



## **Equity by Design:**

**Using Peer-Mediated Learning to  
Advance Equity for All Students**

**Paulo Tan**

**Erin M. Macey**

**Kathleen A. K. Thorius**

**Marsha Simon**

# Using Peer-Mediated Learning to Advance Equity for All Students

Historically, students with disabilities have been educated in self-contained or separate environments with limited access to general education curriculum and few opportunities to engage with nondisabled peers (Ferri & Connor, 2005). Separate program participation can inhibit emotional and social development, leading students to appear more “disabled” in school contexts (Christensen, 1996); that is, while students with disabilities are typically not segregated in many aspects of their daily family and community lives (e.g., going to the mall or a restaurant), they are commonly segregated in schools. Those identified as having a disability and subsequently isolated in self-contained classrooms have been disproportionately students of color

(Skiba, Poloni-Staudinger, Gallini, Simmons, & Feggins-Azziz, 2006), and the consequences of such placements often include stigmatized difference, entrenched racial segregation, lower achievement, and limited opportunities to learn (Frattura & Topinka, 2006; Valle & Connor, 2011).



## Key Terms

**Significant disabilities** (also referred to as low-incidence disabilities) - those disabilities occurring less frequently in the general population, such as intellectual disabilities and blindness. While people with significant disabilities are likely to experience challenges associated with the biological, cognitive, and/or physical characteristics of their disability, it is the social and political construction of those characteristics as problematic that limits access, participation, and outcomes for individuals with significant disabilities. Instead, these characteristics are representative of the diversity of human experiences for which all educational environments should be designed.

**Non-disabled** -The word non-disabled is used in this brief to represent the privilege of not being identified with a disability (Johnson, 2006). For example, whereas individuals identified as having an intellectual disability are often treated as inferior and helpless, individuals not identified as having a disability are privileged not to be subjected to such treatment.

**Peer-mediated learning** - A pedagogical approach that shifts the responsibilities of teaching and learning from the teacher to the students and where students work collaboratively.

**Collaboration** - A practice involving two or more individuals interdependently working together and building on each other's strength toward a shared goal.

In response to these consequences, advocates from multiple perspectives have called for better access and outcomes for these historically underserved groups of students. For students with significant disabilities (e.g., autism, intellectual disabilities) who were denied public education prior to the 1960's, efforts to expand educational access have resulted in a continuum of services ranging from receipt of free public education services in separate schools or separate programs to inclusion in general education classrooms (Gartner & Lipsky, 1987). Recent reports confirm the trend toward an increasing number of students with disabilities being educated in general education classrooms (U.S. Department of Education, 2011). However, access to core academic content (e.g., mathe-

matics) for these students still remains elusive (Wehmeyer, 2006). Moreover, mere placement in a general education classroom is inadequate; rather, high expectations and strong supports are necessary to academically and socially empower students with significant disabilities to become full participating members of the school community (Kluth & Straut, 2003; National Council of Teachers of Mathematics (NCTM), 2000). *Peer-mediated learning* (PML) has emerged as one pedagogical approach to advance this vision.

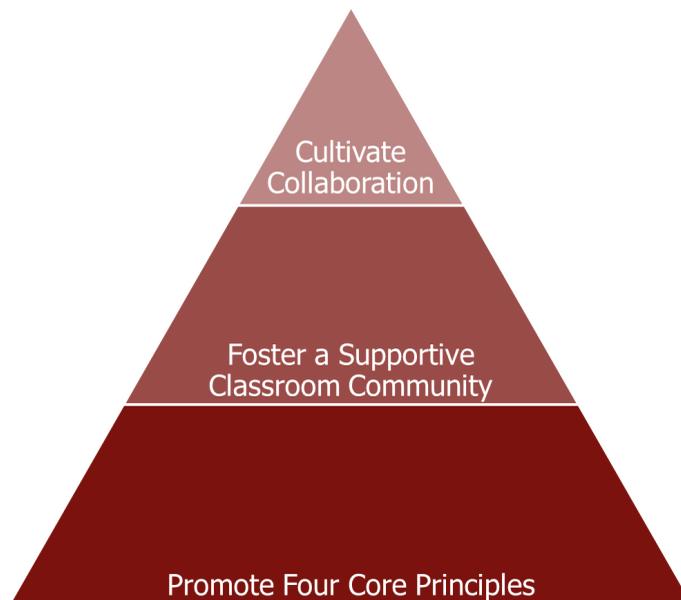
In the field of special education, PML usually involves training *non-disabled* students to apply specific strategies to socially engage with students with disabilities (Utley & Mortweet, 1997). Research on PML suggests that peers can successfully support the learning of students with disabilities (Strain, 2001; Utley & Mortweet, 1997). PML also substantially shifts the nature and frequency of the interactions students with significant disabilities have with their non-disabled peers, consequently promoting active social learning opportunities with a full range of peers (Giangreco, Halvorsen, Doyle, & Broer, 2004). PML not only promotes greater engagement of students with disabilities in general education classrooms, but it also benefits non-disabled students, who are given the opportunity to work with and learn from all of their peers (Cole, Waldron, Majd, & Hasazi, 2004).

In addition to fostering a more social approach to learning between students with disabilities and their non-disabled peers, PML can shift power over and responsibility for learning from teachers to students. Such an advancement benefits students because they are able to structure their own learning experiences (Cohen & Intili, 1981; Dangwal & Kapur, 2009). Clearly, PML has the potential to further equity in the classroom. A key question, then, is what principles and practices need to be in place to ensure that such an approach facilitates self-discovery and personal

growth (Havnes, 2008)?

## Advancing Peer-Mediated Learning to Promote Equity

PML experiences can be exercises of compliance or life-serving educational encounters depending on the principles and practices within the learning environment in which they are situated. Whereas a PML experience could include a non-disabled student helping a student with a significant disability complete a teacher-assigned task out of a sense of obligation, an advanced PML experience goes beyond this to create interactions in which students learn from one another by engaging in meaningful work together. We assert that this type of PML requires that educators promote four core principles, foster a supportive classroom community, and cultivate collaboration. In the pages that follow, these core principles are described and strategies to support each focus area - foster a supportive classroom community and cultivate collaboration - are offered.



**Figure 1. Creating the Conditions for Advanced PML: Core Principles and Focus Areas**

# Promote the Four Core Principles of PML

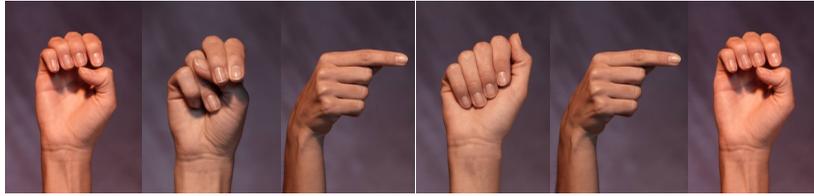
To be truly transformative, PML must rest on four key assumptions about learners and learning. These four core principles underlie the two focus areas. The first area encompasses practices related to fostering a *supportive* classroom community and the second emphasizes the importance of cultivating a *collaborative* learning environment. These build on one another; once supportive practices are in place to encourage students to appreciate one another's commonalities and differences, the collaborative practices help students leverage these differences toward productive ends.

## Principle 1: We Learn through Active Engagement

The first core principle of an advanced PML approach involves ongoing interactions between students, which follows the concept that learning goes beyond passively absorbing information provided by an expert (Freire, 1970). Instead, students should be afforded space to engage with one another through actions such as reasoning, explaining, elaborating, justifying, and challenging (King, 2002). This concept of engagement moves beyond basic participation in that individuals are cognitively, physically, and emotionally invested in the activity (Kahn, 1990). As a result, students forge meaningful connections to their learning and the learning of others. For example, when peers communicate while solving a mathematics problem with multiple possible solutions, they influence one another's learning as they process, analyze, and synthesize various solutions and points of view and compare them to their own (NCTM, 2000). Engaging in this type of active participation supports equity in that students learn from diverse perspectives, come to appreciate and value each other's strengths, and reformulate or hone their own views.

## Principle 2: All Individuals are Capable of Active Engagement

Closely related to the first principle, the second principle holds all students to high expectations through a perception of all students as competent learners. This means that teachers recognize that all students have the capacity, intellectual ability, and desire to learn, reason, imagine, contribute, be heard, be challenged, be accepted, and be appreciated (Kluth & Straut, 2003). This recognition is particularly important for students with significant disabilities who historically have been restricted from participating in meaningful academic learning due to deeply-entrenched, deficit-based perceptions (Kliewer, Biklen, & Kasa-Hendrickson, 2006). This concept also extends to how students perceive one another; learning experiences are optimized when students do not perceive or portray themselves socially and academically as more or less competent than their peers (Cobb, 1995).



### **Principle 3: All Individuals are Cultural Beings**

This principle entails building on an expanded notion of competence by capitalizing on the wealth of knowledge and experiences that all students bring to school (González, Moll, & Amanti, 2005). Such notions depart from traditional practices that typically minimize students' unique strengths by ranking and comparing each student relative to one other based on narrow perceptions of ability (e.g., scores on a reading test). Instead, advanced PML uses students' strengths, experiences, and interests as a basis for further connections, learning, and development. In other words, all students, including individuals with significant disabilities, bring prior knowledge and experiences that are important for advancing their own learning and the learning of others. As a result, the proposed PML shifts the learning relationship from a model of teacher-learner to learner-learner.

### **Principle 4: Collaboration is a Priority**

The fourth principle involves emphasizing genuine collaboration while de-emphasizing competition (Sapon-Shevin, 2010). The notion that we are stronger when we work together and, as a result, everyone wins runs counter to the principles that are commonly supported in today's classrooms: individual accomplishments are valued over those achieved in groups and there are a limited number of winners (Varenne & McDermott, 1998). The three preceding core principles facilitate collaboration because students will view their competencies as different or unique rather than as having a lower or higher quality relative to their peers. A truly inclusive community can be fostered by promoting a climate of open dialogue and collaborative culture, seeing all students as competent learners with valued strengths, and structuring opportunities for everyone to become fully, centrally, and meaningfully engaged in academic and social learning (Ahn & Class, 2011).

# Foster a Supportive Classroom Community

The core principles are first enacted through practices that build a supportive community. In supportive classroom communities, diversity is embraced, learning is accessible to all, and self-determination skills as well as conflict resolution skills are valued and modeled. Over time, students will build the capacity to support one another and themselves.

## Realize Commonalities

In supportive communities, teachers create experiences in which commonalities surface. This practice is crucial in our increasingly diverse classrooms. Teachers can promote these types of experiences by developing a flexible curriculum that provides students many opportunities to discover and appreciate each other's personal and cultural histories. For example, teachers may engage the class in an activity in which each student presents and discusses an object that is important to them. Students in the audience can then be asked to express what they learned about the presenter (Sapon-Shevin, 2010). For students with significant disabilities related to communication, the presentation could involve the use of assistive technology to pre-record a message on a speech generating device, which could then be played during the activity. These students would also be given the opportunity to communicate what they learned about their peers using their device.



## Create Experiences that are Universally Designed for Learning

Teachers are encouraged to plan learning experiences with the full range of students in their classroom in mind rather than use a lesson plan that addresses the middle and “retrofitting” it to accommodate for students not in the middle (Center for Applied Special Technology (CAST), 2012). The Universal Design for Learning (UDL) framework ensures that learning experiences are accessible to all students by incorporating multiple means of expression, representation, and engagement in all aspects of the curriculum, instruction, and assessment (CAST, 2012). Students’ individualized education programs (IEP) and special educators may be consulted to guide the design of the learning experiences. For example, some students with significant disabilities may need extra time to process information and assistive technology to communicate. In these instances, lessons should be designed with flexibility to create space for any student who needs additional time to process information. By attending to the individual needs of particular students, teachers meet all students’ needs (e.g., English language learners as well as other students typically benefit from additional processing time).

Teachers employing UDL practices use multiple means of engaging students in learning and plan several ways to draw students into instruction. For example, to ensure active involvement of all students - but specifically of a student with significant disabilities who may require extra processing time - the teacher could plan to solicit this student’s thoughts and use the opportunity to model appropriate wait time, responding with validation to highlight the intellectual contributions brought forth by this student after the student has contributed to the lesson discussion (Boaler &

Staples, 2008). When appropriate, the teacher can also rephrase or re-voice what the student has communicated to facilitate sharing with the entire class (Moschkovich, 1999). This is a particularly important support for students with significant disabilities using alternative means of communication. In essence, through thoughtful planning and modeling, the teacher is implicitly and explicitly sending the message that in this community, the voices of all students are important, regardless of time and modality. As a result, students see that learning is accessible to all and better understand how to adequately support one another.

### **Teach & Model Self-Determination Skills**

Teachers are also encouraged to model, explicitly teach, and guide self-awareness, self-management, and self-advocacy behaviors in order to promote student empowerment in self- and peer-supports (Wehmeyer, Field, Doran, & Mason, 2004). For example, in addressing the class, a teacher may make a statement such as: "I find that there are days where my eyes just feel funny and are not at full strength, but I still feel like doing some reading. On those days I take advantage of my e-reader because I could zoom in to make the words bigger so that it is easier for me to read." Consequently, while assistive technology tools such as speech generating devices may be directly introduced to a student with communication difficulties, other assistive technologies (e.g., computer programs, audiobooks, multimedia tools) and supports (e.g., adults and peers) are made available to all students through guidance that eventually leads to self-selection at particular times. The example above references using a think-aloud (i.e., metacognitive strategies) as a scaffolding strategy that lays the foundation for self-determinative behaviors.



### **Guide Conflict Resolution**

Conflict resolution processes and skills are also important to the development of a supportive classroom community. Inevitably, individuals in a community will have conflicts (Sapon-Shevin, 2010). Initially, teachers may need to support and guide conflict resolution by creating spaces, learning experiences, and skill practice that promote "win-win" situations or compromises. For example, a teacher may engage students in a lesson in which he models listening and processing another's articulation of a problem. He can then give students the opportunity to practice these skills. These opportunities are particularly crucial for the interactions between students with significant disabilities and their non-disabled peers because it promotes better understanding of their similarities and differences.

As teachers continually foster supportive classroom communities and gradually shift these responsibilities to the students, all students, and in particular those who have been historically underserved and marginalized, become central and essential participating members of the classroom who are empowered to work together to recognize, understand, value, and celebrate their similarities and differences. As a result, fostering supportive classroom communities facilitates and promotes the crucial components of an advanced form of PML.

# Cultivate Collaboration

Once teachers begin to see the core principles reflected in students' support for one another, they can cultivate collaboration. Key practices that have demonstrated efficacy in increasing collaboration among students include allowing student choice, employing questioning techniques to promote critical and creative thinking, varying grouping configurations, and choosing activities that foster interdependence.

## Use Student-Driven Projects

The topic or the central idea of collaborative learning experiences should reflect what students are curious about and find meaningful (Daniels & Harvey, 2009). Local concerns may be one way to pique the interests of students of all ages, as students are often curious and concerned about issues in the communities around them. Conversations with students around these issues can often lead to the development of rich and meaningful activities. When activities arise from such conversations, students are the ones making the choices about the content of their learning (Daniels & Harvey, 2009). Schultz (2008) described the power of this type of learning when he engaged a group of fifth-graders in a year-long project to improve their school's deteriorating conditions. Shultz's role as the teacher was to help shape and guide these conversations, monitor the progress of the groups, provide

feedback, and make connections between the selected activities and existing local and state learning standards.

## Advance Projects through Questioning

Once the topic or central idea is selected, students - with guidance from the teacher - should focus on some central questions that will drive the activity and promote deeper understanding of the topic. King (2002) proposes using questions that do not have one correct solution and are open-ended, such as "What does ... mean? How are ... and ... different? What would happen if...?" These questions encourage students to discuss possible solutions and strategies, compare and contrast, make inferences and conjectures, integrate ideas to arrive at some agreed-upon solutions, gather and analyze data, engage in critical examinations of underlying assumptions, and form new questions to be explored.

## Vary Grouping Configurations

Teachers are encouraged to consider flexible groupings with varying group sizes (e.g., dyads, triads, or whole class), group compositions (e.g., gender, abilities, or interests), and roles (e.g., facilitator, reporter, or note taker). By varying the size and composition of groups as well as the roles of group members, all students have the opportunity to work with a range of peers and experience different responsibilities and group dynamics. This is particularly important for students with significant disabilities as it raises the expectations to engage with others and to have a central role in the group. At a point where a sense of strong, supportive, and collaborative community is evident, decisions about group composition may be entrusted to the students.





### **Create Interdependence**

Another way to promote collaboration is to intentionally create interdependence among group members by choosing activities in which the group depends on each member's contributions to realize a common goal (Buchs, Gilles, Dutrévis, & Butera, 2011). Another way to promote interdependence is to assign roles when students work in small groups. For example, when working in dyads, one student may be assigned the role of tutor and the other as the tutee. Midway through the activity, the pair can switch roles (Fuchs, Fuchs, Mathes, & Simmons, 1997). In groups of three or more, roles such as facilitator and reporter can be assigned. A central role of the facilitator is to ask questions, probe for additional information, and encourage all members of the group to participate. Similarly, the reporter should solicit individual input from all the members so that the development of solutions to problems reflects the views of the group and is properly summarized (Cohen, 1994). Be sure to give adequate planning time and support so that students feel prepared to enact their role(s).

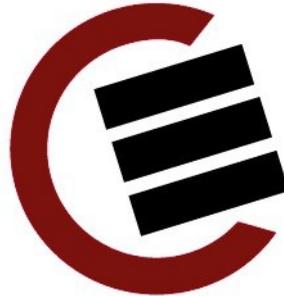
Some students may be more comfortable participating peripherally. That is, they may prefer to spend a high proportion of the collaboration

time listening. Initially, this may be the case for students with significant disabilities, particularly if they have been used to a passive role in their education (Giangreco, Halvorsen, Doyle, & Broer, 2004). However, Esmonde (2009) suggests that facilitators and teachers closely monitor and encourage these students to progress toward more central participation. Students with significant disabilities may prefer the role of the reporter as it affords them the opportunity to develop a presentation using technology.

In addition to negotiating individual roles and group tasks, students can take on increasing responsibilities in the various aspects of managing the activities, including determining the goals, desired outcomes, action steps, and deadlines. Teachers may need to provide support and guidance with organization strategies, timelines, and tools so that students appreciate the importance of their own work as it relates to the goals of the group. The continually-developing community and collaborative culture will foster student recognition and delegation of interdependence so that the students themselves may assign one another parts of a task. Guidance from the teacher may be needed to ensure that all students have a central role in these tasks.

# Conclusion

The proposed principles and practices support PML experiences that create a high level of engagement and promote equity, not only for students with significant disabilities in inclusive environments, but also for all students. Moving toward advanced PML experiences will require educators to continually reflect upon and improve everyday teaching and learning. Advanced PML may be viewed as one component of an overall educational experience that is connected to and consistent with transformed practices in schools that are advancing equity.



## About the Great Lakes Equity Center

The mission of the Great Lakes Equity Center is to ensure equity in student access to and participation in high quality, research-based education by expanding states' and school systems' capacity to provide robust, effective opportunities to learn for all students, regardless of and responsive to race, sex, and national origin, and to reduce disparities in educational outcomes among and between groups. The Equity by Design briefs series is intended to provide vital background information and action steps to support educators and other equity advocates as they work to create positive educational environments for all children. For more information, visit <http://www.greatlakesequitycenter.org>.

## Disclaimer

Great Lakes Equity Center is committed to the sharing of information regarding issues of equity in education. The contents of this practitioner brief were developed under a grant from the U.S. Department of Education. However, these contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the federal government.

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