The why of open pedagogy: a value-first conceptualization for enhancing instructor praxis

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Abstract

Theoretical evolution within the field of Open Pedagogy has progressed rapidly in recent years. Practical application, however, has lagged this conceptual development. This article seeks to explore the gap between theory and practice by examining how the use of terms within the open education space may create barriers for instructors new to the concept. The authors of this article argue that the most effective approach to creating momentum toward practices associated with Open Pedagogy is to begin with an alignment of an instructor's values with the attributes of an open educator. Subject matter experts were consulted in the association of open pedagogical values with specific practices. The result is a visual aid useful for an instructor's self-assessment or in collaboration with curriculum designers to identify a logical start point for an instructor as they begin their movement from a more traditional to an open approach.

Keywords: Open pedagogy, Open practice, Values, Pedagogical shifts

Introduction

Within the field of education, it has become axiomatic that engaging students is critical. Research demonstrates that student engagement impacts a number of measures of student success including academic achievement, college readiness, and even personal well-being (Boulton et al., 2019; Gallup, 2019; Upadyaya & Salmela-Aro, 2013). Also beyond question is the value of increased student motivation, with more autonomous forms of motivation having been demonstrated to positively impact student performance, increase knowledge transferability, and lead to greater psychosocial health (Burton et al., 2006; Howard et al., 2020; Wang et al., 2020).

Open Pedagogy is an educational approach that has been conceptualized in a number of ways. Most broadly, it has been defined as teaching and learning practices that are made possible through open licensing of content (Clinton-Lisell, 2021) as well as both philosophical and practical alignment with education that is "access oriented" and "learner-driven" (DeRosa & Jhangiani, 2018, pp. 13–14). Evidence suggests that Open Pedagogy leads to positive student outcomes, such as development of critical thinking skills, greater self-direction, and increased enjoyment of education (Dermody, 2019;

Hegarty, 2015; Hilton et al., 2019; Tillinghast, 2020; Werth & Williams, 2021b; Wiley et al., 2017). Research also indicates that forms of Open Pedagogy may positively impact student engagement, help in building skills necessary for success at the college level, and enhance forms of motivation generally considered to be more beneficial (Werth & Williams, 2021a, b).

For all of its potential advantages, the Achilles heel for Open Pedagogy in terms of instructor implementation may be the plethora of definitions and conceptualizations of the term. According to Wiley and Hilton (2018),

> *The wide range of variation in the many recent definitions of open pedagogy makes it increasingly difficult to make sense of the term, potentially leading to claims of openwashing and creating other practical problems in the context of teaching and learning practices (p. 135).*

Although more easily defined, research out of the United States suggests that under 50% of faculty are currently aware of Open Educational Resources (OER) and Creative Commons licensing (Spilovoy et al., 2020). It is difficult to imagine faculty awareness of Open Pedagogy to be greater than OER and generally, lack of awareness has been described as the main barrier in the move towards openness (Nascimbeni & Burgos, 2016).

While it may seem logical to attempt to increase implementation of a concept by more clearly defining what it "is", a more effective method may be to start by fostering the ability of an individual to discern how their own values align with the concept. Indeed, recent research by Otto (2021) suggests that affective as opposed to cognitive dynamics are more important to instructor engagement with OER. Otto goes on to indicate that while some level of knowledge is needed to use OER, instructors are initially attracted to the concept because of underlying values (Otto, 2021).

These findings align with the concept of the Golden Circle, a term coined by Sinek (2009) and explained in a 2009 TedxPuget Sound video that at the time of this writing has over 56 million views. According to this framework, organizations or leaders normally describe what they do or how they do it, but infrequently first articulate why. Sinek indicates that what people relate and buy into is the why. What separates companies that are exceptional from those that have similar resources and ability is often their focus and marketing around the "why" first. Applied to the concept of Open Pedagogy, those interested in realizing its potential benefit and assisting others in doing the same should start with the "why", or the values inherent in aspects of this pedagogical approach. Determining how these align with the goals one has for their own teaching could help an individual identify what elements of Open Pedagogy would best fit into their instructional strategy and provide a "foot in the door" for greater implementation in the future.

In any field, gaps can develop between the theoretical evolution of a concept and how a practitioner may apply this in praxis. In presenting this article, the authors first seek to explore, using a narrative approach, key articles which highlight how the varying definitions in open educational spaces may serve as barriers to those new to the field. Open Pedagogy specifically is examined, describing the practices with which an instructor seeking to be more "open" may engage. Following this the values associated with various elements of Open Pedagogy are overviewed to reinforce the existing literature that sees

this pedagogical approach as an empowerment tool for learners. The result is a proposed framework for visualizing Open Pedagogy designed to depict the concept in less abstract terms related to the tasks engaged in by educators which is both in alignment with current literature and combines both philosophic and technical aspects of pedagogy. The authors sough subject matter insight into the alignment of framework elements and the values espoused in Open Pedagogy. The insight of these individuals are presented in order to highlight commonalities seen by experts regarding value-attribution to Open Pedagogy.

Positionality

The authors of this article, recognize that in academic research and writing it is possible to be disconnected from the ultimate focus of our efforts, the students. Reflexivity and positionality allow one to better understand how their own lived experiences impact their academic practice more broadly. Creswell (2007) notes that being completely neutral is not possible and as such, one should not pretend that neutrality in their endeavors can be achieved. In light of this realization, the authors wish to be transparent in their own identities as it impacts understanding and interaction with academia.

   Philosophically, the authors would like to fundamentally shift the power dynamics of the "traditional" classroom. They believe that education is most meaningful to students and democratic when traditional power structures are disrupted and voices which are frequently marginalized by the very structure of academia are heard.

Literature review

Conceptualizing open pedagogy

Since its articulation, educational concepts touted as open have increased exponentially. These include, but are not limited to "open ___": practice, educator, education, institutions/universities/educational systems, educational practices, pedagogy, educational resources, content, access, collaboration, courses, recognition, research, scholarship, education science, source, and teaching (Anderson, 2009; Andrade et al., 2011; Beetham, et al., 2012; Bologna Open Recognition Declaration, 2016; Bozkurt et al., 2019; Coffey, 1977; Cormier & Siemens, 2010; Couros & Hildenbrandt, 2016; Cronin, 2017; Cronin & MacLaren, 2018; DeRosa & Jhangiani, n.d.; DeRosa & Robison, 2017; DeVries, 2019; Ehlers & Conole, 2010; Gacek, & Arief, 2004; Geser, 2007; Hegarty, 2015; Hodgkinson-Williams & Gray, 2009; Inamorato dos Santos et al., 2016; McGill, 2013; Naidu, 2016; Nascimbeni & Burgos, 2016; Paskevicius, 2017; Stagg & Bossu, 2016; UNESCO, 2012; van der Zee & Reich, 2018; Veletsianos & Kimmons, 2012; Weller, 2013; Wiley, 2013).

   Although these are all valuable concepts and worthy of consideration, the plethora of practices touted as being open comes at a price. Definitions are elusive, evolving, and at times contradictory (Baker, 2017; Bozkurt et al., 2019; Cronin & MacLaren, 2018; Inamorato dos Santos et al., 2016; Tietjen & Asino, 2021). This lack of clear definitions is problematic (Tietjen & Asino, 2021) as terminology surrounding open education has been credited with confusion that may negatively impact adoption efforts, miscommunication leading to ineffective discussions, and as being detrimental to the ability to build collaborations (Inamorato dos Santos et al., 2016; Lane, 2009; McGill, 2013; Pomerantz & Peek, 2016).

Perhaps the concept that causes the most variance, in terms of the proliferation of definitions, is the term "open". Pomerantz and Peek (2016) in their article "50 Shades of Open", describe the many various interpretations of open, stating that open refers to rights, access, use, transparency, a participatory culture, practices that enable openness, and aligning one's philosophies with the principles espoused in openness. Although often referred to as "free", this alone is not sufficient to constitute "open" (Cronin, 2017; Williams & Werth, 2021). It may be difficult to consider something that is not free "open"; there are many examples of content, particularly in relation to publishers and websites, where free clearly does not equate to open as no rights are given to others to reuse, remix, revise, retain or redistribute the work in question (Pomerantz & Peek, 2016; Wiley, 2013 & n.d.). Faculty create resources available to students, often locked behind the learning management system (LMS) and not openly licensed (Santiago & Ray, 2020).

In her analysis of openness, Cronin (2017) synthesized four interpretations of "open" in educational settings: open admission, open as free, open educational resources, and open educational practices. She goes on to state that open may refer to content itself, access, and how they are used but also teaching approaches and the values behind these. "Open", then, may refer to a product or process; access to anything from content to knowledge itself; transparency (Stagg & Bossu, 2016), participatory practices (Anderson, 2009; Inamorato dos Santos et al., 2016), student choice (Commonwealth of Learning, 2000), alternate means of learning (Inamorato dos Santos et al., 2016), and ultimately to different ways of constructing knowledge (DeRosa & Jhangiani, n.d.).

Pedagogy would seem to have a simpler definition. Commonly defined as the art and science of teaching, this description may only capture a portion of the dynamic present in the educational milieu. In writing about pedagogy, Murphy (1996) suggests that there is an indelible connection between learner and educator while also acknowledging that pedagogy involves student agency, where the learner acts as part of knowledge creation instead of being a passive recipient. Fullan (2013) echoes these sentiments, describing a "new pedagogy" as a developing concept in which the student and instructor are truly partners in the learning process. Shah and Campus (2021) indicate that there are two pedagogical models, teacher-centered and student-centered. Moreover, definitions of pedagogy may be technicist and center on subject-matter knowledge and strategies that lead to measurable outcomes, or sociocultural, focusing on human development and the broader history and values of the learning environment (Shah & Campus, 2021). These definitions illustrate the short-sighted approach of viewing pedagogy as a concept entirely dependent upon the classroom instructor or devoid of cultural influences, and highlight the argument of Tietjen and Asino (2021) that outlining what is meant by "pedagogy" is missing from the current debate on what constitutes Open Pedagogy. A more holistic approach may be to view pedagogy, and by extension Open Pedagogy, as reliant on both the instructor and student, in a context where many tasks traditionally thought of as teacher-centric can be shared with students to be empowering and inclusive.

Whatever the basis, defining Open Pedagogy has been a subject of debate in the field of open education. Definitions range from the broad, wherein Open Pedagogy is seen as embodying the essence of openness, to the narrow which focus on creation of OER (Jhangiani & Green, 2018). In her systematic review of the use of the term "Open

Pedagogy", Clinton-Lisell (2021) indicates that most studies define the term in relation to permissions granted by open licensing with the majority of the research they reviewed having students create a non-disposable assignment that at least students could choose to share with a larger community. While acknowledging that how one defines Open Pedagogy impacts the ways in which they can support Open Pedagogy, Jhangiani and Green (2018) state that the community, in large part, has agreed to disagree. Early in the life-stage of an emergent concept it makes sense to avoid such debates. As mentioned above, however, terminology issues cause difficulty in communication, reduce adoption of open approaches, and create possible confusion in how to support such efforts. It is incumbent as the field matures to address areas of philosophic divergence.

Conceptualizing open pedagogy and related concepts

Considering variability in the terms "open" and "pedagogy" and lack of consensus on a definition, it is not surprising that the concept of Open Pedagogy remains nebulous, spurring a variety of frameworks. Additionally, the term open educational practice (OEP) is frequently used in the literature with varying degrees of similarity to Open Pedagogy. In reviewing open educational practices from a constructivist perspective, Paskevicius (2017) developed a visual aid for OEP depicting the interplay of learning outcomes, teaching and learning activities, assessment and evaluation, and teaching and learning resources. Koseoglu and Boskurt (2018) conducted an extensive exploratory review of OEP. Their resulting framework uses a series of circles arranged in a bullseye fashion depicting openness as the central philosophy of OEP. Out from this is Open Education (theory), followed by Open Educational Practices (practice), and finally evolving-adaptive open approaches (models/approaches). Open Access, Open Content, Open Courses, Open Data, Open Design, Open Knowledge, Open Learning, Open License, Open Scholarship, Open Source, Open Standards, Open Teaching and Open Universities are given as examples of evolving-adaptive open approaches. Each of these, the researchers explain, can be further examined in regards to the dimensions of culture, pedagogy, technology, legal issues, finance, and labor. In a recent comprehensive review of OEP, Huang et al. (2020) proposed a framework with five conditions (OER, open assessment, open collaboration, open teaching, and enabling technology) and four relations (OER-enabled technology-open teaching, open teaching-enabling technology-open collaboration, open collaboration-enabling technology-open assessment, and open assessment-enabling technology-OER) and indicate these as interacting to enable OEP development.

In regards to Open Pedagogy itself, a frequently cited framework is from Hegarty (2015) who outlines eight attributes of the concept: (1) Participatory technologies; (2) people, openness & trust; (3) innovation & creativity; (4) sharing ideas and resources; (5) connected community; (6) learner generated; (7) reflective practice; and (8) peer review. Through qualitive research, Baran and Alzoubi (2020) devised the Open Pedagogy in action model, wherein content curation, peer feedback, community engagement, development, reflection, and scaffolding comprise the six main practices of Open Pedagogy. Tietjen and Asino (2021) conducted a systematic literature review of Open Pedagogy with the aim of clarifying the concept and identifying commonalities to create a flexible framework for Open Pedagogy. This work led to the Five-Circle Framework where

Open Pedagogy is viewed as including the following characteristics: seeking diversity of cultural voices as design partners, emphasizing a participatory pedagogy, using open licenses to position learning as commons, embracing learners from nonacademic settings, and cultivating a culture of collaborations (Tietjen & Asino, 2021).

These models, while useful in describing some elements of openness in teaching highlight an interesting trend regarding models in the field. Frameworks generally do not depict the activities engaged in by the average practitioner in relation to the underlying philosophies of teaching they represent. The result is either a predominantly technicist or sociocultural presentation of pedagogy rather than a synergy of the two.

From theory to praxis

Recognizing that integration of open educational practices by teachers was relatively low, Nascimbeni and Burgos (2016) conducted research with experts in the field of open education to uncover the stages educators experience in moving from reliance on traditional pedagogies to the use of, and eventually becoming advocates for, openness in education. Their study resulted in the creation of a definition of Open Educator and model for fostering greater implementation of open practices by faculty, the Open Educators Factory (OEF) framework.

According to Nascimbeni and Burgos (2016) an Open Educator practices openness within four activities: how the course is designed, what content is used to facilitate learning, engaging students as co-creators of knowledge, and the ways in which students are assessed. The framework allows instructors to be assessed or self-assess on four domains (Design, Content, Teaching, and Assessment) and in relation to three layers of integration (individual, small group, and fully-open collaboration). Educator growth is proposed to proceed through two transitional stages, awareness of and then transformation into an Open Educator (Nascimbeni & Burgos, 2016). Continued research with university instructors suggested the OEF framework has validity in practice (Nascimbeni et al., 2018). Recently, the same authors explored the attitudes, knowledge, and skills educators must become adept in in order to implement open educational practices. The prevailing attitude noted is, "Be ready to openly share one's work, to use the knowledge created by others, to improve access, participation, and quality of teaching and learning" (p. 108).

These four domains of educational practice: Open Design, Open Content, Open Teaching, and Open Assessment have been explored by others in the field. Open Content was first used by Wiley in the late 1990s and was defined as copyrightable works that are provided perpetually free to retain, reuse, revise, remix, and redistribute—known within the field as the 5Rs of open (Wiley, 2014). While Open Educational Resources (OER) are probably the most recognizable example of open "content", other items within the literature have been proposed to belong to this family as well. McGill (2013) and Inamorato Dos Santos et al. (2016) note that Open Content includes not only teaching and learning materials, but outcomes of scholarly endeavors such as data and research outputs as well.

Open Design has been defined as the "… creation and development of potentially meaningful learner experiences through open and transparent collaboration among course developers and peers using open educational resources, open educational practices and open technologies" (Open Design and Development, n.d.). Nascimbeni and

Burgos (2016), while not defining Open Design, list characteristics of an educator using this approach as openly sharing teaching plans with other experts as well as students (current or past). Inputs from these individuals are considered and the evolution of teaching plans is made transparent. The purpose for an openness in educational design is also discussed by Inamorato dos Santos et al. (2016) as increasing participation in design of learning activities so that students themselves are involved and the purpose behind the way educational experiences are structured is evident. Speaking to more practical elements of Open Design, Paskevicius (2017), indicates that openness relates to the development of learning outcomes, the selection of materials used in the teaching/learning process, activities that students will engage in, and assessment practices.

In referring to Open Assessment, Nascimbeni and Burgos (2016) emphasize the importance of peer-review as an assessment tool, as well as collaborative assessment practices, badges, and micro-credentialing. This aligns with the definition developed by Chiappe (2012) and Chiappe et al. (2016), who acknowledge that Open Assessment relies on peer-to-peer engagement facilitated through the use of open tools. Peer-to-peer engagement, as a part of Open Assessment, is a vital component of the Open Educator's facilitation process. The central role peer-review plays in pedagogical "openness" is evidenced by the fact that it is one of the eight characteristics of Open Pedagogy described by Hegarty (2015) and in the five conditions to implement open educational practices outlined by Huang et al. (2020).

Open Teaching, unsurprisingly, as a concept encompasses a number of practices. In the work of Nascimbeni and Burgos (2016), Open Teaching involves social knowledge construction with students, providing students agency in what is learned and how, enhancing networking such as peer and group learning, focusing on the process of learning as opposed to a product, and communicating across various learning communities to foster greater sharing of ideas and solutions. Couros and Hildenbrandt (2016) also provide a description of Open Teaching, indicating that it involves inclusion of activities that are "... open, transparent, collaborative, and social" (p. 148). These authors go on to state that open teachers advocate for knowledge being freely accessible, and within the learning environment support students participating in knowledge construction and creating shared networks.

A relatively new addition to open vernacular is the term OER-enabled Pedagogy. Introduced by Wiley and Hilton (2018), it is defined as "teaching and learning practices that are only possible or practical in the context of the 5R permissions which are characteristics of OER" (p. 135). A key element of OER-enabled Pedagogy is the creation of a non-disposable (NDA) or renewable assignment. NDAs are assignments designed to provide value to others, are available to larger audiences than traditional assignments, and may be licensed openly by the creator, which is the students (Seraphin et al., 2019; Wiley & Hilton, 2018). In this way, OER-enabled Pedagogy invites learners to be co-creators of knowledge rather than more passive recipients of information. This pedagogical approach, then, has parallels in Open Design, Open Content, and Open Assessment but because of its unique characteristics may be best discussed as a separate construct.

Considering the conceptualizations above, the authors created the visualization in Fig. 1 to represent the teacher-centric facets of Open Pedagogy. This figure stems from the description of the activities of an Open Educator by Nascimbeni and Burgos (2016)

Fig. 1 Visualizing teacher-centric elements of open pedagogy
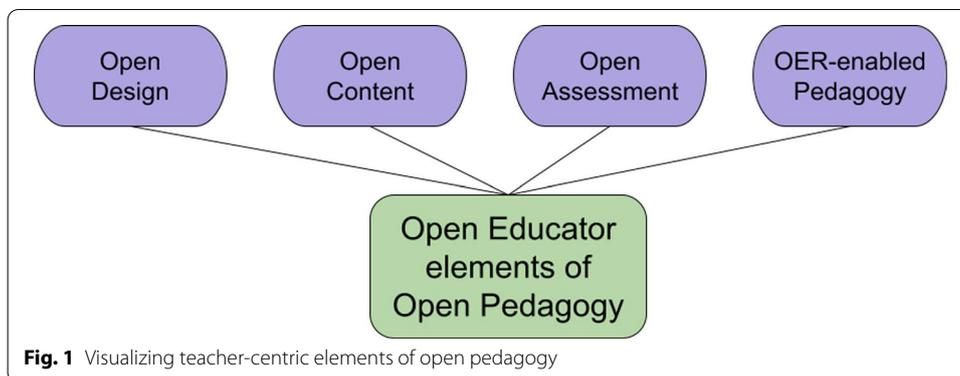
with the exception that openness in teaching has been replaced with OER-enabled Pedagogy. This was done for two reasons. First, as the framework described in this article is intended to clarify the term Open Pedagogy for those new to the field, the authors sought to avoid discussing an Open Educator as one who practices Open Teaching considering that designing a course, selecting its content, and planning assessments are all commonly considered "teaching". Secondly, OER-enabled Pedagogy, as outlined by Wiley and Hilton (2018), has become common in the open vernacular and includes concepts Nascimbeni and Burgos described in the teaching domain of an Open Educator, while remaining conceptually distinct in purpose and practice from design, content, and assessment activities.

Values attributed to open pedagogy

Education is by its very nature a value-laden endeavor. Attempting to be value neutral has been described as oxymoronic and against the ultimate purpose of an educator (Hamberger & Moore, 1997). What tasks an individual values as a teacher has also been shown to impact elements of teaching practice and student involvement (Fischer & Hänze, 2020). Altering an individual's teaching approach, then, would naturally start with an understanding of the values or philosophical underpinnings of a new pedagogy and require these align with that individual's own educational philosophy. Unfortunately, education often defaults to the "banking model" of instruction, a term coined by Freire. In this structure, students serve as passive recipients in learning, acting as a box where information can be deposited later to be recalled via rote memorization (Freire, 2000). With rapidly-developing technologies often at the center of education practices, Stommel (2014) argues that education must embrace critical digital pedagogy. With facets that include community and collaboration, diverse voices, and global access (Stommel, 2014), critical digital pedagogy and Open Pedagogy are in alignment.

   As described earlier, Open Pedagogy is frequently conceptualized in regards to its perceived characteristics or benefits. These structural definitions may ask readers to consider attributes (Hegarty, 2015) and praxis (Paskevicius & Irvine, 2019). DeRosa and Robison (2017) posit that the increased discussion of student-centered educational structures (e.g.: pedagogy, institutional structure and policy) often seem to stop at the lowest-common denominator, where students are acknowledged but not intentionally included. However, the value of Open Pedagogy can be espoused through characteristics

that seek to engage students and provide them agency. Lutris and Simon (2021) argue that the success of OER and open practices hinge on Open Pedagogy and the ability to include diverse voices in educational praxis. This aligns with Cangialosi (2017) who believes Open Pedagogy is not simply a means for content delivery but the space for students and faculty to claim ownership of the learning environment and explicitly have their voices heard.

In this article, the authors seek to enumerate values that others have ascribed to Open Pedagogy that may also serve as a reason why those *outside* the field of open practice may wish to begin integrating this pedagogical structure into their own teaching. Similar to open terminology in general, the reasons why an instructor may choose to adopt Open Pedagogy are diverse. Frequently the same core value is described using different terminology, bringing an added layer of complexity for those new to the concept. Although any value or philosophic grounding of a concept may be described using various terminology, the purpose of being open in educational endeavors from the literature could be reasonably distilled to the following six concepts: sharing, transparency, collaborative knowledge construction, deconstructing traditional power dynamics, personalized learning, and learner empowerment. These values along with their description, related conceptual terms within existing literature, and grounding citations can be found in Table 1. In collating these into a conceptualization the authors refer to as "The Why of Open Pedagogy" in reference back to Sinek's work, the first piece of a larger structure is described through which those who see the value in such an approach may invite others to join them in adoption of open practice. Sharing, the first "why", invites others to distribute work publicly and freely, thus disrupting capital-based knowledge structures that prioritize profit over information access and retention. Lutris and Simon (2021) note that profit has been the goal of publishers. Thus, the work of free knowledge sharing through structures such as the Creative Commons provide an avenue to democratize knowledge distribution.

Transparency and collaborative knowledge construction are the next two "whys" of Open Pedagogy. Transparency provides an avenue for those in the learning process to understand how knowledge has been constructed and how a learner's own positionality affects their biases, beliefs, and viewpoints. Additionally, acknowledging the reason and rationale behind assignment of learning activities creates an environment where the learner is more fully engaged in learning processes (Nascimbeni & Burgos, 2016). Collaborative knowledge construction is at the heart of Open Pedagogy, where learners are able to provide valuable insight into learning materials, and the open practitioner recognizes that knowledge construction is not a closed process, but one to which information is continually added. This aligns with Lutris and Simon (2021), who push back against the idea of a static use of OER. Hegarty (2015) acknowledges the role of collaborative knowledge construction, as well, noting it as essential to the eight core principles of Open Pedagogy. The three 'whys' discussed thus far are interconnected, particularly in their focus on the production and dissemination of knowledge.

The last three 'whys' of Open Pedagogy focus on the power structures and dynamics within learning spaces. Other pedagogical frameworks have sought to address structural elements of the classroom. Constructivist approaches center the learner (Prabha, 2010), as well as other active learning strategies. However, Open Pedagogy shifts here,

Table 1 Values espoused in open pedagogy (the "Why")

Why	Description	Conceptual terms	Representative citations
Sharing	Freely sharing of content and knowledge. Individuals allow others to use what they create to further their own personal and professional development. This may be done through collaborative efforts, publishing open articles, or licensing creative works in a way that permits the 5Rs of Open Educational Resources	Sharing; Global open source curriculum; Social openness; Information collaboration and exchange; Open licensing	Bali et al. (2020), Bliss and Smith (2017), Ehlers and Conole (2010), Hegarty (2015), Hodgkinson-Williams and Gray (2009), Inamorato dos Santos et al. (2016), Koseoglu and Bozkurt (2018), Nascimbeni and Burgos (2016), Ossiannilsson (2018), Paskevicius (2017), Seraphin et al. (2019), Wiley and Hilton (2018)
Transparency	Transparency is evident in the purpose of educational activities, expectations, and practices for assessment. Transparency is also provided into the values inherent in education such as how knowledge has been constructed and how one's own biases, beliefs, and values impact the teaching/learning dynamic	Transparency; Exposed; Clear	Couros (2010), Couros and Hildebrandt (2016), Hegarty (2015), Inamorato dos Santos et al. (2016), Koseoglu and Bozkurt (2018), Nascimbeni and Burgos (2016), Open Design (n.d.), Paskevicius (2017), Stagg and Bossu (2016)
Collaborative knowledge construction	Knowledge is not viewed as complete, unchanging, or being determined by those traditionally in positions of authority (e.g. scholars, professors, teachers). Educators and learners acknowledge the value of and participate in efforts to construct knowledge together	Learner dialogue; Social participatory web; Networked learning; Socialization and interactivity; Contribute knowledge to public realm; Engaging with a community;Participatory culture; Collaboration between developers and peers; Collaborative knowledge building/creation; Collaboration and consultation; Add value to the world; Information collaboration and exchange; Cooperative learning; Learners contribute; Co-create knowledge; Learner dialogue; Social participatory web; Networked learning; socialization and interactivity	Baran and Alzoubi (2020), Chiappe et al., (2016), Couros (2010), Couros and Hildebrandt (2016), DeRosa and Robison (2017), Ehlers (2011), Ehlers and Conole (2010), Hegarty (2015), Huang et al. (2020), Inamorato dos Santos et al. (2016), Nascimbeni and Burgos (2016), Open Design (n.d.), Paskevicius (2017), Seraphin et al. (2019)

Table 1 (continued)

Why	Description	Conceptual terms	Representative citations
Deconstructing traditional power structures	Concerted efforts are made to evaluate and evolve power structures in the educational environment, such as the traditional teacher-student relationship. Voice is given to those in underrepresented groups and those with authority move instruction away from a deficit model of learning	See additional perspectives; Mentorship; Mentorship & facilitating; Learner-driven; Participatory culture; Not knowledge transfer and retrieval; Bridge formal/informal learning; Learners become teachers; Focus on diversity and inclusion; Self-regulated learning; Non-traditional hierarchy; Non-traditional learning; Learner-centric environment; Focused on social justice; Inclusion of multiple perspectives; Deconstruct teacher-student binary; Change inequitable power structures; Change teacher dominance and learner passivity; Greater student autonomy; Equalize access; Freedom in use; Cooperative learning; Centering experience on marginalized groups; Destabilizing normative pedagogies; Co-travelers in education; Instructors as learning mediators; Students as independent agents; Learner choice; Interactive learning; Reduce authoritative learning resource use; Student autonomy; Student responsibility for learning; Increase accessibility; Student-centered	Bali et al. (2020), Baran and Alzoubi (2020), Baran et al. (2021), Bliss and Smith (2017), Chiappe et al. (2016), Cronin and MacLaren (2018), DeRosa and Robison (2017), Ehlers (2011), Ehlers and Conole (2010), Freire (2000), Hegarty (2015), Huang et al. (2020), Koseoglu and Bozkurt (2018), Lambert (2018), Liu (n.d.), Nascimbeni and Burgos (2016), Paskevicius (2017), Seraphin et al. (2019), Tietjen and Asino (2021)
Personalized learning	Authority is given to learners to determine what is learned, how it is learned, how mastery is demonstrated, and when learning takes place. This personalization takes place in traditional classroom settings as well as non-traditional learning environments	Personalize experiences; Include non-traditional learners; Learner-centric environment; Make culturally relevant; Make relevant; Customized assessment strategies; Address special need of teachers and learners; Student-centered Authentic learning; Real-world learning	An Introduction to Open and Distance Learning (2000), Bali et al. (2020), Bliss and Smith (2017), Chiappe et al. (2016), Hegarty (2015), Ossiannilsson (2018), Paskevicius (2017), Tietjen and Asino (2021)
Learner empowerment	Students are empowered in all aspects of their learning. For example, students participate in knowledge creation, how learning occurs, and the assessment of themselves and others	Student autonomy; Self-efficiency, confidence, and independence; Empowering students/learners; Participatory culture; Learners become teachers; Focus on diversity and inclusion; Self-regulated learning; Include non-traditional learners; Learner-centric environment; Focus on social justice; Inclusion of multiple perspectives; Student ownership; Change inequitable power perspectives; Change teacher dominance and learner passivity; Student engagement; Build intrinsic motivation; Build self-direction; Build self-efficacy; Students as independent agents; Freedom to make mistakes; Student self-direction; Interactive learning; Reduce authoritative learning resource use; Student responsibility for learning; Student-centered	An Introduction to Open and Distance Learning (2000), Bali et al. (2020), Baran et al. (2021) Chiappe et al. (2016), Couros (2010), Cronin and MacLaren (2018) DeRosa and Robison (2017), Ehlers (2011), Ehlers and Conole (2010), Hegarty (2015), Huang et al. (2020), Koseoglu and Bozkurt (2018), Lambert (2018), Nascimbeni and Burgos (2016), Paskevicius (2017), Seraphin et al. (2019), Tietjen and Asino (2021), Werth & Williams (2021a, b)

because it recognizes the value of students' contributions to the field of study, and the power inherent in giving students that level of agency. Thus, deconstructing traditional power structures, personalized learning, and learner empowerment work in harmony with each other. Deconstructing traditional power structures includes seeing students as peers in the learning process (Liu, n.d.) and through this shift, disrupting the process of static information being deposited into student's brains (DeRosa & Robison, 2017; Freire, 2000).

Personalized learning is a fundamental change from the banking model of education. Through personalized learning, one allows students to discover their own agency as learners, and assist in shaping the broader classroom experience. Hegarty (2015) indicates that personalized learning includes allowing students space to explore learning in community with other students. Finally, learner empowerment is the practice of allowing students agency in all aspects of their learning. This, too, aligns with earlier 'whys', particularly deconstructing traditional power structures, because it fundamentally shifts the 'traditional' classroom space to one where learner and faculty work in harmony with each other to create a learning experience valuable to each individual. Others have included learner empowerment at the core of Open Pedagogy (An Introduction to Open and Distance Learning, 2000; Couros, 2010; DeRosa & Robison, 2017; Ehlers, 2011; Hegarty, 2015; Lambert, 2018; Paskevicius, 2017). It is included here because it provides an avenue for faculty to engage students in deep, meaningful learning that is valuable to their own goals for their educational pursuits.

Methodology

Development of the "whys"

The authors distilled the values of Open Pedagogy found in the literature to the listed 'whys' following a process similar to the hermeneutic cycle. This provides an avenue for readers of texts to better understand the purpose of materials through iterative readings of a particular body of work. While hermeneutics is a philosophical process used to better understand truth (George, 2021), its methodological function allows for interpretation and analysis (Byrne, 1998). The authors adopted a hermeneutic, methodological approach of cyclical analysis. Reflected more fully in Values Espoused in Open Pedagogy chart (See Table 1) readers can follow the process from general understanding of the meaning of terminology that arose within the paper, through a more cohesive structural function (the definition), to the distilled super-ordinal elements termed by the authors as the "whys". This process allowed the authors of this paper to align the perceived intent by the authors of the works used to develop the super-ordinal elements from the various papers that were read (seen in Table 1, column 4) from general understanding to a more complete perception of truth. It is pertinent to note that truth in this case is dependent upon interpretation by the authors of others' works.

Appraisal of values by subject matter experts

As evidenced above, discussing the values espoused by Open Pedagogy and related concepts is common. These, however, are most frequently described from the perspective of the authors themselves and often in relation to a larger philosophy of teaching. Avoiding overly broad terminology and philosophies of teaching in general

is important as instructors first delve into facets of Open Pedagogy. Starting with the "why" fosters momentum as opposed to over-generalizations which may lack a concrete starting point on the journey toward openness. If an instructor has a desire to be more "open" and wishes to be more personalized in their pedagogical approach, for example, which open educational practice(s) might they consider as logical anchor activities? Where might this person start if their primary goals were personalized learning *and* learner empowerment? The importance of looking at concepts this way is highlighted by DeRosa and Robison (2017) who point out for OER specifically, that while OER can be a jumping off point in relation to re-envisioning courses, only using an openly licensed textbook instead of one copyrighted by a commercial publisher fails to realize the potential of Open Pedagogy.

To be of most value to those new to Open Pedagogy and in alignment with Sinek's view of starting with the why, it was believed that each element of Open Pedagogy outlined in Fig. 1 should be associated with the most relevant value or values from Table 1. Seeking input from a variety of subject matter experts (SMEs) is important in validating conceptualizations and in ensuring that a greater number of voices speak into ideas as they develop. Such an approach was taken by Nascimbeni and Burgos (2016) in describing the characteristics of an Open Educator. Similarly, the authors of this article saw value in asking experts their view of the values associated with various elements of Open Pedagogy.

In an attempt to gain greater insight into the values viewed by those in the field as inherent in educator-related aspects of Open Pedagogy, twelve subject matter experts were contacted through email and asked about their interest in participating as experts in work related to Open Pedagogy. SMEs were identified as those who have published articles in peer-reviewed journals on the subject of open education. Of the twelve individuals contacted, nine SMEs agreed to participate. Four individuals originated in the United States, two Canada, and one each from South America, the UK, and the Middle East.

Each SME was sent a link to an electronic survey. The survey asked the participant to indicate which values (transparency, sharing, personalized learning, learner empowerment, deconstructing traditional power structures, and collaborative knowledge construction) they associated with each of the following elements conceptualized as domains of Open Pedagogy: Open Design, Open Content, Open Assessment, and OER-enabled Pedagogy. If desired, SMEs had access to the grounding definitions found in Table 2, although reviewing these prior to assessing each item was not requested. In addition to the association question, space was provided where SMEs could leave comments about the task as well as their name if they wished to engage in further discussion. Leaving their name was not required so that individuals could remain anonymous if desired and to avoid any potential impression of coercion. Data was collated from responses in the electronic survey software using a spreadsheet application for quantitative evaluation.

Results

The results of the SME evaluation are found in Table 3. Color-coding was added to aid in reviewing the table. Green indicates locations where all nine of the experts indicated a particular value is associated with the open concept, blue eight of nine, and yellow seven of nine. As evidenced in this table, census was lowest for the value of "sharing" in relation to Open Assessment (44.4%) and "personalized learning" for Open Content (55.6%).

Table 2 Existing definitions of open educator elements of open pedagogy

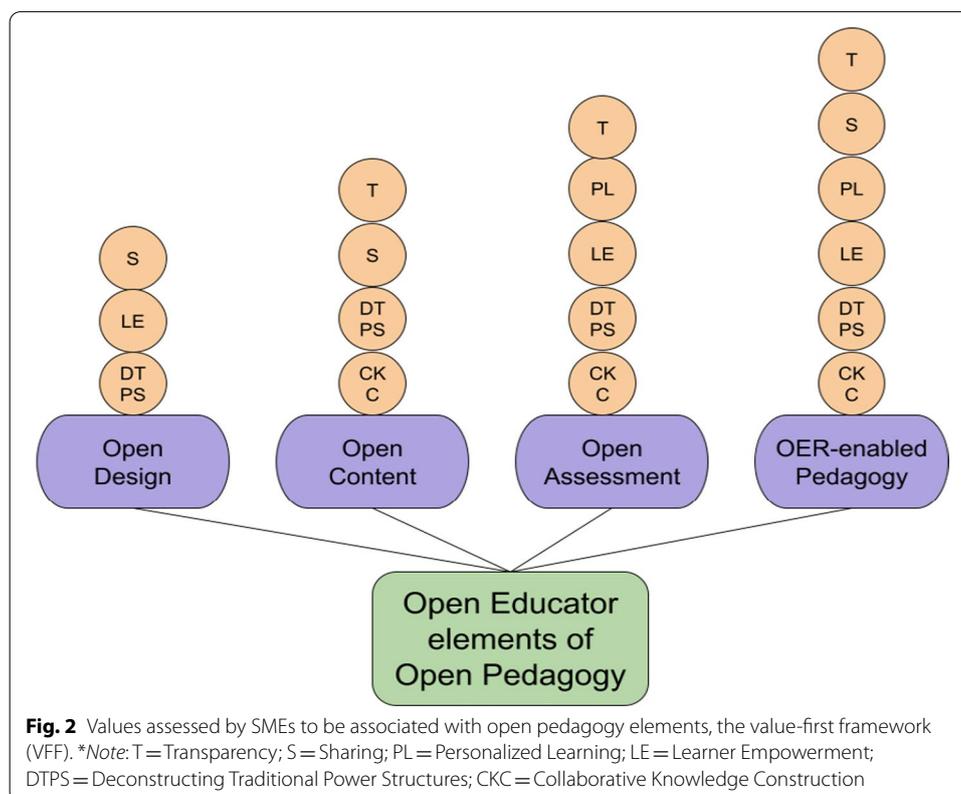| Term	Definition	Citation
Open design	"Open design refers to the creation and development of potentially meaningful learning experiences through open and transparent collaboration among course developers and peers using open educational resources, open educational practices and open technologies."	Open Design and Development (n.d.)
Open content	"It [Open Content] implies open licencing to enable re-use, revise, remix and re-distribute (the 4Rs). Open content is not defined by its intended use and covers raw data, research materials, learning and teaching materials and informational resources."	McGill (2013)
Open assessment	"The process of learning verification and feedback that takes place collaboratively, mediated by free access tools in which teachers produce or adapt assessment resources and students adapt and reshape these resources for the purpose of generating for themselves an assessment that meets their personal needs, learning styles and context." (p. 10)	Chiappe (2012) in Chiappe et al. (2016)
OER-enabled pedagogy	"We define OER-enabled pedagogy as the set of teaching and learning practices that are only possible or practical in the context of the 5R permissions which are characteristic of OER." (p. 135)	Wiley and Hilton (2018)

Table 3 Subject matter expert assessment of values associated with elements of open pedagogy

	Transparency	Sharing	Personalized Learning	Learner Empowerment	Deconstructing Traditional Power Structures	Collaborative Knowledge Construction
Open Design	6	8	6	7	7	6
Open Content	7	9	5	6	7	9
Open Assessment	8	4	8	9	9	7
OER-enabled Pedagogy	7	9	7	8	8	9

All other values were assessed to be associated with Open Design, Open Content, Open Assessment, and OER-enabled Pedagogy by a minimum of six out of nine (66.7%) of the subject matter experts.

Table 3 is particularly interesting in what values all SMEs associated with each of the four domains identified by the authors as part of Open Pedagogy. These include sharing in Open Content and OER-enabled Pedagogy, learner empowerment in Open Assessment, deconstructing traditional power structures in Open Assessment, and collaborative knowledge construction in Open Content and OER-enabled Pedagogy. Also evident are what values were most commonly associated with each of the domains of the role of an Open Educator: sharing and collaborative knowledge construction for Open Content, learner empowerment and deconstructing traditional power structures for Open Assessment, and sharing and collaborative knowledge construction for OER-enabled Pedagogy.

As mentioned previously, within the field of open education it is common for individuals to have somewhat different conceptualizations of terminology. Recognizing this, Fig. 2, the Value-First Framework (VFF),was developed representing the general consensus of the subjective matter expert group (seven or more in agreement) in relation to values they associate with Open Design, Open Content, Open Assessment and OER-enabled Pedagogy. As can be seen, three values reached this threshold for Open Design, four for Open Content, five for Open Assessment, and all six for OER-enabled Pedagogy. As evidenced in the VFF, the concepts with the fewest associated values according to the SME group were Open Design (three items marked by seven or more SMEs) and Open Content (four items marked by seven or more SMEs). Learner empowerment was found in all concepts except for Open Design, while personalized learning was missing from both Open Design and Open Content. This conforms with the views of those like DeRosa and Robison (2017) who indicate that OER, a form of Open Content, is a place

Fig. 2 Values assessed by SMEs to be associated with open pedagogy elements, the value-first framework (VFF). *Note*: T = Transparency; S = Sharing; PL = Personalized Learning; LE = Learner Empowerment; DTPS = Deconstructing Traditional Power Structures; CKC = Collaborative Knowledge Construction

to start becoming more student-centric but alone is not a dramatic change in the democratic nature of a course. Worth noting is that seven or more SMEs did not specifically associate transparency with Open Design or sharing with Open Assessment. OER-enabled Pedagogy included the most values with SME consensus with all six of the values rated seven or higher.

Discussion

Much has been written about the potentially negative impact of divergent concepts touted as "open" for both researchers and practitioners. Particularly worrisome is the belief that this debate may negatively impact adoption of such practices and the structures developed to support those who do. The authors of this article sought to use existing literature to develop a framework which depicts both technicist and sociocultural elements of Open Pedagogy in a manner useful for those new to the field and perhaps teaching theory more generally. This is particularly important as many at the college level have little or no formal training on how to teach students (Ofgang, 2021).

Through review of literature and assessment by experts, Fig. 2 was constructed. This Values-First Framework (VFF) has similarities and differences to those already established in the literature. The VFF has the most in common with the Open Educators Factory (OEF) framework of Nascimbeni and Burgos (2016). While the OEF describes the stages of instructor development from using traditional techniques to open practices and contains Design, Content, Assessment and Teaching domains, the VFF situates an Open Educator within the concept of Open Pedagogy, includes OER-enabled Pedagogy as opposed to Teaching, and visually represents the philosophical values most likely aligned with each domain. The VFF is also reminiscent of Paskevicius' (2017) alignment of Open Educational Practices and constructivism, but places greater emphasis on differentiating teacher practices by underlying philosophic values. The Values-First Framework is unique compared to the Five-Circle Framework (Tietjen & Asino, 2021) which outlines characteristics of Open Pedagogy as opposed to core values and domains of teaching and the Open Pedagogy in action framework (Baran & Alzoubi, 2020) which depicts specific tasks of a teacher but not values. The VFF is also conceptually different than that of OEP described by Koseoglu and Bozkurt (2018) and Huang et al. (2020) in that the VFF attempts to outline Open Pedagogy, Open Design, Open Content, Open Assessment, and OER-enabled Pedagogy both in terms of their relationship to one another and their underlying philosophies.

In distilling the values of the open terms found in the VFF, the authors sought to simplify the core reasons for why an instructor may wish to use these open approaches. Common in the literature are statements about the general benefit of open approaches in fostering collaboration and networked or participatory learning. The VFF sought to move beyond these to the underling purpose of such collaborations. While it is believed that these are an accurate representation of the literature, it should be noted that as the field continues to mature, particularly through empirical studies, these too may evolve. However, the values listed in Table 3 and Fig. 2 are not unique to learning environments claiming to be "open". Luechauer and Shulman (2002) for example, provide a list of empowerment techniques that faculty may consider which includes having students provide insight into or co-write the syllabus, help shape the assignments and measures used

to assess progress in class, and engage in both peer and self-assessment, while suggesting that instructors reduce lecture to around ½ of a class and use group projects instead of final exams. It is not difficult to find kernels of transparency, sharing, personalized learning, learner empowerment, deconstructing traditional power structures, and collaborative knowledge construction in these suggestions. Emergent research, though, is showing positive impacts of pedagogical practices intentionally aligned with open philosophies. This includes student skill achievement and engagement (Hilton et al., 2019; Marsh, 2018; Sheu, 2020; Wiley et al., 2017; Werth & Williams (2021a, b)), the ability for students to see greater value in their efforts (Werth & Williams, 2021a), and the development of forms of motivation with greater academic and psychosocial impact (Werth & Williams, 2021b).

The utility of a diagram such as that depicted in Fig. 2 is two-fold. First, it provides guidance as to what may be an effective entry point for someone interested in becoming more open in their educational approach. An instructor who values transparency and wishes to embody this more fully in their teaching might choose to use techniques associated with Open Content, Open Assessment, or OER-enabled Pedagogy over one specifically related to course design. If the same individual, however, also wishes to empower learners and make the learning process more personalized, Open Assessment or OER-enabled Pedagogy would be a more logical place to start based on their philosophic alignment than techniques more uniquely associated with Open Content.

Second, the diagram provides a method for considering ways to mitigate resistance to change. Tagg (2012) describes faculty resistance to change existing because of the perception that the costs outweigh the benefit, the desire to not lose what one already has and values, and the tendency for someone to cherish what is viewed as their own. Implementing techniques associated with Open Design, Open Content, Open Assessment, or OER-enabled Pedagogy may be seen as a trigger to any or all of these barriers if these are viewed as fundamentally different than an individual's current practices. Starting with the "why" however, aids in seeing the philosophic values that can be fostered in such an effort, increasing the likelihood that the benefits of change outweigh the costs. If an individual selects a technique based on its alignment with a value they wish to foster as an educator, the value is in essence "theirs" already. Associated pedagogical techniques can be seen as a method to align one's practice and philosophy as opposed to potentially losing something they treasure. Example techniques associated with the elements of Open Pedagogy from Fig. 2 can be found in Table 4.

Conclusion

The authors here recognize that seeking consensus on a topic that has such broad conceptualizations as Open Pedagogy can be difficult. In seeking input from SMEs with varied backgrounds, insight was sought into the values they associate with Open Content, Open Design, Open Assessment, and OER-enabled Pedagogy– the elements of the Value-First Framework (VFF) of Open Pedagogy. Figure 2, then, is a visual aid that can be used by instructors to find values they wish to embody and the associated elements that can lead them into Open Pedagogy. Similarly, those working with instructors in a curriculum design capacity could use the figure to help identify logical techniques aligned with the instructor's teaching philosophy which could serve

Table 4 Examples of approaches to open pedagogy

Term	Sample characteristics/techniques	Citation
Open Content	Open Content that could be used by faculty include: Learning modules Courseware items Teacher resources (e.g.: curricula, videos, images, syllabi, lesson plans) Open source learning management systems Materials found in Merlot (https://www.merlot.org/merlot/) MIT Open Courseware (https://ocw.mit.edu/index.htm) Textbooks: OpenStax, Bookboon, Saylor	Bliss and Smith (2017), Green et al. (2018), Hodgkinson-Williams and Gray (2009)
Open Design	Use of: Freely available software and materials Educational technology to increase access Engaging others in development/re-development of learning outcomes, teaching and learning resources, teaching and learning activities, and student assessment/evaluation Iterative approach to course design Practices including the sharing, reuse, and remix of materials Methods to be more communicative with students and peers in the course elements and design process (e.g. communities of practice)	Bozkurt et al. (2019), Couros and Hildebrandt (2016), Paskevicius (2017), Nascimbeni et al. (2018), Open Design and Development (n.d.)
Open Assessment	Focus on use of formative assessments Collaborate and consult with students and peers in achieving learning goals Develop assessment tools in a participatory manor with learners Encourage students to share work products beyond the educator-learner dyad Utilize both peer and self-evaluation Favor authentic assessment tools Clearly communicate expectations and evaluation criteria	Chiappe (2012) in Chiappe et al. (2016), Jacobs (2019), Nascimbeni and Burgos (2016), Paskevicius (2017)
OER-enabled Pedagogy	Students may: Write articles for Wikipedia Create an openly licensed textbook Edit Wikipedia articles Take photos and license them openly Author test questions for wider use Develop tutorial resources Create summaries of key concepts Develop social media postings with content to which others may refer	Couros and Hildebrandt (2016), DeRosa (2016), Jhangiani (2017), Wiley et al. (2017), Wiley and Hilton (2018)

as a foothold to future implementation of open activities while minimizing common reasons for resistance to change. In eliciting an international SME perspective, the VFF authors sought to address the global nature of openness movements. Similar to Tietjen and Asino's (2021) emphasis on the need for diverse voices, it was recognized that diversity of expertise creates a fundamentally stronger basis on which educators can build their own enumeration of Open Pedagogy. Nevertheless, limitations to this conceptualization exist, because different SMEs may hold different value perceptions.

The VFF opens doors to future research into the relationship between instructor activities, philosophic values, and adoption of open activities in the classroom. Future research is being conducted on measuring instructor predisposition to Open Pedagogy based on the concepts depicted in the VFF. Research is also planned for evaluating the effectiveness of the VFF in encouraging the use of open techniques by those new to the concept of Open Pedagogy. Additional research is warranted regarding how alignment of existing and desired educational philosophies impacts praxis in higher education environments. Such research, particularly considering the evolving and maturing field of open education may lead to improvements in the VFF or previously proposed fameworks.

Open Pedagogy is a field with a wealth of frameworks and conceptualizations. From OER-enabled Pedagogy (Wiley & Hilton, 2018) to the Five-circle Framework (Tietjen & Asino, 2021) and Hegarty's (2015) attributes to Open Pedagogy, there are a variety of approaches individuals can use to enter into practices in open education. By enumerating "The Why of Open Pedagogy", the authors seek not to muddle the field further, but be explicit in value associations that may assist faculty in adopting open practices. It is believed, as discussed by Tietjen and Asino (2021) this clarity will create a deeper and more meaningful understanding of Open Pedagogy. Finally, in seeking to shift praxis, the authors invite those in Open Pedagogy to build upon what is found here in order to assist in fundamentally democratizing the learning experiences of students.

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