

Principles for equity-centered learner-educator co-creation: A reflection on practice and pedagogy

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Introduction

Learner-educator co-creation means engaging students as partners in decision-making about course planning, content curation, and/or student assessment (Bovill, 2020a; Bovill, 2020b). Co-creation is founded on the idea that students will obtain a deeper understanding and higher achievement through an interactive partnership with an educator. Calls for active participation of students in designing curricula date back to at least as far as Dewey (Bovill and Bulley, 2011) and have continued throughout history. Vygotskiĭ (1978) advocated for the theoretical foundation for this partnership, which he called the Zone of Proximal Development. Situated within constructivist learning theory, the interaction and social context for learning with others is theorized to facilitate more memorable learning and problem-solving ability than independent coursework (Kantar, Ezzeddine and Rizk, 2020). In this paper, we expand on this theory by viewing co-creation through an equity lens.

There are many potential positive outcomes for students of engaging in co-creation with educators, which include a sense of belonging in a course, positive relationships, reinforcing authentic assessment, improved student performance, and fostering metacognition (Bovill, 2020a; Villarroel et al., 2018; Bovill, 2020b). Unfortunately, co-creation initiatives are often limited to small groups of students who volunteer to engage in it outside of a course context. In contrast, when co-creation is embedded in a course and an entire class of students is engaged in co-creation, it may be more inclusive and reach more learners (Bovill, 2020b).

Co-creation with an entire group of students requires skilled facilitation, particularly as class size and the diversity in student needs increase. Educators need to skillfully minimize potential barriers and mitigate negative outcomes of asking students to co-create with their educator. Maintaining inclusivity during co-creation poses a challenge as educators strive to hear the voices of diverse students during the process (Bovill et al., 2016). In addition, there may be several other barriers to co-creation within the course (i.e. student resistance) or institution (i.e. structures, practices, and norms) (Bovill et al., 2016) that educators need to balance.

Although educators may engage in co-creation with a goal of improving inclusivity, there is a risk of unintentionally marginalizing students as they decide whose voices impact the final decision (Bovill et al., 2016). In both digital and in-person environments, decision-making with a whole class that relies on consensus-like methods may make some students feel excluded when their needs are different than the majority of the class. Therefore, inclusivity and equity must be at the forefront of how co-created decisions are made when power is shared with students. Approaching co-creation through an equity lens means taking action to oppose systematic barriers, discrimination, and biases that may impact shared decision-making. What appears to be missing in many existing definitions of co-creation is explicit clarity around how to approach equity and inclusion during decision making. Since co-creation is situated in the constructivist paradigm, it makes sense that one's context would influence how co-creation is enacted. Yet, a set of common principles can be developed and used to guide co-creation. We propose that equity should be at the forefront of these principles, otherwise co-creation may fail to achieve the intended aims of learner liberation. The purpose of this paper is to promote discourse around proposed principles for equity-centered learner-educator co-creation.

Proposed Principles of Equity-Centered Learner-Educator Co-Creation

Proposed principles to guide equity-centered learner-educator co-creation were developed based on our co-creation experiences, educational practices, and reflection on existing literature. They were drafted by LK who is a nurse educator with learner-educator co-creation experience as both an educator and student. They were then refined with ML (an undergraduate student with co-creation experience during a course with LK), LK's thesis supervisor, and a committee member with an educational theory background.

These principles are intended to guide educator actions, are non-linear, and interconnected as shown in Figure 1. Prioritizing equity during decision making is at the center of these principles. To create equity-centered co-creation, educators need to engage in ongoing reflection on values, negotiation of power sharing, engagement in active and honest dialogue, and integration of choice and flexibility. Equity-centered co-creation happens in the context of a supportive relationship and psychologically safer environment. Potential outcomes of equity-centered co-creation include, but are not limited to, increased belonging, inclusivity, equity, metacognition, critical thinking, collaboration skills, student achievement, and more. Learners should be invited to influence how these principles are enacted to the extent possible in each context. Potential strategies to enact each principle that are discussed in this paper are summarized in Table 1.

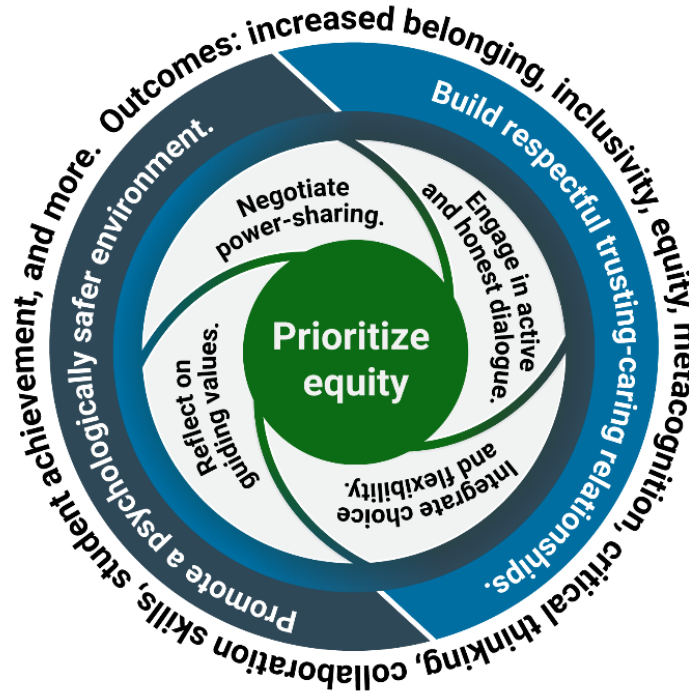


Figure 1: The Interconnected Nature of the Principles of Equity-Centered Co-Creation

Table 1. Proposed principles and strategies for equity-centered learner-educator co-creation

Principle	Strategies
Prioritize equity.	<ul style="list-style-type: none"> Identify and take action to reduce sources of oppression in the course. Involve students in problem-solving how to reduce inequities. Promote life-work balance for learners and educators. Role model anti-oppressive actions.
Reflect on guiding values.	<ul style="list-style-type: none"> Engage with others in a person-centered way. Respect diverse expertise. Reflect on one’s values, teaching philosophy, and motivation.
Negotiate power-sharing.	<ul style="list-style-type: none"> Plan for an appropriate level of student participation in decision making. Set enabling constraints. Connect co-creation to learning outcomes. Unplan and replan based on discussions with students.
Engage in active and honest dialogue.	<ul style="list-style-type: none"> Recognize the importance of interaction for enacting all principles. Facilitate dialogue about co-creation. Engage students in decision-making using multiple strategies. Leverage theories during dialogue to support discussions.

Principle	Strategies
Integrate choice and flexibility.	<ul style="list-style-type: none">• Recognize that choice and flexibility are part of the process and outcome.• Clarify that co-creation is a choice.• Adopt an inclusion mindset.• Integrate Universal Design for Learning.• Avoid consensus-like decision-making.
Build respectful trusting-caring relationships.	<ul style="list-style-type: none">• Embrace relational pedagogy.• Humanize the self.• Be welcoming, approachable, and non-judgmental to encourage honesty.
Promote a psychologically safer environment.	<ul style="list-style-type: none">• Grow relationships with students.• Recognize that interpersonal risk-taking is needed.• Address conflict.• Encourage speaking-up and sharing of ideas.• Explore how to improve based on feedback.

Note: While the principles summarized in this paper are primarily intended to guide educator actions, we recommend sharing them with students and inviting their participation in how they are enacted as much as possible.

Prioritize Equity

There is an urgent need for society, including educational institutions, to be more equitable by taking action against oppression in all forms. Equity in education means supporting diverse students in achieving course outcomes through customized supports allocated through a social justice lens; It means taking actions to oppose barriers, bias, and discrimination (Jurado De Los Santos et al., 2020). Equity is not the same as fairness, which means treating everyone equally. In contrast, equity means treating students as individuals with unique life circumstances and barriers to their learning, which may be compounded by their identification with one or more groups that are discriminated against in society. Discrimination based on students' race, abilities, sexual orientation, gender identity, religion, and other characteristics has been linked with underrepresentation in fields of study, lower educational attainment, and poorer health (Loeb and Hurd, 2017; Veenstra, 2011). For example, underrepresented minority medical students who face hostile learning conditions (i.e. harassment and discrimination) and receive less support, have been found to have lower academic performance and higher attrition (Orom, Semalulu and Underwood, 2013). In education, unintentional discrimination may also be evident in lowered expectations, isolation, and offering students fewer learning opportunities (Rowe and Francis, 2020). Through an equity lens, educators take action to oppose discrimination by planning courses in a way that reduces barriers to learning and providing individualized support to students to reach course goals. During co-creation, discussion of

equity for students with different needs (i.e. childcare responsibilities, neurodivergence, and other considerations raised by students) is another strategy to reduce oppression in a course. Discrimination that these students may face from their peers should also be discussed and addressed. Students who are feeling oppressed should be encouraged to speak up to enable educators to respond to sources of discrimination.

Placing life-work balance at the forefront of decisions is critical for co-created decisions to remain equitable. Acknowledgement that students and educators have multiple responsibilities may be needed during decision-making discussions. One drawback to discursive approaches to education aimed at facilitating metacognition and knowledge transfer is the time it takes to engage in the process. Furthermore, when students and educators are passionate about subject matter, there is a risk they may opt for the best way to achieve outcomes rather than the most feasible approach for their overall workload. For example, the lead author has had students suggest adding large projects to an already heavy course. While the genuine interest to produce a large project indicates student engagement with the topic, intentionally integrating a discussion about workload may be needed to prevent burnout.

Role modeling equitable power sharing is an essential aspect of co-creation that may support self-efficacy development. Bandura theorized that students observe actions, assess their appropriateness, and subsequently adopt them (Bates, 2019). Through developing agreed-upon values and role-modeling anti-oppressive actions in the classroom, students may develop their ability to oppose oppression in society. For example, dialogue about how decisions may create inequities for others may help students recognize the wide range of consequences of decisions, particularly for persons who are historically marginalized. This dialogue may also promote growth of student critical consciousness, a concept proposed by Paulo Freire (1973), wherein students are able to think critically and challenge oppression in society. Developing critical consciousness means raising awareness of inequities, reflection, and action (Jemal, 2017).

Reflect on Guiding Values

Being person-centered and respecting diverse expertise guides how equity-centered co-creation is enacted. A focus on person-centeredness means the goal is for everyone to benefit from the process of co-creation, which requires attention to the beliefs, feelings, diversity, and needs of individuals. Person-centered pedagogy aims to be: 1) transformative, 2) co-constructed, 3) relational, and 4) pragmatic (Dickson et al., 2020). McCormack et al. (2021) describe that being person centered is a way of thinking, acting, and being – not a specific action. It means engaging with others with empathy, genuineness, and respect (Johnson, 2021). To teach in a person-centered way, educators need to use multiple strategies to build

relationships with students, encourage reflexivity, use active learning strategies, and learn with students (Dickson et al., 2020). To engage students in a person-centered way, we need to humanize learning through demonstrating vulnerability, building relationships that are supportive, and creating brave spaces (Mackay, 2020). In our experience, being honest about our own failures, limitations, and lessons learned fosters these human connections. The concept of a healthful relationship, developed by Mackay (2020), is based on person-centered theory and founded on mutual trust, mutual respect, developing shared expectations, knowledge sharing, and openness to learning, unlearning, and relearning. These relationships have transformed learning through an emotional connection and an openness to learn (Mackay, 2020).

Adult learners need to be valued as contributors to co-creation. They desire control over their learning, benefit from problem-solving, are motivated by aligning learning with their goals, and have valuable life experiences (Knowles, Holton and Swanson, 2014). Students are well positioned to assess their own barriers to learning, knowledge of which is essential for designing equitable education. Students also bring varied perspectives of current practice contexts. Valuing mutual contributions (such as participation and sharing insights) has been labeled an ethic of reciprocity, which has been identified as a feature of co-creation (Cook-Sather, 2020). Educators can demonstrate that they value student expertise by listening actively, incorporating their ideas into decisions, supporting them, and acknowledging their efforts.

The values suggested here are not an exhaustive list but serve as a starting point for further discourse about essential values for co-creation. Prior to, and during, co-creation we recommend educators reflect on their values, teaching philosophy, and motivation for engaging in co-creation. Clarifying one's teaching philosophy helps educators identify assumptions and subsequently improve teaching practice; It also promotes collegial discourse and scholarship to advance teaching and learning goals (Laundon, Cathcart and Greer, 2020).

Negotiate Power Sharing

Throughout co-creation, educators need to plan, unplan, and re-plan how to share power with students. As Bovill and Bulley (2011) explain, co-creation may occur with varying levels of student participation and control over decision-making. Prior to engaging in co-creation, educators should identify how much power they can feasibly share with students, how co-creation will support course outcomes, what may be co-created, and how flexibility may be integrated into decision-making. Bovill and Bulley's ladder of participation differentiates eight increasingly active ways students may participate in decision-making. The levels of this model

progress from where educators remain in control of decision-making, to where decision-making is informed by student feedback, to where students have some influence, and finally to where students substantially, or fully, control decisions. They indicate that the level of power shared with students may depend on several contextual factors including class size, educator experience, time, institutional support, pressure to deliver content, and learner readiness. Co-creation without limitations may be undesirable and overwhelming for learners. It may therefore be beneficial to increase students' level of participation incrementally over time (Bovill and Bulley, 2011). Co-creation exists on a complex continuum from making all, to selected, course decisions together, from making large decisions to small decisions, from impacting those that engage in co-creation, to everyone enrolled in a course, from being highly structured to an open, flexible, and not pre-determined process (see Figure 2).

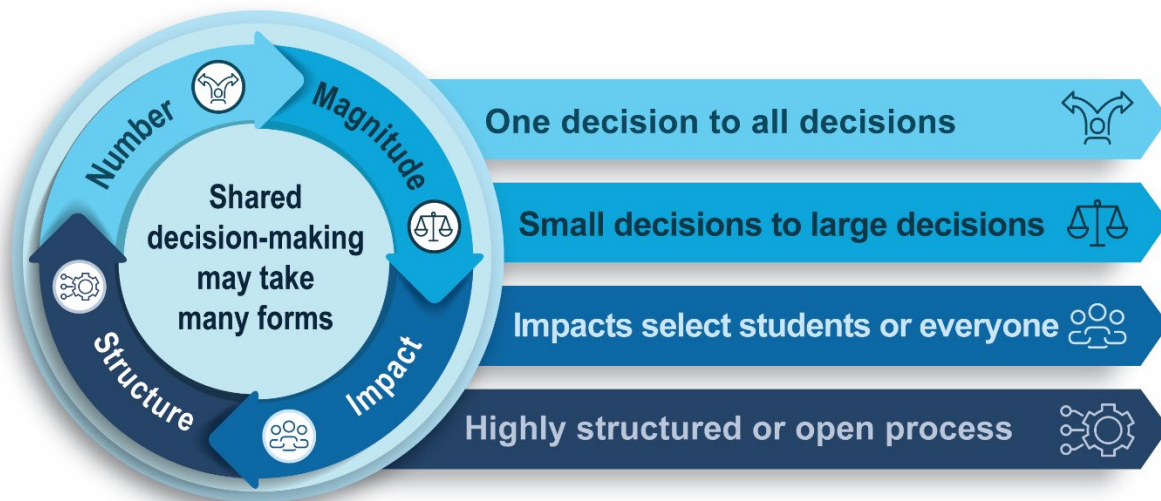


Figure 2: Existing Variations in Learner-Educator Co-creation Practice

Determining how much power to share with students is a contextual decision. We agree with Bovill and Bulley (2011) that higher levels of student control over decisions are not always desirable, and manipulation is unethical. Removing all decision-making power from educators runs contrary to evidence about effective teaching, may result in confusion, and is problematic for programs with accreditation standards. On the other hand, pretending to share power with students, while not integrating their input, may frustrate students and serves to disempower them (Bovill and Bulley, 2011). Co-creation means actively involving students in decision-making. For equity-centered co-creation, we contend that students need to have influence and choice during the decision-making process that feels meaningful to them.

Educators are charged with designing co-creation in a way that achieves an optimal balance between liberation and restrictions, which may be a difficult task. In educational literature, the concept of enabling constraints refers to non-prescriptive direction for students about possibilities, in part by setting limitations on endless options, with the goal of improving learning (Davis, Luce-Kapler and Sumara, 2015). Scaffolding and/or limiting co-creation may improve student focus and productivity. Enabling constraints supports equity when they remove barriers for students that may be disproportionately impacted during discussions. For example, planning for multiple ways students can impact decisions over time may remove barriers for participation in decision-making for students with anxiety or learning disabilities. Using a combination of anonymous and identified feedback mechanisms further supports student anonymity, which may promote comfort during discussions as relationships are still forming. Integrating these multiple sources of feedback requires time for educator reflection and attention to equity.

Aligning co-creation activities with course outcomes is useful to guide decision-making. In some situations, co-creating assessment criteria may also improve the authenticity of assessments. As Villarroel et al. (2018) identified, an authentic assessment mirrors real-world contexts in terms of its context, complexity and promotion of evaluative judgment. They recommend co-creation as a strategy for engaging students with assessment criteria because dialogue about assessment standards helps students develop evaluative judgement (i.e. the ability to assess their own performance and engage in self-regulated learning). Co-assessment has improved students' perceived reflection, evaluative judgement, and self-assessment skills (Quesada et al., 2019; Henderson et al., 2022). Since these skills are important learning outcomes across educational sectors, co-creation has the potential to be used in a wide range of course settings.

Shared power is important for improving equity during co-creation because it helps to create a more democratic and inclusive classroom (Bovill, 2020b; Cook-Sather, 2020). If all students in a course feel they can impact decisions that affect them, it fosters a sense of ownership and investment in their learning. At the same time, the amount of power appropriate to share with students varies based on learner needs. In our experience, presenting co-creation as a choice, inviting learner feedback in multiple ways, then adding flexibility to assignments has worked well. After educators meet students and discuss co-creation, unplanning and replanning is therefore needed.

Engage in Active and Honest Dialogue

Interaction is essential during co-creation, as it impacts how every proposed principle is enacted. Several constructivist educational theorists throughout history have emphasized the

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importance of interaction to facilitate learning. Interaction is essential during co-creation as it provides the opportunity to share experiences, ideas, and build relationships (Dollinger and Lodge, 2020). During co-creation, skillfully facilitated dialogue helps students focus on the goal of learning and lifelong self-assessment skills while fostering caring and inclusive environments. Dialogue that is collaborative helps to create a shared sense of the potential impacts of decisions and how those decisions may impact people with different needs (Dollinger and Lodge, 2020; Cook-Sather, 2020). Students have shared with LK that this dialogue also improves student-student relationships and psychological safety. Dialogue is essential because students may not be accustomed to having power in traditional educational settings (Bovill and Bulley, 2011) and they have shared with us that they begin this process with disbelief that they have power to shape course expectations. The key to enacting this principle is to set up ways to communicate that feel welcoming and non-hierarchical.

Dialogue about co-creation plans should include any limitations on student power to shape course expectations, rationale for how decisions may be made, and guiding values. Without engaging in some form of dialogue (verbal or written), it is difficult to gain an understanding of students' needs. Dialogue can help students develop their voice in a way that helps educators address inequities (Cook-Sather, 2020). Bringing equity to the forefront of this discussion further supports student metacognition and the ability to recognize sources of inequity in other aspects of their life.

Building an open and honest dialogue in an historically hierarchical environment takes time and patience. To accomplish this goal, educators may use multiple ways to actively engage students in shaping their education. When working from an equity-centered lens, it is important to recognize that some students may not feel comfortable or able to participate in a real-time exchange of ideas (Rogers-Shaw, Carr-Chellman and Choi, 2018). Asynchronous and anonymous forms of communication may augment dialogue. For example, an open-ended survey where participants have time to reflect may be conducted between discussion sessions to inform dialogue. However, seeking student input through surveys lacks the depth that can occur during real-time conversations. Anecdotally, a Google document where students can anonymously contribute ideas during real-time exchanges is an effective strategy for engaging students. Educators are encouraged to be mindful to integrate input from all sources during decision-making and communicate how input was used in order to show learners how they impact decisions. Otherwise, one-way communication risks students perceiving their role as more passive than active.

During equity-centered learner-educator co-creation, educators need to ensure that expectations are designed in such a way that everyone in the class has an equitable opportunity to meet them. Dialogue enables a more accurate assessment of learner needs and promotes

collective problem-solving to support equity because more creative solutions to overcome unnecessary barriers may be identified. Beginning the discussion with collaborative goal setting may also help students become invested in the co-creation process. Dialogue further fosters intrinsic motivation among students through emphasizing human relationships, autonomy, and their competence (Cook and Artino, 2016). Co-creation is centered around improving student autonomy. When educators strive to emphasize learning, inclusion, and customization of assessment during dialogue, it supports relationship development, confidence, and therefore student motivation. This customization may also improve the authenticity of assessment by tailoring expectations to learner needs (Villarroel et al., 2018). Dialogue during co-creation may also clarify assignment expectations.

Integrate Choice and Flexibility

Co-creation centered around equity begins with a recognition that both the process and outcome of decision-making need to include choice and flexibility. This principle includes embedding choice over *if* students co-create, *how* they co-create, and *what* they co-create. Despite potential benefits, learners may not wish to participate in co-creation (Bovill, 2020b). Students' comfort with co-creation may improve over time as relationships develop or as they gain practice with collaborative decision-making. However, to support student agency, educators should clearly inform students that the act of co-creation is itself a choice.

Enacting equity through an inclusion mindset means recognizing that learners are diverse, which means no single decision will work for everyone in a class, particularly when classes are large. An inclusion mindset has been reported by Schley and Marchetti (2022) as a strategy for partnering with students when collaborating on customized strategies to increase course interactions. This inclusion mindset means everyone works towards building a positive relationship because learning takes place in different forms. Relying on students to request accommodations does not constitute a mindset of inclusion, since the onus is mainly on the student to seek help and their needs may not be met (Schley and Marchetti, 2022). Instead, equity is supported by planning to welcome diversity through integrating choice and flexibility into course expectations.

Universal Design for Learning is a framework used in many settings that essentially justifies integrating choice into all aspects of teaching, learning, and assessment when it aligns with learning outcomes. Specifically, students may choose to submit written or video reflections that can be graded with the same marking guide (Killam, Luctkar-Flude and Tyerman, 2023). The goal of using Universal Design for Learning is to make learning accessible and inclusive for everyone (Rogers-Shaw, Carr-Chellman and Choi, 2018), which also reduces the need for

individual accommodations. Educators can integrate choices into their courses in advance of meeting students, but we believe, based on our discussions with learners, that dialogue with students about what the choices are during co-creation enhances feelings of inclusion, equity, and belonging in a class.

Decision-making processes must also be inclusive. Consensus-like decision-making strategies refer to seeking input and agreement from all students. In some situations, consensus-like strategies may seem to improve collaboration, efficiency, and inclusivity. However, there is a danger that dominant voices may overpower the voices of historically disadvantaged students. If some voices are given more weight (i.e., the voices of students who speak-up), some students may feel excluded or marginalized due to difficulty speaking-up. Decision-making based on a vote has the same potential to marginalize students. A more equitable way to make decisions may be to rely on the educator to review all inputs, critically reflect on them, then integrate ideas into a decision where choice and flexibility are part of the final decision.

Build a Respectful Trusting-Caring Relationship

Bovill (2020a) identifies that relational pedagogy is foundational for co-creation. Simply put, relational pedagogy asserts that a meaningful relationship is needed between students and educators for effective learning to occur. When students have a positive relationship with educators, they are more comfortable participating in course activities like co-creation. Positive relationships create a foundation of trust and respect, which are essential for meaningful collaboration, feeling valued, and being comfortable with sharing honest feedback. Without a supportive relationship, students may not feel safe engaging in dialogue about inequities in the classroom. Relationships have also been shown to improve student wellbeing, motivation to engage in course activities, academic success, personal development, and willingness to collaboratively work through challenges (Bovill, 2020b).

Developing relationships may be a long-term process that begins with humanizing oneself. Sharing personal stories, using humor, demonstrating vulnerability, admitting mistakes, being genuine, empathy, and using inclusive language are strategies that can work together to humanize the educator. Additional strategies to build relationships include calling students by their names, using correct pronunciation, sharing one's personal pronouns, using students' preferred pronouns, displaying genuine interest in their circumstances, remaining non-judgmental, and communicating openly. Sharing one's values and teaching philosophy at the beginning of a course can help students understand the educator's motivation to engage in co-creation, fosters respect, and promotes connection with students.

It is critical to be welcoming and approachable as an educator. If students do not perceive educators as approachable, they are unlikely to be honest about their needs. Students may enter the course with mistrust due to prior experiences of incivility or discrimination in an educational setting. When students have been disrespected, dismissed, or belittled in previous courses, educators may need to work to demonstrate they can be trusted (Lasiter, Marchiondo and Marchiondo, 2012). Educators need to demonstrate that they are non-judgmental, approachable, and trustworthy, before an honest exchange can occur. Honesty is essential for equity-centered co-creation because it allows for a more collaborative approach to problem-solving and overcoming challenges. Honesty may also improve cohesiveness, trust, creativity, and team effectiveness. Therefore, educators need to work to create an environment where honesty is possible by taking intentional steps towards being approachable and promoting psychological safety.

Promote a Psychologically Safer Environment

Psychological safety is an important part of both the learner-educator relationship and the classroom environment. Psychological safety is important for students and faculty to speak-up about sources of inequity in a course during co-creation. The promotion of psychological safety in the classroom involves removing fear from human interactions and making it safer for group members to take interpersonal risks and engage in classroom activities (Tu, 2021; Clark, 2020). Co-creation is an activity that involves interpersonal risk-taking because it means being vulnerable and willing to share insights with others. Evidence supports that feeling psychologically safe motivates learners to share knowledge with their colleagues, ask questions and request feedback without fear of negative consequences, enhancing learning for all (Tu, 2021; Soares and Lopes, 2020). Strategies to improve psychological safety during co-creation that have been previously discussed include providing multiple mechanisms for sharing ideas, setting decision-making guidelines, and developing trusting-caring relationships with students.

More specifically, educators need to address conflict, encourage speaking-up, welcome idea sharing, and react to inputs with curiosity and an intention to improve based on feedback. During co-creation, conflict is expected and must be addressed in a psychologically safe way. Communicating concerns to one another is essential during conflict management so all parties feel respected, and their voices are heard (Schwarz, 2002). Role modeling effective conflict resolution and problem solving by staying calm, actively listening and focusing on solving problems is a strategy that can help to create a safer and respectful context for co-creation.

Encouraging students to voice concerns and share ideas is critical for creating inclusive and equitable learning environments. Speaking up gives students a chance to influence their

education. If students do not speak up about sources of inequity in education, problems are likely to go unresolved. To promote psychological safety, educators need to react to feedback by being open and responsive to student needs. During co-creation, a mindset of respecting diverse voices of both students and educators has potential to reduce exclusion when educators are responsive to diverse needs (Cook-Sather, 2020). Active listening, gratitude for feedback, acknowledging when students are being vulnerable, validating their feelings, remaining neutral by focusing on the goal of improving the situation, collective problem-solving, and following-up to let students know what has been done to address the issue, are important actions that we have used to show students how committed we as educators are to equity. It is important to stay focused on the goal of improving to prevent becoming defensive or angry based on student feedback. Educators and learners may benefit from workshops on how to provide and receive constructive feedback in a compassionate way. Further, role modeling inclusive decision-making during a course and explaining the rationale behind not using consensus-like decision making may also help students develop skills that will assist them in being inclusive in future interactions.

Conclusion

In summary, equity-centered co-creation is intended to promote feelings of inclusion in education, which in turn improves relationships and creates a sense of belonging for persons who are learning together. Co-creation, when done through an equity lens is aimed at creating a safer space for learning, where individuals can access customized support for their learning. We believe that the potential benefits of co-creation may be better realized when educators enact the principles proposed in this paper. How co-creation is enacted is of utmost importance for the skilled facilitation of shared decision-making with a whole class of learners.

Bovill (2020b) argues for a whole-class approach to co-creation, to promote inclusivity and positive relationships with, and between, students. Unfortunately, literature examining whole class approaches to co-creation is scarce. Reported strategies and benefits of co-creation may not transfer to all educational contexts. It is important to explore student experiences with equity-centered learner-educator co-creation across educational contexts to determine the potential pedagogical value and feasibility of this approach. We acknowledge that this paper serves as a starting point for further discourse and research, which will be used to further refine our proposed principles for equity-centered learner-educator co-creation. In ongoing work about co-creation, we hope to engage in discourse to refine this list, possibly adding, rewording, or removing principles. Further empirical investigation of the different ways that students and educators experience a course that involves co-creation is needed to refine the principles proposed in this paper.

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