Introduction

The way we view the primary role of education influences the discourse around schooling¹. The authentic learning framework stems from social constructivism theory: a belief that learning is collaboratively constructed and that understanding develops from sharing information and challenging others to build knowledge². As we learn, we are shaped by those around us and our learning environment, which in turn influences how we construct our knowledge³. The authentic learning approach fosters a learning environment that supports students in achieving their educational goals and becoming engaged citizens, professionals, and dreamers.

The Authentic Learning Framework

As we explore the idea of authentic learning practices, the research offers a view of authenticity not as a single idea but instead as a collection of components. These components provide students with varied opportunities to connect with the content in personally meaningful and relevant ways to ensure retention and application of knowledge across contexts. Research has shown that teachers can emphasize learning as meaningful when it is student-centered, collaborative, contextual, and integrated with community and society⁴. These types of learning experiences increase positive emotions around learning, garner higher perceptions of relevance and long-term understanding, and activate student engagement in learning as well as an intrinsic motivation to learn⁵. Authentic practices not only help teachers to more fully engage students, but also allow students to gravitate toward learning that resonates with them.

Authentic learning practices center around the following components:

- **1. Student-centered learning.** We often use the term "student-centered learning" to describe a shift in teaching focus from the teacher to the student. This idea can include aspects of student agency⁶, scaffolded learning environments⁷, and the cultural nature of learning⁸. Student-centered learning emphasizes the student's role in constructing their own knowledge. These types of guided learning opportunities help students make purposeful learning decisions that connect to their existing cultures, experiences, and understandings⁹. A student-centered learning environment allows teachers to serve as facilitators throughout the process, supporting students as they become independent learners¹⁰.
- **2. Construction of knowledge.** Construction of knowledge forms the foundation of constructivist theory, building on the idea that there is no knowledge independent of the meaning that we construct as learners¹¹. How we construct knowledge is grounded in the work of Piaget, but these ideas have also expanded through recent studies in cognitive psychology, brain research, and human development, which have shown how complex interactions between learners and their environments result in structural changes to the brain's neural networks¹². These neural networks make up the long-term memory of individuals and are continuously extended and reshaped as new information is received from the environment¹³. Our prior experiences are shaped by educational, social, and cultural experiences both in and out of the classroom¹⁴.
- **3.** Inquiry-based learning. Inquiry-based learning is an active process that begins with and is guided by relevant questions¹⁵. Teachers can facilitate the inquiry process by helping students to ask good questions, find relevant information, and think through their conclusions, inferences, and solutions¹⁶. As students work to answer questions through research, analysis, and collaborative discourse, they synthesize and make sense of information and ideas that enable them to deepen their knowledge and share their new understanding

with others. Through a focus on inquiry, we allow a student's own curiosity to drive how they construct their knowledge.

4. Real-world connections. Connecting learning to the real world helps students see how their learning might be applicable in the future, while also motivating them to attempt to apply their learning in meaningful ways¹⁷. These real-world connections can help students develop aspirations about what they want to do after school, since they are positioned to imagine themselves trying different future paths as they learn¹⁸. When teachers deliberately integrate the school setting with the real world, students can more easily transfer skills upon entering the workforce¹⁹.

With each of these components building on one another, authentic teaching and learning practices emphasize the meaningful aspects of learning. These components of authenticity demonstrate a clear connection between learning and the benefits achieved when that learning has clear value beyond the classroom. By incorporating the four components of authenticity, teachers can facilitate learning experiences that students will recognize as not only intrinsically meaningful but also meaningful for how they interact with their world.

Authenticity in Practice

With a clear view of the key elements of authenticity, we can work to integrate these elements into our teaching practice. Whether working directly with technology or not, teachers can use authenticity to impact day-to-day learning in the classroom.

Authenticity in context. Balance is key in applying the components of authenticity to the classroom environment. Not all aspects of authenticity are necessary to include in a lesson to make it an authentic learning experience. A great first step is intentionally considering which aspects of authenticity will best serve students. While there are areas where the components of authenticity overlap in their intent, each of these components will help to develop a student-centered learning experience. Integrating authentic teaching practices into classroom learning might involve:

- Integrating inquiry into all subject areas to reap the benefits seen in the sciences, with consideration for content specifics and retention of knowledge²⁰.
- Increasing student agency by providing choice and ownership²¹.
- Honoring students' personal cultures and understanding the value of their unique perspectives²²
- Scaffolding discussions and allowing students to lead discourse²³.
- Seeking out authentic audiences for quality feedback and understanding of real-world contexts²⁴.
- Mirroring the real world in the tasks assigned to students and the tools they use²⁵.
- Acknowledging students' interests, values, identities, and aspirations, and then making meaningful connections to these characteristics²⁶.

It is important for practitioners to stretch and implement new methods to enhance authenticity. School leaders should encourage and support teachers in implementing strategies to improve authenticity for better student outcomes in the classroom and the postsecondary environment.

Real-world connections through service learning. Authenticity can also be integrated into learning through the real-world connections seen in service learning. Service learning refers to learning experiences that ask students to engage with their surrounding communities through meaningful opportunities for learning and collaboration²⁷. In service learning, we see a clear commitment to authenticity as real-world problems are approached with a focus on the common good, society, and learning by doing²⁸. Service learning allows students to take an active role in their education by asking questions, seeking out and grappling with evidence²⁹, and using their preconceived notions about the world and their understanding of how things work³⁰. Rooted in the reflective processes defined by John Dewey, service learning is an ever-evolving process³¹ that links academic standards with community service performed by the student so that each strengthens the other. Service learning not only provides a sense of empowerment to the groups most directly in need

of change, but also reinforces the value of learning by asking students to devise solutions to community problems.

Effective service learning includes:

- Integration into the academic curriculum. When integrated directly into the curriculum, service learning allows the learning to extend beyond the classroom. This ensures students learn from the work they do while helping the communities they serve³².
- An emphasis on relevance. Service learning activities and experiences should be relevant to students and the communities they are serving³³. This emphasis on relevance must also extend to personal and cultural relevance for students in order to drive curiosity and result in better academic outcomes³⁴.
- *Critical reflection*. Requiring students to critically reflect is vital within the context of service learning, as it gives students the opportunity to think, talk, or write about what they observed and learned throughout the process³⁵. Critical reflection also helps students to understand the meaning of their work, deepen the knowledge acquired, and gain key insights into the broader community-level factors that influence decision-making³⁶.

Authentic use of technology. As the professional world becomes more technology-centric, finding ways to integrate authentic, real-world tools becomes increasingly important³⁷. The authentic use of technology includes:

- Using technology to help students participate in real-world endeavors and share the products of these endeavors with a larger audience³⁸. These opportunities allow students to practice authentically using tools in a way that prepares them to face the challenges ahead.
- Emphasizing technology as a tool to support authentic learning. This involves evaluating technology tools and resources in relation to learning tasks. In doing so, we shift the focus away from the technology itself and toward how that technology can bridge the divide between the classroom and the world beyond, simulating external environments³⁹.
- Evaluating technology in terms of authenticity. With the belief that learning should be the primary goal and the use of technology a secondary goal, Kolb⁴⁰ recommends three questions in her Triple E framework to gauge authenticity when incorporating technology into learning: reflect on whether a tool engages students in the learning goal, enhances the learning goal, or extends the learning goal.

Increasing our digital fluency—the ability to search for, evaluate, and use information and technology—is key to ensuring that all technology tools are integrated authentically.

Conclusion

Authentic learning aims to support educators in developing student-centered learning experiences grounded in a scaffolded process where students build on their identities, cultural backgrounds, and existing knowledge through inquiry and discourse to deepen their understanding and enrich their sense of purpose in the world around them. Educators are authentic in their practice by being true to the content, the learning process, and the science that supports how people learn. Students develop a connectedness to their learning through their personal histories, aspirations, or cultures. At its heart, authentic learning aims to infuse learning with purpose and meaning so that students develop the skills necessary to fully engage with the world at large.

References

¹Labaree, 1997

²Vygotsky, 1978

³Darling-Hammond et al., 2021; Osher et al., 2020

⁴Anderson, 1983; Atkinson & Schiffrin, 1977; Ausubel, 2000; Bransford et al., 2000; Dewey, 1966; Piaget, 1972

⁵Nachtigall et al., 2022; Parsons et al., 2021; Jeter et al., 2019; Kuhlthau et al., 2015

⁶Manyukhina & Wyse, 2019; Moses et al., 2020; Reeve & Shin, 2020

⁷De Backer et al., 2016; Mariage et al., 2019; Schwartz et al., 2021

⁸Esteban-Guitart & Moll, 2014; Hammond, 2015; Kelly et al., 2021; National Academies of Sciences, Engineering, and Medicine [NASEM], 2018 ⁹Colter & Ulatowsky, 2017

¹⁰Lee & Hannafin, 2016; Reeve & Shin, 2020

¹¹Fox, 2001; Piaget, 1972; Vygotsky, 1978

¹²Liu et al., 2017; NASEM, 2018

13Liu et al., 2017

¹⁴Liu et al., 2017; NASEM, 2018

¹⁵Chatterjee et al., 2009; Kuhlthau et al., 2015

¹⁶Kranzfelder et al., 2019; Ligozat et al., 2017

¹⁷Darling-Hammond et al., 2021

¹⁸Singer et al., 2020; Beier et al., 2018; Koomen et al., 2018

¹⁹Osher et al., 2020

²⁰Kuhlthau et al., 2015; Nachtigall et al., 2022

²¹Moses et al., 2020

²²Darling-Hammond et al., 2021

²³Harris et al., 2012

²⁴Nachtigall et al., 2022

²⁵Burgin, 2020

²⁶Kenyon, 2020; Ryan & Deci, 2019

²⁷Dymond et al., 2013; Sprague Martinez et al., 2017

²⁸Shumer et al., 2017

²⁹Brewer & Daane, 2002; Sprague Martinez et al., 2017

³⁰Gibson & Chase, 2002; Sprague Martinez et al., 2017

³¹Reif-Stice & Smith-Frigerio, 2021

³²Dymond et al., 2013

³³Boss, 1994; Filges et al., 2022; Dymond et al., 2013; Leming, 2001; Skinner & Chapman, 1999; White &

Mistry, 2016

³⁴Cabrera et al. 2014

35 Eyler & Giles, 1999; Giles & Eyler, 1994

³⁶Eyler & Giles, 1999; Giles & Eyler, 1994; Sprague Martinez et al., 2017

³⁷Dishon, 2021

³⁸Dishon, 2021

³⁹Hod & Sagy, 2019

⁴⁰Kolb, 2017

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