. The more students strengthen their skills in the area of mental wellness, the more naturally they develop metacognition—the ability to think about their own thinking, decision-making, and behavior.

This is the direction we consciously guide students toward. They learn to become aware of their experiences, reflect on their functioning, and regulate the strategies that lead to long-term satisfaction and inner balance.

In the course, we deliberately work with the technique of paraphrasing—important ideas are conveyed repeatedly in different ways. Key messages are not stated just once; they are gradually developed through definitions, examples, and personal stories. This increases clarity and comprehension.

For example, when introducing the concept of authenticity, we begin by providing a clear definition, follow with a real-life example, and conclude by restating the key message in different words—ensuring it resonates with various types of learners.

Our approach is action-oriented—we emphasize activity and interaction. We do not rely solely on knowledge transmission, though it has its place and is used in the course. We go further: we support students in discovering key insights and skills on their own, at their own pace, and through their own path.

We assign concrete tasks and set clear objectives, while still allowing space for individual approaches. In this way, we help students develop the competence to actively shape their well-being—not as abstract knowledge, but as a personal skill they can apply in their everyday lives.

BEwell combines personalized instruction with community support. Thanks to the AI guide—WellBot—students experience the course as a form of one-on-one coaching, tailored in time and pace to their needs. As the avatar of a real university educator, WellBot delivers content authentically and clearly.

However, once a month, we also meet in live sessions—with a human facilitator and a group of students. These sessions provide space for reflection, sharing experiences, and collaborative problem-solving based on course assignments. They remind us that while WellBot is a powerful tool, true understanding and growth are rooted in real human connection.

In designing BEwell, we placed strong emphasis on the instructor's positive and authentic approach, which directly influences students' mood and motivation. Mirror neurons, which play a crucial role in empathy and social learning, allow positive emotions from the teacher to be transferred to the student. Studies show that a teacher's positive attitude can significantly affect students' emotional state, thereby enhancing their engagement and learning effectiveness.

WellBot, our AI guide, is designed to communicate with genuine positive energy—not in a forced or artificial way, but in a natural, sincere, and human manner. This helps students tune into a positive emotional wavelength, making them more open and receptive during the learning process.

Every word in the course carries the personal imprint of PhDr. Jana Kočí, Ph.D., who authored all the scripts and serves as the voice behind WellBot. Jana writes exactly as she speaks to her students—

with openness, warmth, and a deep understanding of their needs. This gives the course a sense of authenticity and sincerity, building trust and emotional closeness—even in an online setting.

This approach is further supported by her academic expertise and long-standing research in the field of well-being, which she continues to develop at the Faculty of Education, Charles University.

We also place great emphasis on empathy and respect for each student's individual experience. When a student shares uncertainty or difficulty, we never downplay their feelings. Instead, we respond with the question, "How can I help you?"—a clear signal that we take their experience seriously and are ready to support them.

This approach aligns with findings on mirror neurons, which play a key role in empathy and social learning. Research shows that a teacher's positive demeanor can significantly influence students' emotional state, enhancing their engagement and the effectiveness of their learning.

WellBot, our AI guide, is designed to communicate with natural positive energy—not in a forced way, but with a genuine and human tone. In doing so, it helps students attune to a positive emotional state, which supports their openness and receptiveness during the learning process.

We also focus strongly on fostering student autonomy, a key factor in developing intrinsic motivation and overall well-being. According to Self-Determination Theory, autonomy is one of three essential psychological needs; when fulfilled, it leads to higher intrinsic motivation and more effective learning.

WellBot is designed to offer students choice and control over their learning. They can decide when during the week to complete each lesson and choose from a variety of activities based on their preferences. For example, they may select two out of four exercises that best match their learning style and interests. They can even customize the visual interface—such as background color—to enhance their sense of control and comfort.

This approach strengthens students' perceived autonomy, which research shows is linked to greater motivation, better engagement, and improved mental well-being.

We also systematically build students' self-efficacy while effectively managing cognitive load. Self-efficacy—the belief in one's ability to succeed—is a crucial determinant of learning success and sustainable well-being. As Albert Bandura noted, "People with high self-efficacy view challenging problems as tasks to be mastered rather than threats to be avoided."

WellBot is designed to provide constructive feedback and support students in gradually mastering tasks. This helps them build confidence in their abilities and fuels their motivation to continue learning.

At the same time, we pay close attention to managing cognitive load. We alternate different types of activities—from cognitively demanding tasks to reflective pauses and practical exercises—to ensure students stay focused without becoming overwhelmed. This approach is grounded in cognitive load theory, which emphasizes the limits of working memory and recommends instructional designs that avoid overload.

Through these strategies, students not only acquire new knowledge but also develop the skills needed for autonomous learning and sustainable well-being.

In designing the BEwell course, we drew on the principles of visible learning and rigorously followed the evidence-informed education model. Rather than relying on trends or intuition, we based our approach on validated research and meta-analyses. We were particularly inspired by John Hattie's *Visible Learning*, which synthesizes over 800 meta-analyses to identify the factors with the greatest impact on learning outcomes. This work serves as one of our methodological cornerstones, helping us distinguish between approaches that sound good and those that actually work.

Research and meta-analyses (e.g., Hattie, 2009) confirm that high-quality feedback is among the most effective tools for learning. In BEwell, feedback is not limited to end-of-course evaluation; it is a continuous, integral part of the learning process. On the Uniwellsity platform, students can submit ongoing assignments, comment on peer contributions, and receive individual feedback from instructors. This dynamic interaction creates a real dialogue between students and teachers, deepening students' understanding, enhancing their self-reflection, and motivating continued learning. Feedback is not merely informational—it is a key driver of deep learning and personal growth.

In BEwell, we also apply the principles of dialogic teaching, which research shows to be more effective than the traditional IRF model (Initiation–Response–Feedback). Whereas IRF often reduces classroom exchange to a closed loop of questions, brief answers, and superficial feedback, dialogic teaching emphasizes openness, collaboration, and shared meaning-making.

We ask open-ended questions, encourage multiple viewpoints, teach conversation techniques, and promote a culture of respectful discussion. We help students articulate their ideas, support them with arguments, listen to others, and reflect on diverse perspectives. This results not only in knowledge, but in deep, transferable understanding.

Specific techniques we use to support dialogic learning include:

- Think–Pair–Share
- Reflective Circles
- Higher-order questioning based on Bloom's Taxonomy
- Socratic dialogue
- Argument mapping
- Role-play and perspective-taking
- Creative text interpretation
- Reaction journaling
- Discussion protocols
- Peer feedback using assessment criteria
- Silent conversation (written dialogue)
- Rotating discussions
- Structured small group interviews
- "Four Corners" technique—choosing and defending a viewpoint
- Dialogic summary instead of testing

These methods not only deepen understanding of course content but also develop essential 21st-century skills such as critical thinking, empathy, collaboration, and expressive ability. In the BEwell environment, learning is never a monologue—it is a living dialogue where every voice matters.

BEwell also intentionally applies the principle of the self-fulfilling prophecy—in its positive form. We recognize that teacher expectations significantly influence student performance and self-perception. For this reason, every aspect of the course—from scripts and communication to the language used by WellBot—has been designed to ensure that students feel genuinely trusted and supported by both the instructor and the AI guide.

Each word of the course carries an implicit message: *"I believe in you. You can do this. You hold more within you than you realize."* The course scripts are crafted to reinforce students' sense of self-worth, belief in their abilities, and appreciation of their unique qualities. WellBot is not merely a technical tool, but a humanized guide—its language, tone, and responses are programmed by an academic with many years of experience working with students and a deep respect for their individual journeys.

This approach has far-reaching effects—students who feel seen, trusted, and accepted begin to trust themselves. This newfound self-belief extends beyond the classroom into their personal lives, relationships, and everyday decisions. In this way, we not only enhance their academic success but also strengthen their inner stability and self-confidence.

We also actively implement differentiated instruction by adapting the difficulty, format, and content of activities to accommodate diverse learners. Each student enters with different backgrounds, levels of preparedness, and preferred learning styles—and we view this diversity not as a challenge but as a natural part of the learning process.

Thanks to this approach, students can choose between various task options—sometimes opting for deep reflection, at other times for action steps or creative responses. This flexibility increases engagement and intrinsic motivation, as students are empowered to work in a way that feels natural and meaningful to them. It also reinforces their sense of competence—each student has the opportunity to experience success, regardless of their starting point.

Differentiation also allows us to better target instruction according to students' current needs, which improves both the effectiveness of learning and the overall experience. In the BEwell environment, no student is "too slow" or "too far ahead"—everyone has their own path and receives support precisely where it's needed.

Another essential didactic principle consciously applied in BEwell is *scaffolding*—the gradual removal of support that allows students to transition from guided learning to full autonomy. At the start, we offer clear structures, guiding questions, examples, and concrete prompts. As students gain confidence, this support is purposefully reduced until they can think, decide, and reflect independently. This process significantly strengthens their ability to self-direct both their learning and well-being.

In the context of well-being, scaffolding means that students gradually adopt specific strategies for caring for their mental health while building the confidence that they can manage without external support. Scaffolding does not foster dependence on the course or teacher—it cultivates internal stability and trust in one's capabilities. This becomes particularly crucial once the course ends, and students are expected to transfer what they've learned into everyday life.

We also implement the *Think–Pair–Share* strategy, which effectively enhances both understanding and student engagement. First, the student works individually—perhaps

reflecting on a question, analyzing an example, or studying a short reading. Then, they are invited to pair up with a peer via the Uniwellsity platform to share, compare, or deepen their reflections. This phase of social interaction happens outside of the main lesson time, at a relaxed pace, and according to the student's choice—they decide when and with whom to connect. This makes the learning experience more socially grounded and personally relevant. It promotes peer learning and strengthens understanding through dialogue, leading to deeper knowledge retention and greater intrinsic motivation.

We also intentionally reduce *cognitive load*. Drawing from cognitive load theory, which highlights the limited capacity of working memory, we structure the content and flow of lessons to ensure that information is digestible and sustainable. This means combining theory blocks with discussions, practical demonstrations, short videos, and reflective exercises. We "chunk" the content into smaller, manageable units and vary the rhythm and format of instruction to prevent overload. This structure helps students maintain attention, absorb information more effectively, and sustain a positive relationship with the learning process itself.

Each learning block begins with a conscious *activation of prior knowledge*. This strategy has multiple benefits—it connects new information to what the student already knows, deepens understanding, and aids in long-term memory retention. It also builds students' confidence by reminding them that they already have a foundation on which to build. In practice, this might look like reflecting on a personal experience with the topic, answering introductory questions, or revisiting the previous lesson with WellBot. As a result, students are more focused, engaged, and ready to learn.

A core component of our approach is also the creation of a *safe and supportive environment* in which students are not afraid to make mistakes. On the contrary—we see mistakes as an essential part of the learning journey and an opportunity for growth. The course actively fosters a *growth mindset*, based on the work of Carol Dweck, whose research shows that students who see abilities as developable rather than fixed are more resilient to setbacks and more motivated to learn. Both WellBot and the human facilitator regularly remind students that mistakes are not failures but steps forward—learning does not come from perfection, but from the courage to try and reflect.

A powerful element of BEwell is the *intentional cultivation of social support*, which is among the strongest predictors of well-being. We know that a shared burden is lighter, and a shared joy is greater. That's why we create opportunities for interpersonal connection beyond the core lessons. Students can interact on the Uniwellsity platform between sessions—offering mutual support, sharing experiences, or arranging joint study sessions, Zoom calls, or leisure activities. This community dimension boosts not only motivation and belonging but also emotional stability and long-term well-being.